



Energy Storage R.10-12-007

Energy Storage Procurement & Policy Options



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Energy Division
Grid Planning & Reliability
December 4, 2012





Remote Access

WebEx Information
Meeting Number: 747-320-967
Meeting Password: storage
Go to:
<https://van.webex.com/van/j.php?ED=194641532&UID=491292852&PW=NNWE5ZDZkNTU1&RT=MIM0>

Call in #:
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1040466

*Note: *6 to mute/unmute*

Upon entry to the call, please place yourself on mute, and remain on mute unless you are asking a question

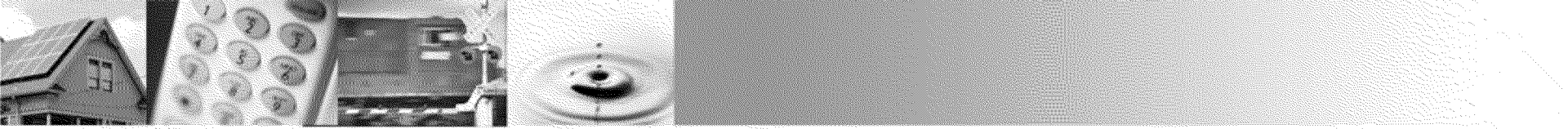




Workshop Purpose and Goals

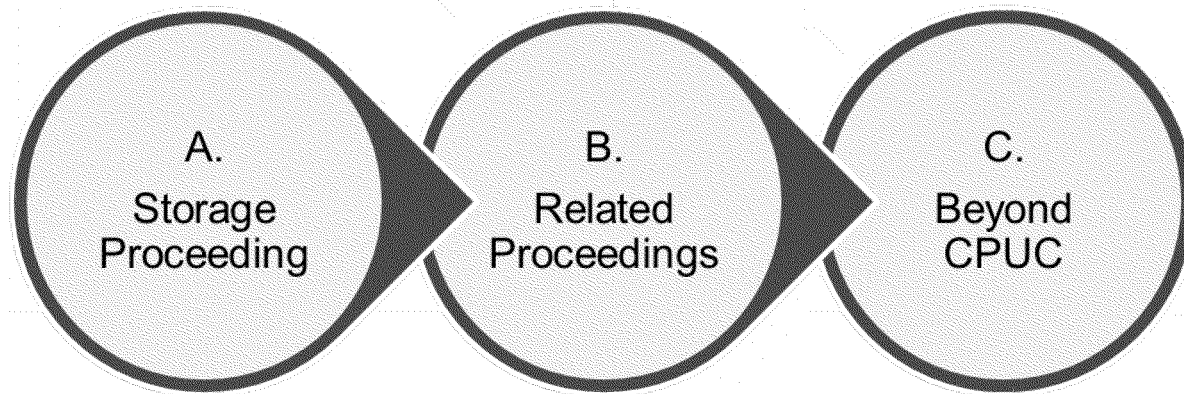
- Review accomplishments in the storage proceeding to date
- Assess and prioritize what can be accomplished in the remaining time
- Identify what information needs to be gathered to complete the analysis
- Review activities in other related proceedings and identify priorities for 2013
- Discuss staff report ideas, including questions that would be useful for staff to ask in order to further build out the record
- Plan for the procurement discussion in January





Areas for Energy Storage Policy Action

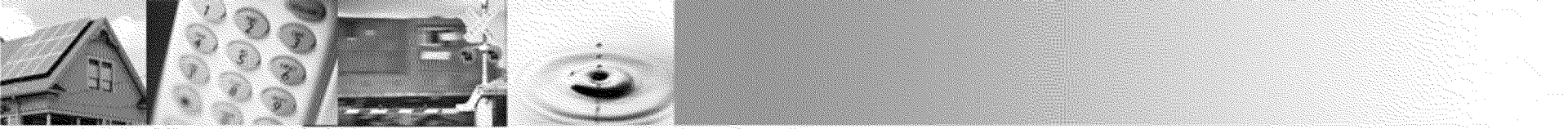
Energy Storage policy issues to be addressed in related proceedings, such as LTPP



Energy Storage policies that can be addressed in the current storage proceeding

Energy Storage policies that require actions by other organizations, such as CEC or CAISO



