

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to
Continue Implementation and
Administration of California
Renewables Portfolio Standard
Program.

Rulemaking 11-05-005
(Filed May 5, 2011)

CLEAN COALITION POST-WORKSHOP COMMENTS ON
SB 32 STAFF PROPOSAL

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November 2, 2011

CLEAN COALITION POST-WORKSHOP COMMENTS ON
SB 32 STAFF PROPOSAL

The Clean Coalition respectfully submits these post-workshop comments on the SB 32 staff proposal pursuant to the Administrative Law Judge's Ruling dated October 13, 2011.

The Clean Coalition is a California-based advocacy group, part of Natural Capitalism Solutions, a non-profit entity based in Colorado. The Clean Coalition advocates primarily for policies and programs that enable the "wholesale distributed generation" market segment, which is generation that connects to the distribution grid for local use. The Clean Coalition is active in proceedings in many regulatory venues, including the Commission, Air Resources Board, and the Energy Commission in California; the Federal Energy Regulatory Commission; and in other state and local jurisdictions across the country.

Our main points are as follows:

- The Clean Coalition urges the Commission to adopt two additional guiding principles: 1) the creation of a feed-in tariff with pricing sufficient to meet the program size in a reasonable time frame (within the confines of the law); 2) the creation of a feed-in tariff that provides economic opportunities for a broad base of Californians and not just a handful of the most experienced renewable energy development companies
- We remind the Commission that under SB 32's ratepayer indifference requirement ratepayers must be held indifferent to both costs and benefits of SB 32. Accordingly, all quantifiable benefits to ratepayers from an SB 32 facility should be compensated fully

- We can accept using the RAM clearing price as the base price, but disagree with some parties' suggestion that this price should be re-calibrated with each RAM auction. Rather, the RAM clearing price from the November, 2011, auction should form the basis for SB 32 pricing and then market response to SB 32 pricing should determine upward or downward adjustments, as staff has suggested
- We agree with the proposed pricing formula of RAM clearing price + transmission costs + locational adder + time of delivery adjustments, but we recommend a different formula for the locational adder. Specifically, we recommend changes to the transmission component of the locational adder. The Commission should for this component use Transmission Access Charges (TACs) specific to each utility, as calculated by CAISO each year. This data is publicly available and more accurately reflects the avoided transmission component
- We also recommend a scaling factor for the RAM clearing price, based on national data comparing approximately 20 MW size projects to projects 3 MW and below (available from Lawrence Berkeley National Lab, NREL and others), in order to provide a more accurate avoided cost base for SB 32 projects
- The RAM clearing price should also be normalized by service territory. If the RAM clearing price for a product category for any IOU comes from a project not in that IOU's service territory (as is allowed under RAM), then the clearing price must be normalized for SB 32 for the applicable service territory, primarily in terms of capacity factor, but potentially other factors also. If there is no applicable RAM clearing price for any particular category, we recommend using the latest Market Price Referent in lieu of the RAM clearing price
- We urge the Commission to use the RAM clearing price as determined with accepted RAM bids on January 15, 2012, rather than the finalized contract price. There seems little reason to delay another three months based on what are likely to be minor changes to the pricing of the accepted RAM bids.

