

Stakeholder Comments Template

**Flexible Resource Adequacy Criteria and Must-Offer Obligation
Straw Proposal, December 13, 2012**

Submitted by	Company	Date Submitted
<p><i>Sue Mara</i> RTOAdvisors (415) 902-4108 sue.mara@rtoadvisors.com</p>	<p><i>Alliance for Retail Energy Markets (AReM)</i></p>	<p><i>January 10, 2013</i></p>

This template is for submission of stakeholder comments on the topics listed below, covered in the Flexible Resource Adequacy Criteria and Must-Offer Obligation straw proposal dated December 13, 2012, and issues discussed during the stakeholder meeting on December 20, 2012. The ISO will also review comments filed with the CPUC in R.11-10-023¹ that respond to the questions asked on the Joint Parties' Proposal per the CPUC's December 4, 2012 Scoping Memo.² Therefore, the ISO has not included questions in this template that have already been asked by the CPUC. However, stakeholders that have not submitted comments to the CPUC may include comments regarding those questions at the end of this document.

Please submit your comments below where indicated. Your comments on any aspect of this initiative are welcome. If you provide a preferred approach for a particular topic, your comments will be most useful if you provide the reasons and business case.

Please submit comments (in MS Word) to fcp@caiso.com no later than the close of business on January 9, 2013.

GENERAL:

AReM submitted *Comments by the Alliance for Retail Energy Markets on Resource Adequacy Flexible Capacity Procurement Joint Parties' Proposal* to the California Public Utilities Commission on December 26, 2013 ("12-26-12 AReM Comments"). Those comments are referenced throughout and are attached hereto. As noted there, AReM remains fundamentally convinced that flexible capacity requirements should be structured as biddable ancillary services (either as new ancillary services or as new requirements folded into existing ancillary services) for all the reasons previously provided and that the CAISO's primary focus should be on developing and implementing those ancillary services and establishing a centralized forward capacity market. The implementation of both ancillary services and a centralized forward capacity market will greatly improve the transparency of market prices, and better support the

¹ The record for R.11-10-023 can be found at http://delaps1.cpuc.ca.gov/CPUCProceedingLookup/?p=401:56:1171820792119401::NO:RP,57,RIR:P5 PROCEEDING_SELECT:R1110023.

² The Scoping Memo can be found at <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M031/K723/31723210.PDF>.

ability of market participants to make investment decisions to meet the capacity needs of the system.

AReM also notes that the CAISO's straw proposal does not address cost causation (page 10), therefore failing to ensure that those creating the need for the flexible capacity pay the costs of procuring it. For example, the straw proposal assumes that all the costs of the flexible capacity are to be borne *pro rata* by load-serving entities (LSEs) (page 9) without considering the extent to which a particular LSE's portfolio of resources created the need for the flexible capacity or whether load should pay these costs at all, which are created by increased reliance on intermittent resources. A robust policy to address reliability needs should identify the root cause of the reliability needs, develop a market transparent mechanism to address the reliability needs, and assign cost responsibility to those creating the reliability needs.

1. The ISO has outlined the basic considerations and assumptions that it proposes (in conjunction with the "Joint Parties") for the flexible capacity needs assessment for 2104. Please provide any general comments/questions/clarifications regarding the needs assessment.

AReM Response: Please refer to pages 3-5 of the 12-26-12 AReM Comments to the CPUC.

2. The ISO proposes to allocate flexible capacity procurement obligations to LRAs based on the LRAs contribution to forecasted monthly system peak. Is this the appropriate allocation methodology? What other allocation methodology could be considered?

AReM Response: Please see AReM's response to Question D.8 in the 12-26-12 AReM Comments (page 17).

3. The ISO proposes to include default tariff provisions for LRAs that do not set flexible capacity procurement obligations. The default level would be the flexible capacity requirement established in the ISO's flexible capacity assessment. Are there other considerations that should be included in the default provisions?

AReM Response: Capacity obligations imposed by the CAISO must be shared among all LRAs, and therefore a default mechanism in the event that an LRA does not establish capacity procurement obligations will be necessary, if flexible capacity requirements are embedded in the RA requirements. However, the straw proposal states that the default obligations will only apply if a LRA does not set its own flexible capacity procurement requirements (page 10), but does not require the LRA to establish requirements that are comparable to the CAISO's default provisions. This could lead to cross subsidies by the LSEs under the jurisdiction of other LRAs that have put in place comparable flexible capacity requirements. As noted in the answer to Question 5 below, AReM does not necessarily support the need for backstop procurement. Nonetheless, if the

CAISO intends to set default requirements and identify deficient LSEs, AReM requests that the CAISO specify that *all* LRAs must meet or exceed the CAISO's default requirements or be subject to any backstop procurement and, possibly, penalties (if penalties are imposed for LSE deficiencies by other LRAs).

