



October 22, 2012

Energy Division: EDtariffunit@cpuc.ca.gov
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

**Re: Recurrent Energy Comments On Draft Resolution E-4546,
Changes to the Renewable Auction Mechanism**

Ladies and Gentlemen:

Recurrent Energy is pleased to provide these comments on Draft Resolution E-4546 ('Draft' or 'Draft Resolution'), proposing changes to the Renewable Auction Mechanism ('RAM') for Pacific Gas & Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company.

Our comments focus on portions of the Draft that would approve a unilateral termination right for utility buyers where network upgrade costs exceed a seller's RAM bid estimates by \$100,000 or 25%, whichever is less. We submit that such approval constitutes legal error for the reasons discussed below, and we urge the Commission to reject the termination right described in the Draft Resolution. However, if the Commission believes that some unilateral termination right is necessary to protect ratepayers, we recommend improvements that would do that without undermining other important RAM objectives. Recurrent Energy also strongly supports comments filed today by LSA, including its discussion of Resource Adequacy Damages.

1. The Draft's approval of the unilateral termination right proposed constitutes legal error because:

- it is inconsistent with Decision 10-12-048, as modified by Resolutions E-4414 and E-4489;
- it is not based on evidence that this change is necessary to improve the RAM program, as that Decision and those Resolutions require and the Draft itself acknowledges; and
- the cost caps which would trigger the termination right remain as arbitrary and competition-limiting as when the Commission first characterized them as such in Resolution E-4414.

Recognizing that Decision 10-12-048 ("RAM Decision") culminated two and a half years of extensive briefing and argument by dozens of parties, the Commission established an unambiguous standard for future modifications to the RAM program. In its decision summary, it wrote that "we expect Energy Division and parties to continually monitor the RAM program, and recommend modifications *based on evidence*, if and as necessary."¹ Conclusion of Law 14 reiterated that "Any modifications proposed should be *based on evidence* that the modification *is necessary to improve the RAM program*."² Ordering Paragraph 5 further directed that

"[t]he IOUs may use the *stakeholder feedback from each [program] forum* to develop and submit an advice letter seeking modifications to the RAM program. Similarly, Energy Division may issue a resolution on its own motion to propose program modifications *based on information from these program forums* or the annual reports developed pursuant to Ordering Paragraph 3 [*sic*] above."³

Resolutions E-4414 and E-4489 amended the RAM Decision in some respects, but neither altered the standard for program modification. Resolution E-4414 affirmed that the RAM Decision "delegates to staff the ability to modify the Decision through a CPUC-approved resolution *based on evidence* that the modification *is necessary to improve the RAM program*."⁴ Resolution E-4489 cited the same language and explained that:

"The purpose of this resolution is to adopt programmatic changes to RAM *based on evidence provided by the IOUs that these modifications are necessary to improve the program* before [the next RAM auction]..."⁵

¹ *Decision Adopting the renewable Auction Mechanism* issued December 17, 2010 in R.08-08-009, at p. 4; emphasis added.

² *Id.*, p. 88; emphasis added.

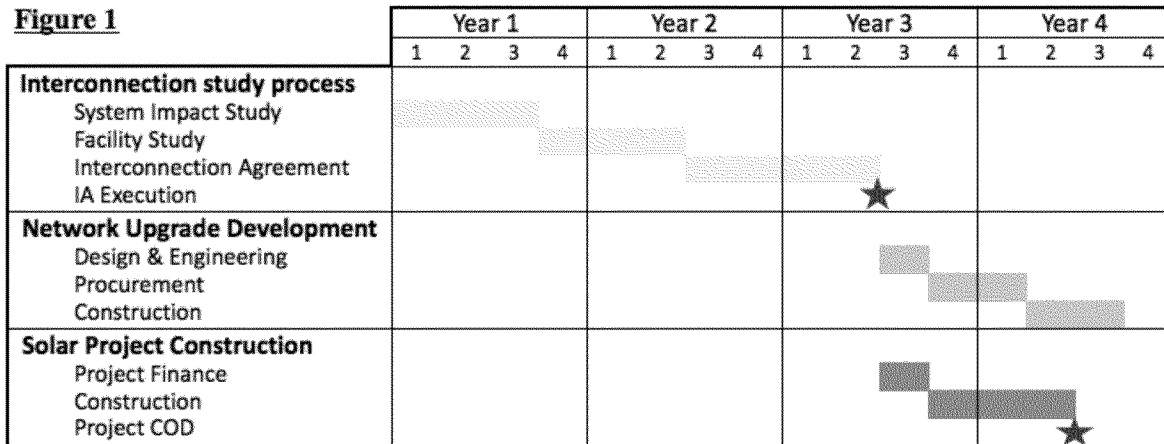
³ *Id.*, p. 96; emphasis added.

