

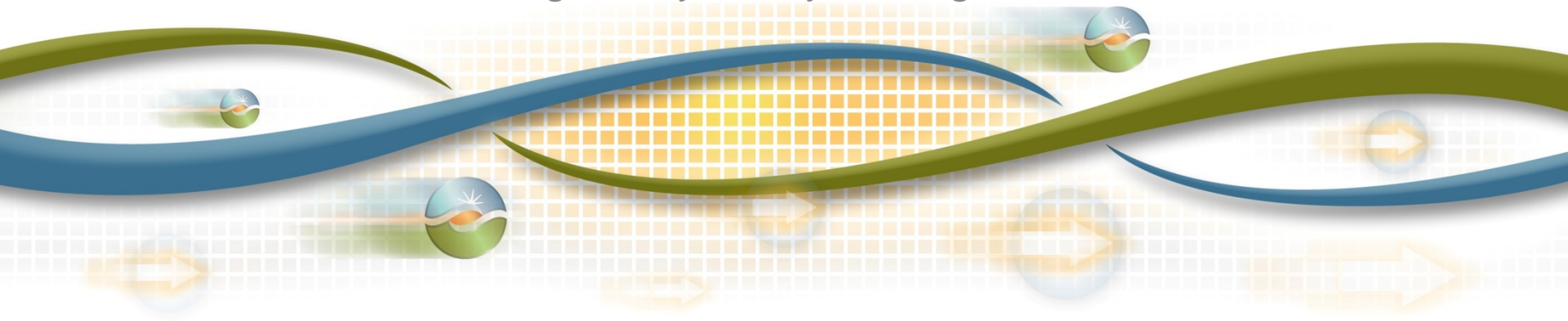


Temporary Shutdown of Resource Operations

Straw Proposal

Stakeholder Conference Call
June 28, 2017
3:00 –5:00 p.m. Pacific Time

Keith Johnson
Infrastructure and Regulatory Policy Manager



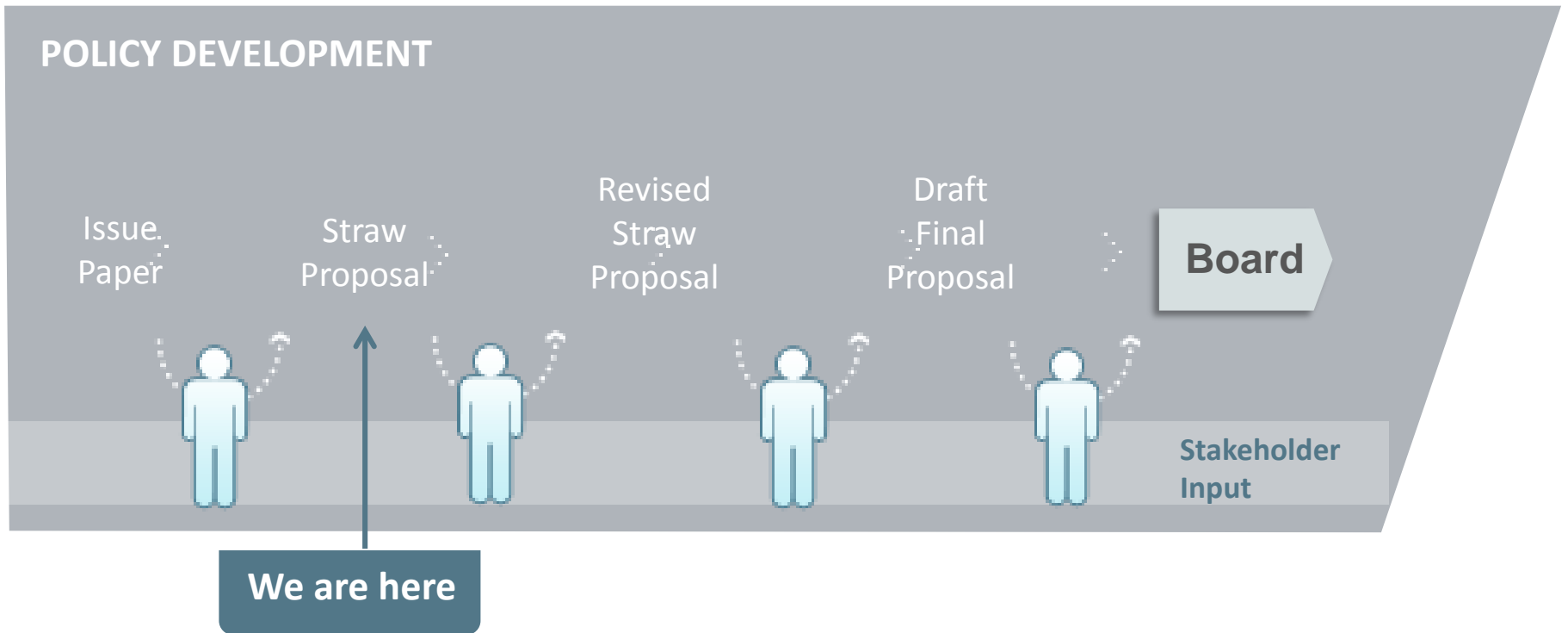
Agenda

Time	Item	Speaker
3:00-3:05	Plan for Stakeholder Engagement	Jody Cross
3:05-3:15	Background and Scope	Keith Johnson
3:15-3:25	Existing Processes	Keith Johnson
3:25-3:40	Stakeholder Comments	Keith Johnson
3:40-4:55	Straw Proposal	Keith Johnson
4:55-5:00	Next Steps	Jody Cross

PLAN FOR STAKEHOLDER ENGAGEMENT

Stakeholder Process

Temporary Shutdown of Resource Operations



The plan is to present a proposal to the CAISO Board of Governors for approval on November 1-2, 2017.

- However, CAISO may take its proposal to September 19-20, 2017 Board meeting for approval if stakeholder comments can be adequately addressed after straw proposal
 - Will assess situation after stakeholder comments have been submitted on straw proposal
 - Accelerated approach would mean going to draft final proposal after straw proposal, thereby only having two rounds of stakeholder comments before going to Board

Stakeholder Process Schedule

Temporary Shutdown of Resource Operations

Document	Date	Milestone
Issue Paper	May 10	Post issue paper
	May 19	Hold stakeholder call
	May 30	Stakeholder written comments due
Straw Proposal	June 21	Post straw proposal
	June 28	Hold stakeholder call
	July 13	Stakeholder written comments due
Revised Straw Proposal	August 9	Post revised straw proposal *