4. The ISO is proposing a year-ahead and 12 monthly showings demonstrating that an LSE has procured sufficient quantities of flexible capacity for each month, with 90 percent of the total flexible capacity obligation be shown in the year-ahead showing and 100 percent in the month-ahead showing. Are these the right levels? Are there any other attributes that should be included in these showings?

AReM Response: AReM requests that the CAISO provide market participants with data on: (1) the magnitude of the monthly flexible capacity requirement from 2008 to 2012 if such a requirement had been in place during that time period; and (2) the extent to which its proposed flexible capacity requirements would have been met through the system and local RA showings made during that same five-year period. AReM believes that analysis of such data will help determine whether the proposed levels for annual and monthly shows are appropriate.

5. The ISO is proposing new backstop authority in the system is deficient in the total amount of flexible capacity required. Are the triggers for issuing a backstop procurement designation sufficient? What else should the ISO consider?

AReM Response: If flexible capacity requirements are imposed, and LSEs have met their obligations, there should be no need for additional backstop procurement authority. Put another way, backstop procurement should be explicitly tied to deficiencies in LSEs showing. If all LSEs have submitted compliant showings, and the CAISO still feels there is a need for further backstop procurement, that means that there is something wrong with the manner in which the obligation is defined and/or allocated, and those flaws should be remedied instead of incurring costly incremental backstop procurement.

6. The ISO is proposing to use the current CPM rate in procuring backstop flexible capacity. Are there additional considerations in the use of this rate?

AReM Response: AReM prefers to review the analysis requested in response to Question 4 above before providing a response to this question.

7. The ISO proposes to allocate costs for backstop procurement designations to all LSEs that are deficient in their flexible capacity showings. Is cost allocation for backstop correct? If not, what other options should be considered

AReM Response: Yes, the costs of any procurement that is undertaken to make up for an LSE's deficiency should be allocated to the deficient LSE. However, as noted in the 12-26-12 AReM Comments (page 7), if RA requirements are going to include flexible capacity requirements, there must be specific provisions that address the circumstances in which waivers to the obligations will be granted – for instance if there are insufficient resources to meet the requirements – and whether and how non-compliance penalties will be imposed.

8. Are the ISO's proposed criteria for determining selecting resources to procure for any flexible backstop procurement designation correct?

AReM Response: No response to this question at this time.

9. The ISO has put forth a proposed counting convention for hydro resources. PG&E presented an alternative approach. Please comment on the relative merits of each proposal? Does your organization have any additional suggestions to enhance either proposal?

AReM Response: No comment on hydro counting rules at this time.

10. Beyond the three issues identified by the ISO, are there any other issues the ISO needs to consider in Stage Two of this stakeholder initiative and why?

AReM Response: To the extent that AReM's recommendation that flexible requirements be structured as biddable ancillary services is adopted, the issues identified for Stage Two of the stakeholder initiative would be largely unnecessary. Instead, Stage Two would have to be restructured to focus on implementing well-designed flexible ancillary services. In addition, the need for a "Stage Two" in the first instance raises the issue of why the CAISO proposes to implement one-sided flexible requirements in 2014 before the "Stage Two" issues are addressed and resolved. As discussed in the 12-26-12 AReM Comments (pages 12-13), why should LSEs be required to procure flexible RA attributes, when the procured resource has no related must offer requirements to meet? AReM does not believe the CAISO has made the case for implementation of any such requirements by 2014.

11. Are there any additional comments your organization wished to make at this time?

AReM Response: Yes. Following are additional issues that need to be addressed by the CAISO in this stakeholder process:

Grandfathering of Existing RA Contracts – The supporters of the straw proposal have argued that it avoids grandfathering issues. AReM disagrees. As discussed in the 12-26-12 AReM Comments (page 13) parties to existing RA contracts must be either exempt from the new flexible resource requirements (*i.e.*, the contracts would be “grandfathered”) or be given time to renegotiate the contracts to the mutual satisfaction to both parties.

Combined Cycle Units – AReM is concerned that combined cycle units were described during the 12/20 meeting as being “outliers” and that the CAISO staff at the meeting said that more work was needed to determine how such units could be used to meet the flexible requirements. In addition, the straw proposal lists only an “interim” counting rule for combined cycle units and states that a “longer-term solution” is needed (p. 20). ESPs procure RA capacity from combined cycle units and need upfront clarity about how such units will qualify to provide flexible capacity. Lack of clarity will hamper procurement and create unnecessary market uncertainty. The CAISO should develop clear rules for *all* flexible resources before imposing requirements on LSEs.