⁴ Resolution E-4414, issued August 22, 2011; p. 2.

⁵ Resolution E-4489, issued April 18, 2011; p. 3.

the purchasing utility retains the right to terminate the PPA for cost increases during its own construction of network upgrades. Figure 1 shows how project finance and project construction occurs in parallel with the utility’s network upgrade development. The project developer has no control over utility costs during network construction, and no prudent lender is likely to take on this level of risk. This means that if any right of termination for excessive network upgrade costs is created, it must be exercised or expire before sellers approach construction lenders.

Figure 1



SCE’s proposed PPA language¹¹ requires any termination right to be exercised within 60 days after a seller provides study results or an interconnection agreement. That may or may not adequately define the time period that concerns us, but it does not clearly limit relevant network upgrade cost increases to those occurring between Phase I and Phase II studies. Other language in that subsection also presents serious obstacles to project financing, and is discussed in section 5 below.

3. Because no evidence was presented to justify the specific PPA modification proposed, the Draft Resolution adopts a cost threshold that bears no relation to actual network upgrade costs likely to confront RAM projects. If approved by the Commission, many if not most projects requiring network upgrades could be subject to buyer termination.

The Commission has already twice rejected utility proposals to impose what it characterized as “arbitrary” transmission upgrade cost caps and buyer termination rights based on them.¹² The cost caps now proposed to trigger the termination right approved in the Draft Resolution are at least as arbitrary, again having been determined without relevant evidence and virtually without stakeholder input. As proposed, the cost caps would be the lesser of \$100,000, or 25% over the cost of network upgrades estimated in the seller’s RAM bid. As illustrated in Figure 2 below using typical interconnection costs for projects in RAM 1 and 2, in practice the effective cost cap would virtually always be \$100,000 – which would typically represent a total cost overrun of 1–2% of the estimated upgrade cost for fully deliverable projects, and would average about 4% for energy-only projects.

To put this in context, under the CAISO Tariff a project’s final Phase II study used for the interconnection agreement is considered a “good faith” estimate accurate to *within ± 20%*.¹³ PG&E uses the same 20% range in its interconnection agreements, while SCE simply caveats its own cost estimates as “good faith order of magnitude estimates,” which could cover far more than 20% uncertainty. In other words, the \$100,000 threshold adopted by the Draft Resolution is *at least five to ten times more stringent* than the standard to which the utilities hold themselves. This is unreasonable on its face; its adoption in the Draft is arbitrary and capricious; and the Commission should reject any termination right triggered by it.

¹¹ “SCE has the right to terminate this Agreement on Notice ... on or before ... sixty (60) days after Seller provides to SCE the results of any Interconnection Study or the interconnection agreement tendered to Seller by the Transmission Provider if”.(SCE proposed RAM3 Pro Forma PPA, Appendix A to AL 2579E), §2.04(a)(iii), at p. 13 (pdf p. 34).

¹² Resolutions E-4414 and E-4489, *supra* notes 4 and 5.

¹³ CAISO Tariff, Appendix Y, Section 7.1

Figure 2¹⁴

Typical Interconnection Costs					
EXAMPLE 1: SIMPLE Line Tap		EXAMPLE 2: MEDIUM Line Tap + Multiple DTT Protections		EXAMPLE 3: COMPLEX New Breaker-and-a-Half (BAAH) Substation	
Work Description	Cost, \$ ¹	Work Description	Cost, \$ ¹	Work Description	Cost, \$ ¹
Transmission Line Work	720,000	Transmission Line Work	720,000	Transmission Line Work	980,000
• 1 new dead-end TSP with 2 SCADA switches	520,000	• 1 new dead-end TSP with 2 SCADA switches	520,000	• 8 New Light-duty Steel Poles	400,000
• 2 new in-line dead-end switches	200,000	• 2 new in-line dead-end switches	200,000	• 3 Shoo-flies	300,000
				• Overhead	280,000
Substation Work	750,000	Substation Work	1,750,000	Substation Work	5,250,000
• Relay Work and 1 DTT	750,000	• Relay Work and 5 DTTs	1,750,000	• Relay Work and 3 DTTs; Engineering Support for New 70kV Switching Station	1,250,000
				• New 6-breaker 70kV BAAH Substation	4,000,000
Total Reliability Network Upgrades	1,470,000	Total Reliability Network Upgrades	2,470,000	Total Reliability Network Upgrades	6,230,000
				25% Buffer	1,557,500
	367,500		617,500	\$100,000 in % Total Cost	2%
	7%		4%		
+ Deliverability Network Upgrades	3,000,000	+ Deliverability Network Upgrades	2,700,000	+ Deliverability Network Upgrades	2,800,000
Total RNUs + DNUs	4,470,000	Total RNUs + DNUs	5,170,000	Total RNUs + DNUs	9,030,000
				25% Buffer	2,257,500
	1,117,500		1,292,500	\$100,000 in % Total Cost	1%
	2%		2%		