	August 16	Hold stakeholder call
	August 29	Stakeholder written comments due
Draft Final Proposal	September 11	Post draft final proposal*
	September 18	Hold stakeholder call
	October 2	Stakeholder written comments due
Final Proposal	November 1-2	Present for approval at Board meeting

* Depending on how this initiative unfolds, it may be possible to go directly from straw proposal to draft final proposal

BACKGROUND AND SCOPE

CAISO committed to undertake this initiative during the FERC process related a now-denied complaint.

- On June 17, 2016, La Paloma Generating Company filed a complaint against CAISO
- It submitted multi-month outage requests for several units because it did not anticipate continued operation of units would be economic
- CAISO denied requests because
 - Outage requested on economic, rather than physical reasons
 - Request did not represent appropriate use of outage management system as allowed by CAISO tariff

Complaint (continued).

- On October 3, 2016, FERC ruled CAISO's denial of outages was reasonable under CAISO tariff
 - Only permissible reasons for outage include planned maintenance, new construction, or other work
 - Cannot grant requests for outages for economic reasons such as those at issue in complaint
- Parties suggested FERC order CAISO to revise its tariff
 - To allow for outages based on economic considerations
 - Procure capacity if CAISO denies outage request - at least in case of non-resource adequacy ("RA") capacity
- CAISO agreed to undertake a stakeholder process in 2017

Scope of initiative.