Self-Scheduling of RA Resources – The straw proposal states that the CAISO is “considering” a requirement to prohibit self-schedule on flexible resources during “particular periods,” but not until 2015 (page 14). AReM requests that the CAISO provide data about the percentage of RA resources that are currently self-scheduled during the year and during the “particular periods” of concern. If self-scheduling means resources are unavailable to meet flexible requirements, then the CAISO should not impose such procurement requirements on LSEs until this issue is resolved.

Available Supply for Procurement by LSEs – During the 12/20 CAISO meeting, stakeholders noted that compensation for backstop procurement must be structured to ensure that there is no incentive for suppliers to hold and sell to the CAISO rather than to the LSEs. In addition, SDG&E indicated that, while some LSEs may have excess flexible capacity, the attribute could be bundled with the system or local RA and therefore unavailable to sell to a deficient LSE (in addition, the CAISO’s straw proposal specifies on page 12 that the flexible attribute must remain “bundled” with the RA capacity). AReM requests that the CAISO address these issues in its stakeholder process to ensure that the available supply of flexible resources is sufficient to allow all LSEs to meet the defined requirements without the potential for exercise of market power by those holding the flexible supply.

Other -- AReM’s additional comments at this time are as reflected herein and in the 12-26-12 AReM Comments. AReM will offer additional substantive comments after the CAISO issues its revised draft proposal in February 2013.

12. Please feel free to respond to any comments already submitted to the CPUC in R.11-10-023 as they apply to the ISO straw proposal or the Joint Parties proposal.

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Oversee the
Resource Adequacy Program, Consider
Program Refinements, and Establish Annual
Local Procurement Obligations.

R.11-10-023
(Filed October 20, 2011)

**COMMENTS BY THE ALLIANCE FOR RETAIL ENERGY MARKETS ON
RESOURCE ADEQUACY FLEXIBLE CAPACITY PROCUREMENT
JOINT PARTIES' PROPOSAL**

Sue Mara
RTOADVISORS, L.L.C.
164 Springdale Way
Redwood City, CA 94062
Telephone: (415) 902-4108
E-mail: sue.mara@rtoadvisors.com

Consultant to
ALLIANCE FOR RETAIL ENERGY MARKETS

December 26, 2012

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Annual Local Procurement Obligations.

R.11-10-023
(Filed October 20, 2011)

**COMMENTS BY THE ALLIANCE FOR RETAIL ENERGY MARKETS ON
RESOURCE ADEQUACY FLEXIBLE CAPACITY PROCUREMENT
JOINT PARTIES' PROPOSAL**

I. INTRODUCTION

On December 6, 2012, Assigned Commissioner Mark Ferron and Administrative Law Judge David Gamson of the California Public Utilities Commission (“Commission” or “CPUC”) issued the *Phase 2 Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge* (“Scoping Memo”) in the above referenced proceeding. The Scoping Memo directs parties to provide responses to questions contained in Attachment B of the Scoping Memo on the *Resource Adequacy and Flexible Capacity Procurement Joint Parties’ Proposal* (“Joint Parties’ Proposal”) issued jointly by the California Independent System Operation (“CAISO”), Southern California Edison Company (“SCE”) and San Diego Gas & Electric Company (“SDG&E”) on October 29, 2012 and included in the Scoping Memo as Attachment A. The Alliance for Retail Energy Markets (“AReM”)¹ submits these comments and responses to the questions contained in Attachment B in accordance with the Scoping Memo.

¹ AReM is a California non-profit mutual benefit corporation formed by electric service providers that are active in the California’s direct access market. This filing represents the position of AReM, but not necessarily that of a particular member or any affiliates of its members with respect to the issues addressed herein.

II. COMMENTS

The Scoping Memo states:

The CAISO, San Diego Gas & Electric Company, and Southern California Edison Company submitted a joint proposal on October 29, 2012 that presents an interim flexible capacity proposal they claim could be implemented for the 2014 compliance year. Energy Division will develop a proposal for implementing a potential flexible capacity procurement requirement. The proposal will include a framework on how flexible procurement obligations should be met by CPUC-jurisdictional LSEs.²

Attachment B to the Scoping Memo contains a series of questions for parties to answer with respect to the Joint Parties' Proposal to assist the Energy Division Staff in its preparation of a proposal on "Refinements to RA program/Energy Division proposal on RA Flexible Capacity Procurement" which, according to the schedule contained in the Scoping Memo, will be issued on January 13, 2013. AReM believes that this Phase 2 of the Resource Adequacy ("RA") proceeding holds the potential to improve the reliability of electric service in California in the face of increasing interconnected renewable supply, while advancing important Commission policies on wholesale and retail competition, all to the benefit of energy consumers in California. Therefore, AReM expects to be an active participant in this proceeding and appreciates this opportunity to offer comments on the Joint Parties' Proposal.