¹ Cost estimates are rounded

Equally important, as interconnection studies are refined it is not uncommon for utilities to discover that the study estimate overlooked a piece of equipment, or to require additional protective systems. For instance, PG&E commonly adds direct transfer trips (DTTs) to its interconnection costs: at \$250,000 apiece, just one such unit would trigger the \$100,000 threshold. Similar small refinements might call for a different type of pole – another potential \$250,000 charge. And if a project comes online out of sequence from the study assumptions, another circuit breaker might be required at a cost of \$350,000 or \$400,000 according to SCE and PG&E’s per-unit cost guides. In each of these cases, the proposed cost threshold would easily be exceeded and the seller’s PPA subject to termination unless it elects to buy down costs that are well within the range that utilities themselves expect to incur.

4. Whatever cost threshold the Commission might adopt, any determination that Phase II study estimates exceed it must be subject to reasonable rebuttal using industry standard power flow models and objective evaluation criteria.

To protect ratepayers from excessive costs, it is prudent to afford sellers an opportunity to review the study assumptions used by CAISO or the Participating Transmission Owner (PTO). The seller, as an interconnection customer, generally has an opportunity to identify errors in study results during the Results Meeting, which occurs within 30 days after study results are released to the seller. This is a conversation between the entity that developed the interconnection study cost estimates (CAISO and/or PTO), the interconnection customer, and a technical consultant hired by the customer who can review the reasonableness of the assumptions. While safety and reliability are paramount in determining necessary upgrades, such conversations often result in modifications which reduce network upgrade costs, benefitting all stakeholders. The final determination remains with the CAISO, PTO, or utility, but their interest in maintaining safety and reliability without excessive cost fully aligns with the seller’s.

SCE’s proposed PPA (§ 2.04(a)(iii)(1), at note 11) would undermine this eminently sensible approach by empowering the utility to terminate a PPA “irrespective of any subsequent amendments ... or any contingencies or assumptions” on which the interconnection study or agreement is based. This would allow errors to go unchecked and viable projects to be terminated, but the Draft Resolution does not address it.

We recommend a more prudent and commercially reasonable process. The interconnection customer would be afforded 60 days after notifying the utility that network upgrade cost estimates exceed the cost threshold, to review study assumptions, meet and confer with the responsible entities, and correct any

¹⁴ Abbreviations: TSP = tubular steel pole; DTT = direct transfer trip; SCADA = supervisory control and data acquisition system; RNU = reliability network upgrades (system upgrades required to maintain grid reliability); DNU = delivery network upgrades (system upgrades to enable a generator to achieve Full Deliverability); Shoo-flies = temporary bypass line to allow work on a section; BAAH = breaker-and-a-half substation, to protect individual circuit breakers from the failure of others.

demonstrable errors. The utility could have 30 additional days to assess the consultant’s findings and make a final determination, and any termination at that point would trigger the Seller’s buy-down right.

5. An accurate and objective finding that network upgrade costs will exceed a defined, commercially reasonable cost threshold can reasonably justify buyer termination – but only if sellers have an unambiguous, irrevocable, and enforceable option to buy down amounts over that threshold, and to complete projects in which they have already made substantial development investments.

We have suggested that a buyer termination right triggered by accurate, objective, and transparent study results and premised on some commercially reasonable cost cap could be workable, if accompanied by a firm seller buy-down option. However, the buy-down option described in SCE’s proposed RAM 3 PPA and approved by the Draft Resolution appears to be anything but firm.

On the contrary, PPA §2.04(a)(i)(4)¹⁵ permits the utility to terminate even where a seller elects to exercise its buy-down right, if FERC, CAISO or any Transmission Provider¹⁶ rejects all or part of the interconnection agreement, or modifies it in a way that precludes seller compliance with the buy-down terms. In other words, the buy-down “right”, as proposed by SCE, is illusory at best, and beyond the seller’s control in any event.