- Staff recommends that the locational adder only applies if projects are in “hot spots,” which are defined as those areas where the project would defer investments in distribution or transmission system upgrades. The proposal then directs the utilities to identify 10% (SCE) or 5% (PG&E and SDG&E) of their load that will qualify as “hot spots.” We recommend instead, rather than applying an “all or nothing” approach, that the Commission adopt a three-tiered approach. The first tier should be what staff has recommended already, with the locational adder calculated as the average of ratepayer benefits for those locations. The second tier should be for up to 20% of substations for each utility, with the adder calculated as the average ratepayer benefit for that entire tier. The third tier should be for all other locations, with the adder calculated as the average ratepayer benefit for that entire tier (probably a very low figure, but not zero).
- The Commission should clarify footnote 12 in the staff proposal, which suggests that the transmission cost adder from the RAM clearing price contract should be “adjusted” if the particular project does not have a Phase II study or Facilities Study completed yet. This “adjustment” needs to be fleshed out.
- We agree with staff’s proposal that price adjustments should be based on market response and we suggest the following additional recommendations:
 - Each adjustment up or down should be 5% of the base price (the RAM clearing price)
 - The Clean Coalition recommends an upward adjustment if three months elapse and less than 25% of any category has been subscribed.
 - For downward adjustments, we recommend degression at 50% and then 75% of category allocation subscription.
- We appreciate that SCE agrees with us that prices should be adjusted volumetrically. We disagree strongly, however, with other aspects of SCE’s proposal because their suggested starting price is far too low and their suggested

adjustment increments are far too small to adjust the market price quickly enough to create a real market in a reasonable time frame.

- The Clean Coalition agrees that each utility should be allowed to designate the share for each product “bucket” annually, but with at least 10% or 3 MW, whichever is greater, in each bucket for each utility
- We strongly object to requiring completion of Phase 1 or System Impact Studies as a pre-condition for eligibility. Rather, as we recommended in earlier comments, we believe that an application fee plus a requirement to submit an interconnection application within one month of receiving a feed-in tariff queue position, plus development security requirements for both SB 32 and interconnection, are sufficient hurdles to discourage queue hogging and unserious developers. Requiring a completed Phase 1 or SIS is far too high a burden given the intent of SB 32
- We do recommend, however, that if a developer withdraws from its interconnection process after obtaining an SB 32 queue position, and doesn’t enter a new interconnection process within 30 days, it should lose its SB 32 queue position
- The Clean Coalition also opposes SCE’s suggestion that TOD pricing should be different for deliverable and non-deliverable products. TOD pricing has always been the same previously and we see no valid reason to change this now
- We agree with staff that deliverability should not be required for SB 32 projects and we recommend instead that the Commission simply require any projects that do obtain deliverability be obligated to sell resource adequacy benefits to the host utility (matching the clear language of SB 32)
- We also agree with staff that PG&E’s 1 MW and under PPA should form the basis for a single SB 32 PPA
- We fully support staff’s suggestion that the Commission may in the future expand the program size for SB 32 upwards

- We disagree with staff's recommendation that the development security (deposit) should be \$50/kW for projects between 1 and 3 MW. We recommended previously and recommend again that this be \$20/kW for all SB 32 projects, a more reasonable figure that is still sufficiently high to discourage unserious developers (particularly when we consider the many other costs facing developers, such as interconnection fees, SB 32 application fees, land lease fees, etc.)
- With respect to transitioning from AB 1969 to SB 32, staff recommends that once "the new rules are in place" under SB 32, all AB 1969 projects will be subject to the new rules. We request that the Commission clarify what this phrase means: does it mean upon completion of a Final Decision in this proceeding, or the final Advice Letter filing implementing the Final Decision? Or some other date?
- The Clean Coalition strongly supports the staff proposal to allow SB 32 developers to choose Rule 21 or WDAT to interconnect, until the new Rule 21 is in place (which should apply to all SB 32 projects and all other distribution-interconnected projects)
- We agree with the staff's proposed seller concentration limit of 25% of each IOU's total capacity cap, but we urge the Commission to clarify how this limit will be operationalized. For example, will it be on a rolling basis, such that once an IOU's total capacity is comprised of 25% by a single developer then no more contracts will be allowed for that developer? Or is there some other method of operationalizing this limit that staff have contemplated?
- The Clean Coalition contends that the development security and other viability criteria are sufficient such that an additional experience criterion (staff suggests SB 32 applicants must have at least one team member that has completed a similar project or have worked on one that is underway) is unnecessary and potentially harmful. As opposed to the RAM, SB 32 is intended to provide access to new market entrants and non-professional developers (property owners, farmers, etc.) Such participants may not have had any other opportunity to

develop a project and precedent should not be set here for what may turn out to be a much larger program than the initial 750 MW