1. General Overview Comments

AReM recognizes that California's commitment to increasing renewables creates the need to re-think and re-define the resources needed to ensure reliable operation of the grid. AReM believes that the CAISO and the Commission, working collaboratively with other California energy agencies and stakeholders can and will properly define those requirements. Meeting these new requirements will impose new and significant costs on energy users in

² See Scoping Memo, page 3.

California, and keeping these costs as low as possible should be a paramount consideration. Keeping costs as low as possible can only be achieved if the implementation is carried out with stringent attention to promoting competition among buyers and sellers of the required services. Therefore, AReM's comments herein are written from the perspective of what must be accomplished to ensure that the mechanisms put in place to define and procure these resource requirements promote rather than hinder competition, provide market certainty so that investors can make prudent investment decisions in existing and new resources to serve California's energy needs, and create pricing transparency so that consumers can choose the products and services that best meet their needs consistent with state energy policy goals.

With this perspective in mind, the recommendations that recur throughout AReM's responses to the Attachment B questions are as follows:

- Embedding the new flexible resource requirements in the RA program does not represent an efficient mechanism for procurement of those resources, and as such, if adopted at all, should have a specific sunset date. Beyond that sunset date, capacity requirements should be no more granular than they are today (system and local).
- The new flexible resource requirements should be integrated into the CAISO's biddable ancillary service markets where they can be transparently priced and procured.
- Integrating the flexible capacity requirements into the ancillary service markets will create the pricing transparency and a new revenue stream for resource owners that, along with energy and capacity revenues, will enable them to make economic investment decisions.

- Along with implementation of biddable ancillary service markets, the Commission, working collaboratively with the CAISO, should implement a centralized forward capacity market to provide additional pricing transparency and revenue certainty for the capacity component.
- Proceeding in this manner will ensure that California's has competitive energy, ancillary service, and capacity markets that support economic and efficient investment in existing and new resources.

2. Responses to Questions

Attachment B to the Scoping Memo lists a series of questions about the Joint Parties' Proposal. AReM's responses to some (but not all) of the questions follow, in the order presented in Attachment B.

A. Reliability Risk

- 1. What is/are the most critical grid reliability risk/risks that should be evaluated and managed through the flexible capacity procurement initiative?*

AReM Response: While the CAISO has yet to complete its studies on how the increasing amount of renewable generation will impact grid operations, it is nevertheless clear that interconnecting intermittent resources requires a different set of load following, ramping, and regulation resources than a grid that relies on conventional generation. AReM believes that the CAISO has the necessary technical expertise to make these determinations, and, working cooperatively with the CPUC and the California Energy Commission ("CEC"), the manner in which the requirements will be imposed on market participants can and should be established in a way that best promotes competition, which in turn will put downward pressure on prices.

2. *This proposal attempts to address reliability risk by recommending that the CPUC establish a monthly interim flexible capacity obligation that is based on the ISO's identified flexible capacity needs*
 - a. *Identify the key tasks required to implement this proposal. Propose the order in which they should be addressed, and discuss whether they should be taken up simultaneously or sequentially.*

AReM Response: As noted in the General Comments above, AReM strongly urges the Commission to reject the notion that flexible capacity requirements should be embedded in RA for the long term, and instead should work with the CAISO to develop additional biddable ancillary service products to provide the ramping, load following, and regulation services that are necessary to reliably manage the grid. If flexible capacity requirements are included as part of the RA compliance obligation as contemplated in the Joint Parties' Proposal, that inclusion should last only for as long as it takes the CAISO to develop the ancillary service product definitions and integrate the procurement of those ancillary services within its co-optimized day-ahead and real-time dispatch algorithms, and there should be a stated date by which this will be accomplished.

That said, if flexible capacity requirements are going to be embedded in RA, then the steps necessary to implement such a mechanism would be as follows:

- Clearly define the precise requirements that each RA-obligated entity must meet.
- Resolve how information will be made available to RA-obligated entities as to the amount of flexible capacity that each RA-eligible unit shown on the current Net Qualifying Capacity ("NQC") list can provide.