This is important because the Draft Resolution finds that SCE’s termination approach is “reasonable” expressly based in part on the flexibility that the buy-down right purportedly provides to sellers, and also that “it is fair and reasonable to allow Sellers to buy down excessive increase in upgrade costs to avoid termination of an executed [PPA].”¹⁷ These findings do not square with the actual terms of proposed PPA §2.04(a)(i)(4) noted above, and therefore constitute legal and factual errors that the Commission should recognize when considering the Draft Resolution.

Again, the point here is that although it may be possible to design a right of termination triggered by excessive network costs that both protects ratepayers and honors sellers’ reasonable expectations and developer’s investments, the PPA terms adopted by the Draft Resolution do not achieve that and should not be approved by the Commission in their present form.

Conclusion. The Draft Resolution’s adoption of a unilateral buyer’s termination right on the PPA terms proposed violates prior Commission directives and constitutes legal error. Had evidence been presented as required, a workable termination right could likely have been designed along the lines suggested here. We urge the Commission not to adopt the termination right approved by the Draft Resolution for RAM 3, but to solicit evidence and input from interested stakeholders to craft a more viable approach for future procurements. With respect to the Resource Adequacy Damages clause addressed in LSA’s Comments filed today, we join in recommending that the Commission modify that language to ensure that sellers are responsible only for costs associated with failure to achieve FCDS that are caused directly by sellers.

Respectfully submitted,



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CC: All Commissioners; Energy Division Director and Staff Adam Schultz and Paul Douglas;
Chief Administrative Law Judge Karen Clopton; and General Counsel Frank Lindh.

¹⁵ Id. “Either Party has the right to terminate this Agreement ... if Seller elects to exercise its right to pay for any Excess Network Upgrade Costs, but FERC, CAISO, or any Transmission Provider ... rejects Seller’s interconnection agreement, in whole or in part, or modifies Seller’s interconnection agreement ... in a manner that would make Seller unable to [pay, without reimbursement, for any Excess Network Upgrade Costs] and a Notice of termination is given [within 90] days after such rejection or modification ...”

¹⁶ See ‘Transmission Provider’ definition in Exhibit A (p. 31, pdf p. 144) to the proposed PPA attached to SCE AL 2579E.

¹⁷ Draft Resolution E-4546, p. 10, and Finding and Conclusion 7 on p.32 (pdf p. 62).

SUBJECT INDEX OF RECOMMENDED CHANGES TO DRAFT RESOLUTION E-4546

Page	Recommended Change
9	<p>The utilities held these forums between May and June 2012 and raised this issue with stakeholders, <u>but neither the utilities nor other stakeholders presented evidence that RAM projects had caused or are likely to cause ratepayers to incur excessive network upgrade costs, or the extent of any such costs, or that a unilateral termination right on the terms proposed is necessary to or would improve the RAM program.</u></p>
10	<p>While The Commission agrees that the utility failed to demonstrate existing cases where ratepayers have been or are likely to be exposed to excessive increase in upgrade costs, the Commission disagrees that, therefore, or that such a provision is not needed to improve RAM.</p>
10	<p>Regardless of whether the utility demonstrated specific examples when such an increase has occurred, Although the Commission believes that such a potential for unbounded ratepayer exposure is unacceptable and that some form of buyer termination right for excessive network upgrade costs may be appropriate, no evidence has been presented that RAM projects have caused or are likely to cause such costs; that ratepayers have borne or will bear them; that a buyer termination right is necessary to improve RAM ; or that the specific terms proposed here are fair or reasonable, or would improve rather than imperil the RAM program . If and when such evidence is proffered, parties will be given a reasonable o pportunity to respond and the Commission can consider adopting a Buyer termination right based on a commercially reasonable cost cap, accompanied by an unambiguous, irrevocable, and enforceable Seller buy-down right, to combine flexibility for Sellers with protection for ratepayers.</p> <p>The approach proposed by SCE is reasonable because of the flexibility that it provides to Sellers combined with its protection of ratepayers. Establishing a minimum nominal dollar value of \$100,000 protects Sellers who may experience only minor increases in network upgrade costs from triggering the termination right. Additionally, the creation of a buy down right creates additional flexibility for Sellers by giving them the opportunity to share the burden of excessive upgrade costs while avoiding PPA termination and simultaneously protecting ratepayers.</p>
11-12	<p>Ordering Paragraph 11. The investor-owned utilities shall not use network upgrade cost caps for RAM 3 auctions, but <u>The investor-owned utilities shall add the most recent estimated interconnection study costs of transmission network upgrades resulting from the project’s interconnection study to bid prices for ranking purposes. Each investor owned utility may include in its RAM PPAs a unilateral termination right for Buyer in instances where the cost of ratepayer funded or reimbursed transmission upgrade costs increase over the study estimate provided at the time of the RAM RFO by more than the lesser of: (a) \$100,000 or (b) 25%. If and when any party presents credible evidence that RAM projects have caused or are likely to cause ratepayers to bear excessive network upgrade costs and that a unilateral buyer termination right is therefore necessary to improve RAM, other parties will be given a reasonable opportunity to respond and the Commission can consider adopting a Buyer termination right based on a commercially reasonable cost cap, accompanied by an unambiguous, irrevocable, and enforceable Seller buy-down right, in order to combine flexibility for Sellers with protection for ratepayers.</u></p> <p>Additionally, the investor owned utilities must notify the Seller within 30 days of the availability of new transmission study results of its intention to terminate the RAM PPA. This notice must include:</p> <ul style="list-style-type: none"> (i) a statement of the dollar value of estimated reimbursable transmission upgrade costs provided by the Seller at the time the RAM PPA was executed, (ii) a calculation by the Buyer demonstrating that the reimbursable network upgrade costs have now increased by more than the allowable limit, (iii) a statement of the dollar value by which the increased costs are in excess of the allowable threshold, and (iv) clear instructions for how the Seller may exercise its buy down right to avoid termination, including explicitly providing for Seller to have a minimum of 30 days to exercise its buy down right. <p>In the event that Buyer terminates a PPA pursuant to this provision, it must provide public notice to the Commission that the PPA was terminated and that this provision was the reason for termination.</p>