- This initiative will look at
 - Conditions under which CAISO may allow a resource to temporarily shut down operations for non-physical reasons, including economic reasons
 - Compensation, if any, CAISO would pay a resource if CAISO denies a request for a shutdown
 - Conditions under which switching operations from one balancing authority area (“BAA”) to another BAA would be allowed and whether a resource that has been switched to another BAA would be eligible to shown as RA capacity

EXISTING PROCESSES

The CPUC and CAISO have existing processes that address resource retirements.

- California Public Utilities Commission (“CPUC”)
 - Has maintenance standards under General Order 167
 - CAISO will need to consider General Order 167 as CAISO policy is developed to potentially allow temporary shutdowns
- CAISO
 - Has stakeholder process underway in its business practice manual (“BPM”) change management process
 - Proposing some clarifications to the BPM for Generator Management
 - One BPM change is to clarify the requirements for mothballing a resource

The BPM for Generator Management lays out four scenarios for resources that are considering retirement.

- Scenario 1 - Retiring resource wishes to reserve its deliverability and has either
 - Been approved for affidavit repowering process, or
 - Entered interconnection queue to be studied for repowering
- Scenario 2 - Retiring resource wishes to reserve its deliverability but has not yet
 - Committed to or completed assessment for repowering, or
 - Entered interconnection queue after determination it is ineligible for affidavit repowering process
- Scenario 3 - Retiring resource will not repower and has no need to reserve its deliverability
- Scenario 4 – Resource wants to mothball as it has not yet determined its next steps

A retiring resource has several conditions it must fulfill to retire and maintain its deliverability on grid.

- BPM defines steps a resource is required to take under each scenario
 - Applicable agreements must be revised
 - Resource must demonstrate actively engaged in construction of replacement generation within three years of retiring to retain its deliverability status
 - Annually CAISO will check on status of repowering progress
 - Resource can be in mothball status for no longer than two interconnection cluster application windows (a maximum of two years)

The current BPM has several timing considerations for temporary shutdown of operations.

- Resource must provide notice to CAISO
 - If resource is repowering and desires to retain its deliverability, 60 calendar days in advance of retiring so that CAISO can determine if resource is needed for reliability
 - If resource is permanently retiring and does not want to retain its deliverability, 90 calendar days in advance of retiring so that CAISO can determine if resource is needed for reliability
- If resource does not operate at end of three-year period or cannot demonstrate that it is in active construction then it loses its deliverability status
- CAISO only allows a resource to not generate for one year before CAISO requires resource to develop a plan

STAKEHOLDER COMMENTS

Stakeholder Comments on Scope.

- Instead of this effort, should pursue solution to problem of insufficient revenues to retain resources
- Scope should not include allowing short-term outages
- Describe interplay between this initiative, Capacity Procurement Mechanism (“CPM”) Risk-of-Retirement (“ROR”) initiative, Reliability Must-Run (“RMR”) process, and Transmission Planning Process
- Support granting shutdowns and using existing CPM payment structure if request is denied
- Calpine presented alternate proposal where uncontracted resource is not obligated to respond to dispatch instructions

Stakeholder Comments on Identified Issues.

- Generally support ability for resources to take shutdowns
- Support, but not universal, for payment when request denied – many suggest using CPM mechanism
- Support time limits – but vary widely from a minimum of one to nine months to a maximum of one to three years
- Support establishing timelines and a process for reviewing and granting requests
- Not sure a level of “return-ability” makes sense
- Resource on shutdown should not count for RA
- Resource “switched” out of BAA should not count as RA resource in that BAA

Stakeholder “Other” Comments

- Consider merging this initiative and CPM ROR initiative
- Recommend holistic approach to determine future need for generation capacity
- For a resource to request a shutdown, it must have offered its capacity into annual CPM auction for that trade year
- If CAISO wants to limit need for shutdowns it should focus on market rule reforms

STRAW PROPOSAL

1. Who is eligible?

- Only capacity that is not RA capacity or RMR capacity can request a temporary shutdown, i.e., if resource is RA or RMR it cannot request a shutdown
 - “RA capacity” is capacity that is either shown as RA capacity in RA showing, or capacity that has been procured under a RA contract but may not be shown on a RA showing
 - RMR capacity is capacity procured under a RMR contract
- Resource must be operating as part of CAISO’s BAA to be eligible to request a temporary shutdown