- We disagree with staff's suggestion that section 399.20(n) provides utilities any new authority to reject proposed SB 32 projects. Rather, as we recommended in previous comments, existing or new interconnection rules already provide this authority entirely independent of SB 32. Thus, no new authority is conferred and the Commission can consider this language in SB 32 already implemented
- Alternatively, the Clean Coalition recommends that utilities only be allowed to reject SB 32 projects that are otherwise eligible if they would exceed 100% of the minimum load on the relevant substation. We strongly disagree that project eligibility should be limited to "preferred" areas identified in IOU maps
- The Clean Coalition agrees with staff's recommended data reporting requirements
- We also agree that a uniform reporting format should be developed and we suggest a particular format below
- We suggest that "effective capacity" should be interpreted to mean the AC capacity of each SB 32 project (rather than DC)
- We urge the Commission to clarify that the required online of 18 months (plus one six month extension) should start from the date of the SB 32 contract execution by both parties
- The Clean Coalition strongly opposes SCE's suggestion that up to 60 months for COD will be allowed. Rather, we reiterate our previous recommendation that COD requirements match RAM (18 months from the time of contract execution plus one six month extension)

I. Guiding Principles

The Clean Coalition urges the Commission to adopt two additional guiding principles:

- 1) the creation of a feed-in tariff with pricing sufficient to fulfill the SB 32 program size

in a reasonable time frame (within the confines of the law); 2) the creation of a feed-in tariff that provides economic opportunities for a broad base of Californians and not just a handful of the most experienced renewable energy development companies.

II. Specific comments

a. Ratepayer indifference

We remind the Commission that under SB 32's ratepayer indifference requirement ratepayers must be held indifferent to both costs and benefits of SB 32 projects. Accordingly, all quantifiable benefits to ratepayers from an SB 32 facility should be compensated fully. We have proposed herein some improvements to the staff proposal that we believe will help to make ratepayers truly indifferent financially to SB 32 projects.

b. Pricing issues

i. RAM clearing price

The Clean Coalition can accept the staff proposal to use the RAM clearing price as the base price for each category (though we have argued against this in previous comments), but we disagree with some parties' suggestion that this price should be recalibrated with each RAM auction. Rather, the RAM clearing price from the November, 2011, auction should form the basis for SB 32 pricing and then market response to SB 32 pricing should determine upward or downward adjustments, as staff has suggested.

We also urge the Commission to use the RAM clearing price as determined by accepted RAM bids on January 15, 2012, rather than the finalized contract price in March or April. There seems little reason to delay another three months based on what are likely to be immaterial changes to the pricing of the accepted RAM bids. If there is any

change, it is very likely to be an increase in price from the January to the April price due to developers dropping out of the short-list, resulting in a higher clearing price.

Accordingly, by advancing the SB 32 price determination to January, the Commission will probably be providing a lower base price for SB 32, which benefits ratepayers, while also benefiting SB 32 developers by having an active program three months sooner.

ii. Locational adder

Similarly, we agree with the proposed pricing formula of RAM clearing price + transmission costs + locational adder + time of delivery adjustments, but we recommend a different formula for the locational adder. Specifically, we recommend adding a transmission component to the locational adder, which currently includes sub-transmission deferred investments, distribution deferred investments and line losses. The Commission should use Transmission Access Charges (TACs) specific to each utility for this component, as calculated by CAISO each year. This data is publicly available and more accurately reflects the full locational benefits than E3's proposal.

E3 calculates the "broader regional value" of sub-transmission as the sub-transmission component of the locational adder, providing the following values in their Attachment D to the ALJ Ruling (p. 8):

Figure 1. E3 calculation of sub-transmission avoided costs.