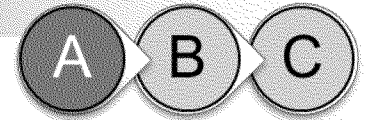


What We're Not Going to Do Today

Debate Procurement Options

- There is insufficient record to make a recommendation of what policy should be adopted or how to make a meaningful decision on procurement targets at this point
- Staff will schedule another workshop in January to address procurement options in more detail
- The Dec. 20 Staff Report will defer making procurement policy recommendation, but parties may comment on how the record in this area can be further developed





Proposed Scope for Storage Proceeding in 2013

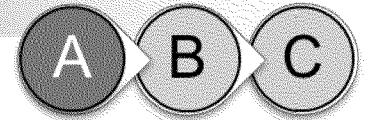
The Decision is due in October 2013. This means that realistically we have about 6 – 7 months left for analysis and building out the record. Proposed issues to be addressed:

1. Energy Storage as a “preferred resource”
2. Cost-effectiveness analysis by use case
3. Determination of procurement targets or other incentives (e.g. pilots)

Anything to add?

A need to have evidentiary hearings can also have a major impact on the schedule and time available for more informal discussion and analysis. It would be beneficial to decide on the need for hearings as soon as possible to avoid delays later.





Energy Storage as “Preferred Resource”

In this proceeding, we can evaluate whether to designate Energy Storage as a “preferred resource” and make a determination that can then be used in other proceedings. Discuss how we can do this analysis:

- Not defined in Loading Order documents. What definition do we use?
- What are impacts of designating storage as “preferred resource” in this proceeding?
- What does it take to do so and to establish a record for determination?





Applying Cost-Effectiveness Methodologies to Developed Use Cases

The plan has been to apply cost-effectiveness tools being developed to the use cases to support policy recommendations. How will this be accomplished?

- What tool or combination of tools are we going to apply to the use cases?
- What are the expected results and how will they help develop the record?
- How can we ensure to get results that can help inform pilot/procurement target decisions?
- Should we apply the cost-effectiveness tools to all of the use cases or a subset? Should a portfolio analysis be conducted?





Evaluation of Procurement Targets or Other Incentives (e.g. pilots)

Analysis Approaches

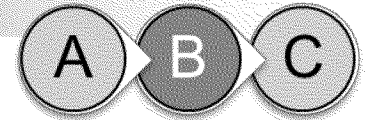
1. Development of Use Cases
2. Applying Cost-Effectiveness tools to use cases
3. Assessment of barriers and corresponding solutions

Possible Outcomes

1. Set a procurement target
2. Don't set a procurement target
3. Set a limited or pilot procurement target
4. Encourage IOU applications for storage—remove barriers

What additional information do we need to decide?



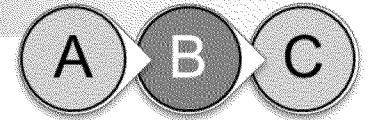


Issues for Action in Related Proceedings

Long Term Procurement Planning (LTPP):

- Set aside a portion of RFO solicitation for LCR and System need determination for non-fossil “preferred” resources specifically including storage
- Revamp bid evaluations to accommodate non-fossil resources in an all-source solicitation
- Calculation of Net Qualifying Capacity Value for LCR
- Develop a contracting mechanism for generation-based storage additions





Issues for Action in Related Proceedings (Continued)

Resource Adequacy (RA):

- Calculation of Net Qualifying Capacity value for RA
- Multi-year contracting for RA resources

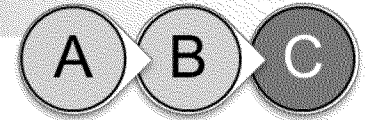
Self Generation Incentive Program (SGIP):

- Reduce Metering/Interconnection Costs for Storage

Generation Interconnection (Rule 21):

- Removal of barriers to fast-tracking of storage/PV interconnections





Other Potential Policy Options

The following are recommendations that would require actions beyond the CPUC:

- Redefine Loading Order to include Energy Storage
- Consider Utility ownership incentives or regulatory rate recovery
- Allow on-bill financing of small storage paired with PV/EV as an incentive for end-user procurement
- Consider storage in Electric Vehicle incentives
- Interpret Storage as “addition or enhancement” to renewable generation facility under PUC Sec. 25741 to eliminate costs and barriers (CEC/Rule 21)
- Certification of energy storage systems by CEC



Other Potential Policy Options (Continued)