- Develop clear rules that will apply in the event there are not sufficient resources in the market place to fulfill the defined need and to address the potential for market power.
- Develop clear rules as to what the consequences will be for lack of compliance with the flexible capacity requirements, such as cure periods, waiver application, and, if the CAISO will undertake backstop procurement in such instances, how that backstop procurement will be priced and the costs recovered from market participants.
 - c. *What are other options to alleviate the underlying reliability risk(s) (e.g. modified bidding behavior, incentives within procurement programs to procure resources that reduce identified reliability risks)? What are the benefits and drawbacks of addressing reliability risk by developing a flexible capacity obligation for LSEs relative to the alternatives?*

AReM Response: AReM does not believe that embedding flexible capacity requirement in RA is the right way to define and procure the products and services that are needed to integrate increasing amounts of renewable capacity into the electricity grid. Each of categories of flexible resources that the CAISO has identified is associated with managing the variability of load in real time, and as such, should be structured as ancillary services, just as 30-minute contingency reserves are currently defined and procured as part of the co-optimized dispatch that the CAISO conducts on a day-ahead basis and in real-time. If these newly required services are defined as biddable ancillary services, generating units that can provide the services and load-serving entities (“LSEs”) that will need to pay for them will have a clear and transparent price signal as to the value such resources bring to the system. Embedding these requirements in RA will serve only

to bifurcate the revenue stream associated with the newly defined services between capacity and energy, and as such, create an unnecessary layer of complexity in the RA program. In short, AReM sees only drawbacks and no incremental benefit to ratepayers that will be achieved by including flexible requirements in RA, rather than solely in ancillary services. That is why AReM strongly urges the Commission to reject the idea of defining flexible requirements within RA for the long term, and instead, work cooperatively with the CAISO and CEC to adopt a policy that such services are and should be defined as incremental ancillary services.

d. In addition to addressing reliability risk, does the flexible capacity obligation have other market impacts?

AReM Response: Yes. The manner in which the CPUC defines the flexible capacity obligation will have lasting impacts on the development of competitive wholesale and retail markets. Specifically, the Commission has expressed a commitment to having the RA program serve as the vehicle by which the resources necessary to ensure a reliable grid are procured, and has recognized that the current hybrid market that allows utilities to continue to build, own and control supply assets with their regulated rate structures is harmful to the formation of competitive wholesale and retail markets. To address this problem, the Commission must apply a metric to all of its market design decisions that evaluates how the proposed market design will (or will not) support the formation of competitive markets.

However, increasing the granularity of the RA requirements is a definitive step away from competition for the following reasons. Markets that impose capacity requirements do so for two reasons: first to provide a mechanism by which resources

committed to the market are counted and second to provide a revenue stream to resources owners to make up for mitigation imposed on energy and ancillary service markets. Indeed, where formal capacity markets exist, the pricing parameters established for those markets are generally defined in terms of the “missing money” – the difference between what a resources needs to remain economically viable and what it can earn from the energy and ancillary service markets. The goal of all competitive markets should be to shrink the “missing money” problem by allowing the value of resources to be increasingly reflected in the energy and ancillary markets, so that the capacity payment component is as low as possible. The Joint Parties’ Proposal does just the opposite – it expands RA and therefore transfers what should be energy and ancillary service market revenues to capacity.

e. How does this type of proposal, as compared to others, satisfy the Guiding Principles as set forth in the August workshop? (See Draft Guiding Principles in the Appendix to these questions)

AReM Response: AReM believes that embedding flexible requirements in the RA program is not consistent with the Draft Guiding Principles contained at the end of Attachment B to the Scoping Memo, as follows:

Draft Guiding Principles followed by AReM’s comments:

1. The Flexible Capacity Procurement initiative should be administratively simple. It should not impose an unnecessary administrative burden on the regulator, load serving entities (LSEs), or market participants. Embedding flexible resource requirements in RA is not administratively simple for regulatory staff, LSEs or other market participants. AReM recognizes that its proposal to integrate the flexible capacity requirements as biddable ancillary services would also require significant resources, but if the Commission adopts the rationale set forth herein that the flexible

- resource requirements should ultimately be structured as biddable ancillary services, then the process of integrating these requirements into RA would only be temporary.
2. *The Flexible Capacity Procurement initiative should result in minimal disruption to the RA program.* Implementation of flexible resource requirements in RA will significantly disrupt the RA program.
 3. *The Flexible Capacity Procurement initiative should be commercially feasible. Allowing the market to distinguish and value a megawatt of capacity with appropriately defined flexible characteristics from a megawatt of generic capacity will facilitate compliance and market liquidity.* Implementation of the flexible resource requirements in RA will not facilitate market liquidity because it will take what is inherently a real-time dispatching requirement and shoehorn it in the RA program, creating a bifurcation in the identification and the value of these resources – *i.e.*, some of the value for such flexible capacity will be garnered through the capacity payment and some will be garnered at the time the resource actually provides the needed flexibility. AReM believes that neither price transparency nor market liquidity are enhanced by such bifurcation and that imposing this level of granularity on the RA obligations will make capacity procurement difficult, especially for competitive suppliers, such as the Electric Service Providers (“ESPs”) that AReM represents.
 4. *The Flexible Capacity Procurement initiative should be dynamic and should be allowed to evolve with changing grid conditions.* This Guiding Principle will be achieved much better if the flexible resource requirements are designed as ancillary services rather than as RA requirements, as the procurement of the requirements through biddable ancillary services is much more flexible than procurement through RA.
 5. *The RA program should seek to maintain reliability while minimizing costs through market mechanisms.* As noted throughout these comments, AReM does not believe that embedding flexible resource requirements in RA will support the sort of the