Year	2011
PG&E	19.29
SCE	23.39
SDG&E	21.08

Translating these values to c/kWh, we obtain the relatively low values in Figure 2.

Figure 2. Converting E3's sub-transmission deferred investments into c/kWh.

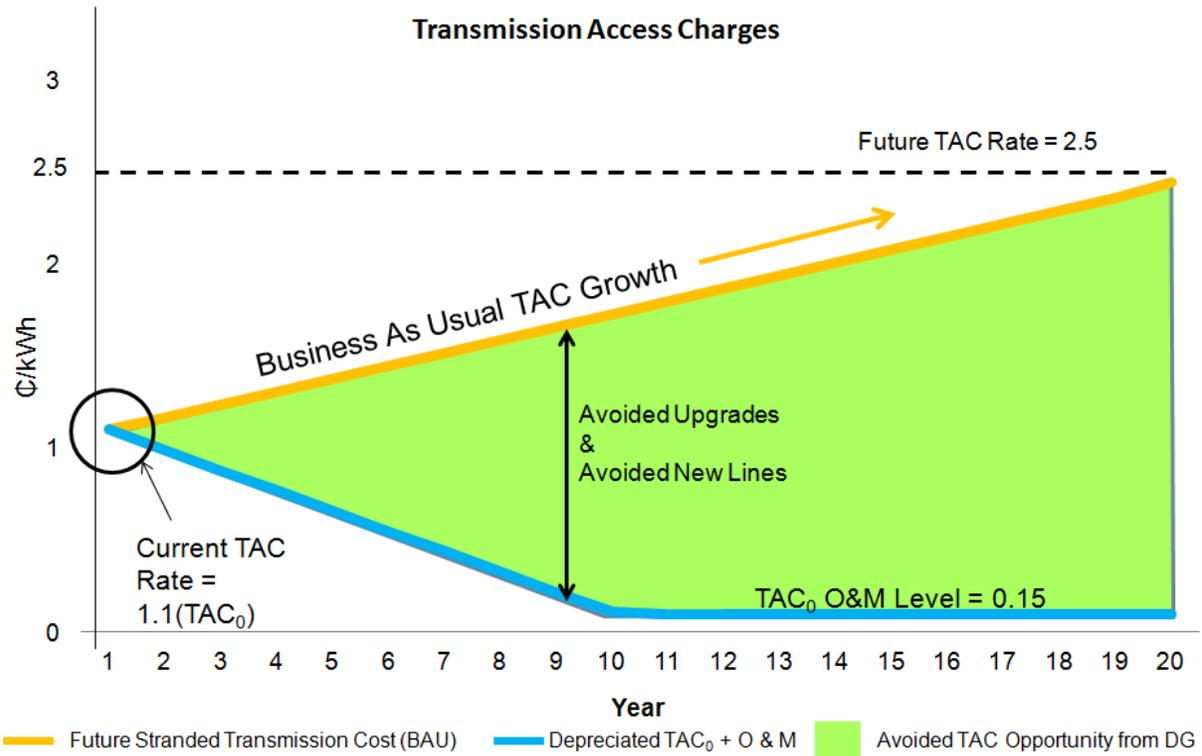
	c/kWh
PG&E	0.22
SCE	0.26
SDG&E	0.24

The Clean Coalition feels that E3's proposed methodology fails to capture the full locational benefits of SB 32 projects because it doesn't include avoided or deferred transmission costs resulting from the deployment of renewable energy on the distribution grid. We recommend, in order to reach a more complete calculation of locational benefits, that the Commission include the established Transmission Access Charges (TACs), issued by the CAISO each year for each utility.