- Encourage the CAISO to change ancillary service market rules to allow storage systems to more easily bid into regulation markets.
- Push development of revised standards in IEEE 1547 and NIST CBO-003-1
- Interpret Storage as “addition or enhancement” to renewable generation facility under PUC Sec. 25741 to eliminate costs and barriers (CEC/Rule 21)
- Certification of energy storage systems by CEC
- Encourage the CAISO to change ancillary service market rules to allow storage systems to more easily bid into regulation markets.
- Push development of revised standards in IEEE 1547 and NIST CBO-003-1





Outline of Interim Staff Report

The purpose of the report is to provide a summary update on the analysis done in 2012 and outline next steps for comments by parties:

- Summary of Use Cases
- Summary of refined barriers analysis and understanding
- Overview of related activities in other proceedings
- Recommendations for next steps:
 - “preferred resource”
 - applying cost-effectiveness to use cases
 - procurement targets/pilots
- Questions for parties to expand the record – suggestions?





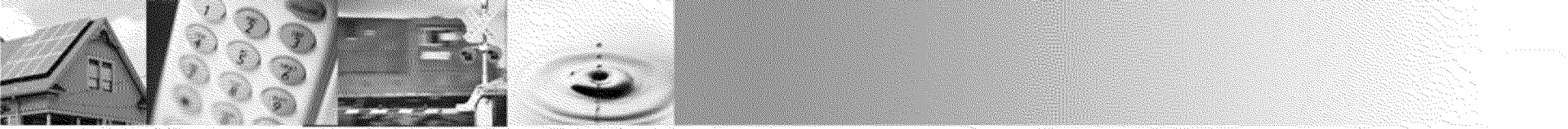
Planning for Procurement Target Discussion

Staff will hold a workshop in January to discuss policy options and how to evaluate the issues in front of the CPUC. Suggested approach:

- Parties will present their perspectives on procurement targets
- Different types of targets will be discussed:
 - Global procurement targets
 - Application-based procurement targets
 - Pilot targets
 - Set-asides in LTPP procurement
- Parties will address the arguments for and against procurement target options
- CPUC Staff would also like to see detailed proposals of how to analyze the different procurement target options, specifically focusing on any additional information that would need to be collected

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Next Steps

- Staff Report will be issued for formal comment December 20, 2012
- January workshop on procurement policy options
- Comments are due January 25, 2013; Replies on February 5
- If evidentiary hearings are requested, motion due Feb. 5





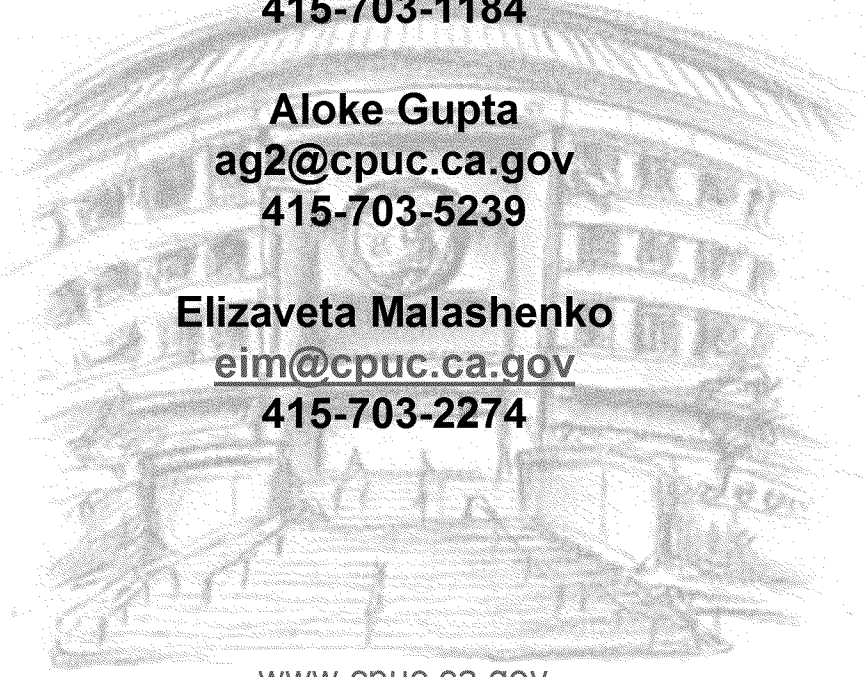
Thank You!