market transparency and liquidity that will encourage robust competition among suppliers to provide the necessary services and, without strong competitive incentives, ratepayers will pay more than is necessary.

6. *The definition of flexibility should be technology neutral and prevent discrimination against all current and future resources that have the required flexible characteristics.* Whether the flexible resource requirement is embedded in RA or structured as an ancillary service, as recommended herein by AReM, the definition of such flexible capacity requirements should be technology neutral. AReM believe that this can best be achieved by defining the flexible resource requirements as biddable ancillary service requirements, in which the owners of the resource compete to offer their flexible resource capability, as those resources are needed to manage the variability impact of intermittent resources.
7. *The flexibility needs study should be transparent and consistent with CPUC-approved assumptions.* Whether the flexible resource requirement is embedded in RA or structured as an ancillary service, as recommended herein by AReM, it is imperative that the CPUC and CAISO work collaboratively and agree upon the assumptions that will define the flexibility needs.
8. *Flexibility procurement and valuation process should be conducted in a manner to ensure generator confidentiality.* AReM believes that addressing this Guiding Principle will be difficult, especially if the flexible resource requirement is embedded in RA, rather than in the ancillary service requirements, as recommended herein by AReM. Specifically, if LSEs are required to procure resources that have flexible capacity requirements, then there must be transparency in the market place as to which resources can provide those attributes. On the other hand, if the services are structured as biddable ancillary services, AReM believes that the mechanisms by which specific resources become eligible to provide those services can be maintained in the CAISO Master File system.

9. *The responsibilities of the ISO, the CPUC, and LSEs should be clearly defined.* AReM believes that embedding the flexible capacity requirements as biddable ancillary service requirements will allow a simpler and more straightforward mechanism for procuring the necessary flexibility than will embedding these requirements in RA.
10. *The rules for generator valuation and LSE allocation should be transparent, consider how to promote efficient procurement, minimize market power opportunities, reward existing flexible resources, and incentivize the appropriate resource mix that results in the type and location of resources that are needed to maintain grid reliability.* Again, the AReM proposal herein to incorporate the flexible resource requirements as biddable ancillary services will accomplish all of these objectives more efficiently and economically than will embedding these requirements in RA.

B. Interim RA solution (Section 2)

3. *The proposed flexibility procurement initiative institutes an interim RA solution for 2014-2017. What are the anticipated impacts of an interim approach on resource adequacy contracts? What factors should the CPUC consider in deciding whether an interim approach is appropriate?*

AReM Response: This question raises several different issues. The first is whether any interim mechanism needs to be done as soon as 2014 or whether it should begin in some later year. At this point in time, there appears to be little evidence supporting a need for flexible resources in 2014 and therefore imposition of any such requirements would impose unnecessary costs on consumers at a time when the California economy is already under extreme stress. This seems particularly evident, given that the Joint Parties' Proposal, while covering the 2014 through 2017 interim period, would not impose any must offer obligation on resources procured for 2014 – raising a question as to why LSEs

should be required to pay for RA attributes that will not be offering any specific service. Moreover, as noted in the question, modifications to the RA program will impact existing contracts unless those contracts already contemplate this modification to the RA program. Parties to those contracts must either be exempt from the new flexible resource requirements (*i.e.*, the contracts would be “grandfathered”) or be given time to renegotiate the contracts to the mutual satisfaction of both parties – *i.e.*, the implementation of changes to the RA program should not cause parties to existing contracts to incur losses.

Determining the timing of implementation of the program modifications and allowing for a transition that ensures parties to existing contracts are treated fairly are key issues. Of equal importance is a second transition issue – providing clarity on just what will be in place at the end of the interim period. As noted throughout these comments, AReM offers the view that, by the end of this interim period, the flexible resource requirements should be structured as biddable ancillary services and that the RA program modifications adopted by the Commission should make this crystal clear - that any inclusion of these requirements in RA should be only for an interim period until the necessary attributes have been integrated into the CAISO’s ancillary market structure.