TACs represent the cost paid by each utility to CAISO to maintain the transmission system. This cost is passed to ratepayers in rates. Essentially, TACs represent the sunk cost of the existing transmission system. TACs change over time as investments in the transmission system change. Today's TACs would go down in coming years if investments in the transmission system were halted now. However, in actuality, TACs will go up significantly in the future due to planned investments in new transmission

and upgrades to existing transmission lines. At a 3 percent annual inflation rate, average TACs increase from today's 1.1 c/kWh to 2.3-2.5 c/kWh by 2020 (figure 3).

Figure 3. Generalized TAC projections (Source: Clean Coalition and data from CAISO).



The Clean Coalition recommends, as a refinement of our earlier recommendations in this proceeding, that the Commission use the actual TACs for each utility, in each year of the SB 32 contract, as the avoided transmission component of the locational adder. The value should be adjusted each year as CAISO adjusts its TAC calculations. This provides an adjusted and accurate estimate of actual avoided transmission costs, in each year of the SB 32 contract, as a key addition to the locational adder.

This avoided transmission cost locational benefit is different than, and does not overlap, the transmission cost adder from the RAM clearing price contract that the staff proposal supports. This is the case because the RAM transmission component represents only a means for normalizing the clearing price to the SB 32 projects for that product “bucket,”

and does not include the broader costs of upgrading and maintaining the transmission system to meet new load or improve reliability. These latter components are included in the TACs and this is why we recommend their inclusion.

We also recommend a different approach for determining whether the locational adder applies. Staff recommends that the adder only applies if projects are in “hot spots,” which are defined as those areas where the project would defer investments in distribution or transmission system upgrades. The proposal then directs the utilities to identify 10% (SCE) or 5% (PG&E and SDG&E) of their load that will qualify as “hot spots.”

We recommend instead, rather than applying an “all or nothing” approach, that the Commission adopt a three-tiered approach. The first tier should be what staff have recommended already, with the locational adder calculated as the average of ratepayer benefits for those locations. The second tier should be for up to 20% for each utility, with the adder calculated as the average ratepayer benefit for that entire tier. The third tier should be for all other locations, with the adder calculated as the average ratepayer benefit for that entire tier (probably a very low figure, but not zero).

iii. Transmission cost adder adjustment

Staff should clarify footnote 12 in the staff proposal, which suggests that the transmission cost adder from the RAM clearing price contract should be “adjusted” if the particular project does not have a Phase II study or Facilities Study completed yet. This “adjustment” needs to be fleshed out.

iv. Price degression

We agree with staff's proposal that price adjustments should be based on market response and we suggest the following additional recommendations:

- Each adjustment up or down should be 5% of the base price (the RAM clearing price)
- The Clean Coalition recommends an upward adjustment if three months elapse and less than 25% of any category has been subscribed.
- For downward adjustments, we recommend degression at 50% and then 75% of category allocation subscription.

We are pleased that SCE agrees with us that prices should be adjusted volumetrically. We disagree strongly, however, with other aspects of SCE's proposal because their suggested starting price lacks a relevant market basis for SB 32 projects, is far too low, and their suggested adjustment increments are far too small to adjust the market price quickly enough to create a real market in a reasonable time frame.

The Clean Coalition also opposes SCE's suggestion that TOD pricing should be different for deliverable and non-deliverable products. TOD pricing has always been the same previously and we see no valid reason to change this now.

v. Normalizing the RAM clearing price

We also recommend a scaling factor for the RAM clearing price, based on nation-wide data comparing approximately 20 MW size projects to projects 3 MW and below (available from Lawrence Berkeley National Lab, NREL and others), in order to provide a more accurate avoided cost base for SB 32 projects.