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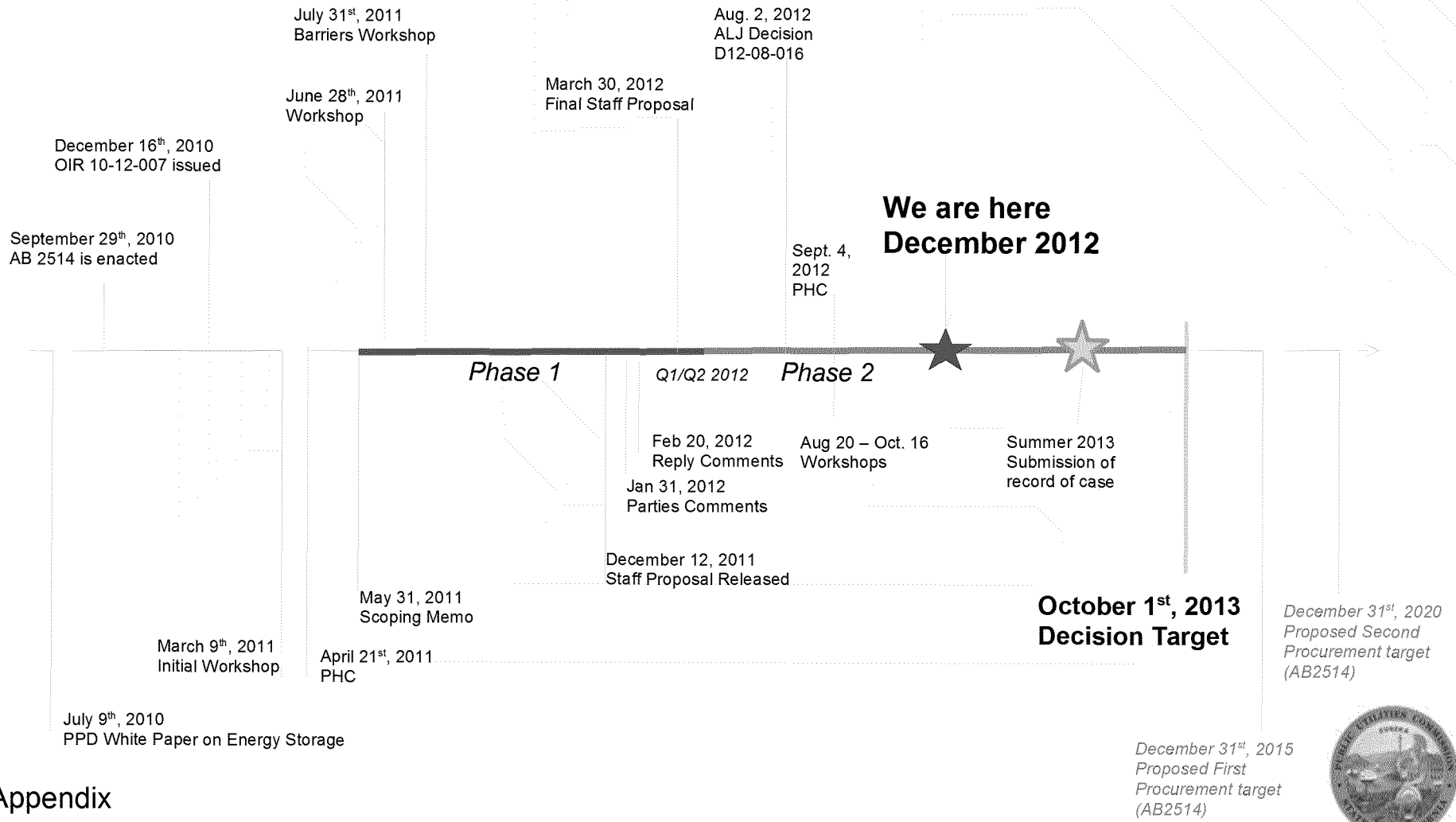
Summary of AB 2514

1. Required the Commission to open a proceeding to determine appropriate targets, if any, for each load-serving entity to procure viable and cost-effective energy storage systems.
2. By October 1, 2013, to adopt an energy storage procurement target, *if determined to be appropriate*, to be achieved by each LSE by December 31, 2015, and a 2nd target to be achieved by December 31, 2020.
3. The Commission shall reevaluate the determinations made pursuant to this subdivision not less than once every three years.
4. Consider a variety of possible policies to encourage the cost-effective deployment of energy storage systems, including refinement of existing procurement methods to properly value energy storage systems.

Appendix



Energy Storage OIR R10-12-007



Appendix