In addition, the Commission should, in collaboration with the CAISO and market participants, finalize implementation of a three- to five-year forward centralized capacity market structure. Integration of the flexible resource requirements into biddable ancillary services, and the adoption of a centralized forward capacity market structure will provide market certainty, price transparency and liquidity that will ensure the development of

long-term resources to meet the reliability needs of the grid through competitive markets, rather than through costly command and control mechanisms.

4. *Should the flexible capacity start in 2014? Explain why or why not.*

AReM Response: See response to B.3 above.

C. Development of Eligibility and Needs Methodology (Section 3.1 and Section 3.2)

5. *According to the proposal, “flexible capacity need” is defined as the need of the ISO to meet ramping and contingency reserves. (Section 3.1)*

a. *Is this an appropriate definition of flexibility? If not, please explain what might be an appropriate definition and why.*

b. *Should flexible capacity needs encompass all of the contingency reserves (E.G. Spin, Non-spin, Regulation up/down)?*

AReM Response: Sections 3.1 and 3.2 of the Joint Parties’ Proposal recognize that the newly emerging flexible resource requirements are akin to the existing spin, non-spin, and up/down regulation contingency reserves that the CAISO procures through its ancillary service markets. AReM believes that the flexible resource requirements should be structured as an expansion of the ancillary services procured through the CAISO markets, and that any move to include spin, non-spin and up/down regulation in the RA capacity construct would be very ill advised. AReM also notes that the CAISO must be careful to define the need for flexible operating characteristics as a *subset* and not *additive* to the 15% planning reserve margin, which LSEs already procure.

6. *Flexibility needs are calculated according to the following formula (Section 3.2)-*

$$\text{Flexibility Need}_{MTHy} = \text{Max}[(3RRHRx)_{MTHy}] + \text{Max}(MSSC, 3.5\% * E(PL_{MTHy})) + \epsilon$$

Where,

Max[(3RRHRx)_{MTHy}] = Largest three hour contiguous ramp starting in hour x for month y

E(PL) = Expected peak load

MTHy = Month y

MSSC = Most Severe Single Contingency

ϵ = annually adjustable error term to account for uncertainties such as load following

a. Is the above formula an appropriate measure to calculate flexibility needs and why?

- E.G. The ISO included the max of either a 3.5% of monthly expected peak load (EPL) or Most Severe Single Contingency (MSSC) factor to the need calculation. This is supposed to ensure that the ISO gets 100% of spinning reserve capacity needed to cover the MSSC.*

- What evidence supports using a 3.5% of EPL to provide the spinning reserve needs in an N-1 contingency?*

- Is it reasonable to require spinning reserves equal to 100% of MSSC? Please explain.*

b. According to the proposal, flexible capacity need is based on how much ramp capability a resource can offer and sustain over a continuous three hour period. Is three hours an appropriate duration in which to measure ramping? Support your answer with empirical data when possible.

c. Is adding an annually adjustable error to ramping requirements term to account for uncertainties appropriate?

- Should the error factor be capped? If so, what is an appropriate cap level and why?*
- What criteria should be stipulated to provide appropriate boundaries on what can be included in the error factor (i.e. proportion of wind generation, or distributed generation)?*

- d. The ISO proposes to use minute-by-minute estimate of load to calculate flexibility needs. Please discuss the suitability of this approach and if this is not suitable, what are the other options?*
 - e. It appears flexible capacity procurement is overlapping with the determination of operating reserves. Is this appropriate? Can some amount of the PRM be offset, and how can the CPUC manage the overall RA obligation if portions are met with more flexible resources?*
- 7. What process(es) or proceeding should be used to calculate capacity flexibility needs as load and supply change over time?*
- a. Currently the annual LCR process results in a determination of local capacity needs on an annual basis. Should flexible capacity needs be included within the LCR process, or should a separate but similar process be established to update flexible capacity needs? Please explain.*
 - b. Who should determine flexibility needs annually– the ISO or some other third party?*

AReM Response to Questions C.6 and C.7: Generally, AReM does not have the expertise to provide specific responses to how the flexible resource requirement should be defined in terms of the calculation formula and its specific components. However, AReM does note that a recurring element in this set of questions has to do with how the definition of the new flexible resource requirement overlaps or is duplicative of existing contingency reserve requirements and/or the existing Planning Reserve Margin of 15%. AReM believes that the re-definition of reliability requirements to address increasing renewable energy must carry with it a comprehensive review of all the reliability metrics

to ensure that that LSE's defined procurement obligations are not burdened with duplicative or overlapping requirements that would impose unnecessary costs on consumers.