2. Whether a resource can temporarily shut down for economic reasons.

- CAISO may allow a resource to temporarily shut down operations for economic reasons, provided that there is no reliability impact as determined by a CAISO study

3. The conditions under which the CAISO may grant a request for temporary shutdown.

- Resource will need to apply for temporary shutdown
- CAISO will need to do a study
- If study determines resource can go out on shutdown without reliability impacts to grid, request will be granted
- Resource will use CAISO's outage management system to report the temporary shutdown status (will change tariff to allow this)

4. Reliability Studies.

- Will conduct two types of studies
 - Reliability analysis
 - RA analysis
- Reliability analysis
 - Will mirror what is currently conducted to ensure system security for generation maintenance outages
 - Will consider expected load forecast and previously approved transmission and generation outages
 - Will apply N-1, credible N-2, T-1 and G-1 contingencies

4. Reliability Studies (continued).

- Capacity analysis
 - Will be conducted to ensure sufficient available capacity
 - Will conduct local capacity check to ensure enough local capacity is procured to meet previously defined Local Capacity Requirement procurement target
 - Will conduct a System RA check to ensure the request for shutdown does not reduce available System RA capacity to below monthly System RA requirements

5. Form of compensation, if any, to be paid to resource if shutdown request is denied.

- Will pay a CPM payment for any months during requested shutdown period where CAISO's studies show resource is needed for grid reliability
- Maximum CPM payment will be for four months at a time
- Payment will be based on CPM bid price if resource has submitted a bid into CPM competitive solicitation process ("CSP"), or, if resource does not have a bid price, CPM soft offer cap price
- Resource will not be required to have offered into CPM CSP to be eligible to receive a CPM payment

6. Limit on minimum and maximum amount of time a resource can shut down its operations.

- Request can be for no less than two months
- Request can be for no longer than four months
- Resource can apply for a subsequent four-month period

7. Process and timeline for requesting shutdown of operations.

- Resource can request at any time during year
- Request must be submitted a minimum of 60 days in advance of requested effective date
- CAISO will notify of approval or denial no less than eight days prior to requested effective date
- Requests will be assessed on first-come-first served basis (there will not be a request “window”)
- All environmental permits must be maintained while on shutdown

7. Process and timeline (continued).

- On return, resource must meet Participating Generator Agreement (“PGA”) requirements, including Pmax and ramping capabilities
- Must be able to return to service within 10 business days upon notification from CAISO
- Can submit subsequent request just prior to when initial request expires, with next request submitted no sooner than 15 days prior to end date of approved shutdown
- If CAISO terminates approved shutdown, resource expected to be ready for service within emergency return time and resource will be paid a CPM payment

8. Is there a level of “return-ability” that would need to be maintained while in shutdown status?

- Resource is free to manage resource such that when it returns it can meet its PGA requirements
- During shutdown resource will not be at risk of having to respond to an Exceptional Dispatch and cannot be called out of shutdown for “no touch” operating conditions
- Emergency return provision will give resource owner 10 business days to come back into operation
 - And resource will be given CPM payment as it is now needed for reliability

9. Can resource on temporarily shutdown be used as RA resource in RA showing for that period?

- Resource on shutdown is not eligible to be used as a RA resource in a RA showing for the period it is in temporary shutdown status

10. Can resource that has switched its operations out of CAISO BAA to another BAA be eligible as internal RA resource?

- Will not be eligible to be used as internal RA resource in a RA showing for period that it has temporarily shut down operations in CAISO's BAA
 - Can still qualify as an import for RA purposes
- Will not be eligible to apply for a temporary shutdown if resource is not operating within CAISO's BAA

NEXT STEPS

Next Steps

- Request stakeholders submit written comments by close of business on July 13
 - Use template provided on website at: [Comments Template](#)
 - Submit to mailbox: initiativecomments@caiso.com