**APPENDIX: PROPOSED FINDING AND ORDERING PARAGRAPHS
for Draft Resolution E-4546**

FINDINGS AND CONCLUSIONS	
1 .	Except as otherwise indicated, the modifications to the Renewable Auction Mechanism program (RAM) proposed by staff are consistent with the direction given in Ordering Paragraph 5 of D.10-12-048.
2 .	Except as otherwise indicated, the modifications adopted herein as proposed by Southern California Edison Company’s (SCE) advice letter (AL) 2759-E, by San Diego Gas & Electric Company’s (SDG&E) AL 2392-E, by Pacific Gas and Electric Company’s (PG&E) AL 4100-E, and on the Commission’s own motion would improve the RAM program.
4 .	The Commission received timely protests to SCE’s AL 2759-E from STS Hydropower Ltd., Clean Coalition, Silverado Power LLC, Recurrent Energy, and the Solar Energy Industries Association. The substance of these protests has been addressed herein.
8.	SCE’s Parties have not provided sufficient evidence, required by D. 10-12-048, that RAM projects have caused or are likely to cause ratepayers to incur excessive network upgrade costs, or that a unilateral termination right on the terms proposed is necessary to o r would improve the RAM program. The record on SCE’s specific termination proposal is insufficient, and its request to include such a unilateral termination right in RAM 3 PPAs to protect ratepayers from excessive increases in upgrade costs– is approved. <u>denied.</u>
PROPOSED ORDER	
1 .	Except as otherwise ordered, Southern California Edison Company’s advice letter 2759-E, San Diego Gas & Electric Company’s advice letter 2392-E, and Pacific Gas and Electric Company’s advice letter 4100E are approved with modifications.
4 .	Each of The investor-owned utilities shall <u>not</u> include in its their RAM 3 PPAs a unilateral termination right for Buyer in instances where the cost of ratepayer funds or reimbursed based on excessive transmission upgrade costs increase over the study estimate provided at the time of the RAM RFO by more than the lesser of: (a) \$100,000 or (b) 25%. % . If and when any party presents credible evidence that RAM projects have caused or are likely to cause ratepayers to bear excessive network upgrade costs and that a unilateral buyer termination right is necessary to improve RAM, othe r parties will be given a reasonable opportunity to respond and the Commission can consider adopting a Buyer termination right based on a commercially reasonable cost cap, accompanied by an unambiguous, irrevocable, and enforceable Seller buy-down right, in order to combine flexibility for Sellers with protection for ratepayers. If adopting this termination right, the utility must also provide that Seller will be notified within 30 days of availability of new transmission study results of its intention to terminate consistent with the direction given herein.

VERIFICATION

I am the attorney for Recurrent Energy in this proceeding. Recurrent Energy is not located in the County of Marin, California, where I have my office, so I make this verification for that reason.

The foregoing:

**Recurrent Energy Comments On Draft Resolution E-4546,
Changes to the Renewable Auction Mechanism**

has been prepared and read by me and its contents are true of my own knowledge and based on information furnished by my client which I am informed and believe to be true. I declare under penalty of perjury that the foregoing is true and correct.

Executed on October 22, 2012, at Mill Valley, California.

/s/ John Nimmons
Counsel for Recurrent Energy