D. Allocation of Flexible Capacity Requirements (Section 3.3 and Section 3.4)

8. The proposal recommends the CPUC allocate flexible capacity procurement obligations to LSEs based on each LSE's relative share of monthly system peak. Is this a suitable approach? Explain why or why not.

AReM Response: The CPUC has recently implemented improvements to the manner in which the RA obligations are allocated to its jurisdictional LSEs by adopting an LSE-specific coincident adjustment factor.³ AReM would expect that these improvements would likewise be incorporated into any allocation of flexible resource obligations. The Joint Parties' Proposal does not define how the "relative share of the monthly system peak" would be calculated and AReM requests that the methodology be consistent with current CPUC/CEC practices. In addition, load migration among LSEs must be accommodated, so that as load migration occurs, parties that acquire new load become responsible for procurement to meet the RA obligations.

a. What other alternatives exist within CPUC jurisdiction that allows LSEs to demonstrate compliance of flexible capacity obligations? Please discuss the relative costs and benefits of different approaches. (Section 3.3)

AReM Response: As noted throughout these comments, AReM objects to including the flexible resource requirements in RA for anything other than a short transition period while these requirements are integrated into the ancillary service markets. AReM notes that, once the ancillary service approach is adopted, then the issue of allocating the

³ D.12-06-025, pp. 28-29.

requirement to LSE is obviated. Under that approach, the CAISO would integrate the flexible resource requirement into its optimized energy and ancillary service dispatch, with the costs allocated to load in the same manner that operating reserves are done today.

E. Flexible Capacity Must-offer Obligations (Section 4)

9. In addition to the must-offer obligations that currently apply to RA resources, the flexible capacity must-offer obligation for flexible resources would require resources to submit economic bids into the ISO's real-market between a predetermined set of hours (i.e. 5AM to 10PM).

a. What is the impact of this more stringent must-offer obligation for flexible resources on specific resources?

AReM Response: AReM believes that owners of the flexible resources must respond to this question, and AReM reserves the right to respond later. At this point, AReM would note that the complexity of a must offer obligation in response to the inclusion of these requirements in RA is likely no different than the complexity the resource operator would face in determining how to structure its bids into the ancillary service markets, if these requirements are embedded solely in the ancillary service markets.

G. Flexible Counting Conventions (Section 5.3.2)

14. Joint parties evaluated three options for counting how a resource's flexible capacity quantity would satisfy a flexible capacity procurement obligation. The three options are: 1) Pro-rata Option: Pro-rata sharing of flexible and generic capacity; 2) Differentiated Capacity Option: Distinguish flexible capacity from generic capacity;

and 3) Count-all Option: Count all capacity from “dispatchable” generators as flexible.

a. Which option do you think is better and why? (Section 5.3.2)

AReM Response: At this time, AReM has no opinion on this important topic, but looks forward to reviewing other parties’ comments.

16. In order to increase transparency over RA capacity procurement, what data could be made public within confidentiality restrictions?

AReM Response: AReM does not have a response to this question at this time, except to note that, if flexible resource requirements are going to be included in the RA obligations, there will need to be transparency with respect to how much of a given resource’s RA-approved NQC can count toward each of the flexible resource attributes, *i.e.*, how much each resource on the NQC list can (or cannot) count toward meeting the flexible resource requirements. Such data must be available to LSEs or the LSE obligation to procure such resources as part of the RA program is unworkable.

H. General

18. What are the specific impacts of the flexible capacity procurement initiative on procurement and contracting on Community Choice Aggregators and Electric Service Providers?

AReM Response: AReM’s responses throughout are aimed at addressing the questions posed in the Scoping Memo from the perspective of the impacts of these RA changes on all LSEs, including ESPs and CCAs. To summarize these issues, AReM believes that incorporation of flexible resource requirements in RA would be a serious misstep in the process of developing robust competitive, transparent and liquid market structures that

ensure the reliability of the grid at the lowest possible costs. Instead, the focus should be on developing robustly competitive, transparent and liquid ancillary service markets that will create the necessary price signals, in addition to the existing energy and other ancillary services and capacity prices, to support maintenance of existing generation and investment in new resources, when and if that is necessary and economically justified.

III. CONCLUSION

AReM appreciates the opportunity to submit these comments, and looks forward to working with the Commission, CAISO, and stakeholders on these critical issues.

Respectfully submitted,



Sue Mara
RTOADVISORS, L.L.C.
164 Springdale Way
Redwood City, CA 94062
Telephone: (415) 902-4108
E-mail: sue.mara@rtoadvisors.com

Consultant to
ALLIANCE FOR RETAIL ENERGY MARKETS