Additionally, the RAM clearing price should be normalized by service territory. For example, if the clearing price for a product category for any IOU comes from a project not in that IOU's service territory (as is allowed under RAM), then the clearing price must be normalized for the applicable service territory, primarily in terms of capacity factor, but potentially other factors also. Without this normalization, the SB 32 base price, from the RAM clearing price, will not be an accurate reflection of the actual market price for SB 32 projects, as is required.

vi. MPR in lieu of clearing price if none is available

If there is no applicable RAM clearing price for any particular category for any utility, we recommend using the latest Market Price Referent in lieu of the RAM clearing price.

c. Megawatt allocation between resource types

The Clean Coalition agrees that each utility should be allowed to designate the share for each product "bucket" annually, but with at least 10% or 3 MW, whichever is greater, in each bucket for each utility.

d. Application pre-conditions

i. Completion of interconnection studies

The Clean Coalition strongly objects to requiring completion of Phase 1 or System Impact Studies as a pre-condition for eligibility. Rather, as we recommended in earlier comments, we believe that the following requirements we've recommended are sufficient hurdles to discourage queue hogging and unserious developers: 1) an

application fee; 2) a requirement to submit an interconnection application within one month of receiving a feed-in tariff queue position; 3) development security. Requiring a completed Phase 1 or SIS is far too high a burden given the intent of SB 32 to provide a means for selling renewable power for many types of sellers (not just professional developers).

The following diagrams show how our previous proposal will interact with the existing interconnection procedures (WDAT). In particular, the various requirements we've proposed for an application to stay in the SB 32 queue should meet the staff objective in suggesting that Phase I or SIS be a precondition for an application, and in a way that is far less onerous on applicants.

Figure 4. Clean Coalition proposed requirements for SB 32.

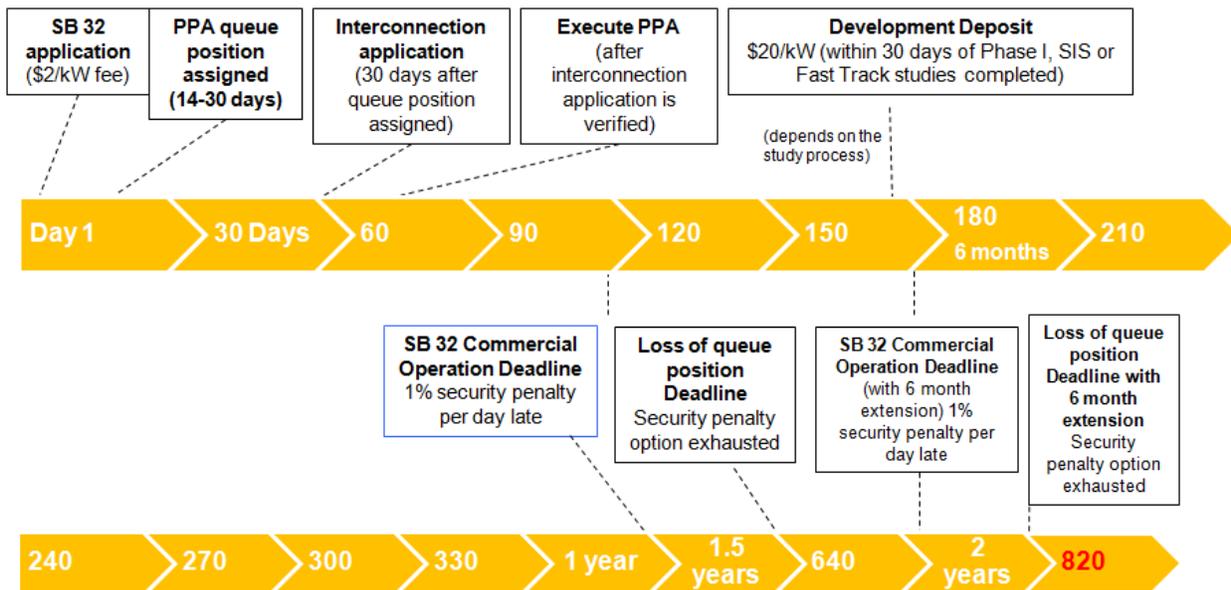


Figure 5. Clean Coalition proposed requirements for SB 32 mapped onto Fast Track.

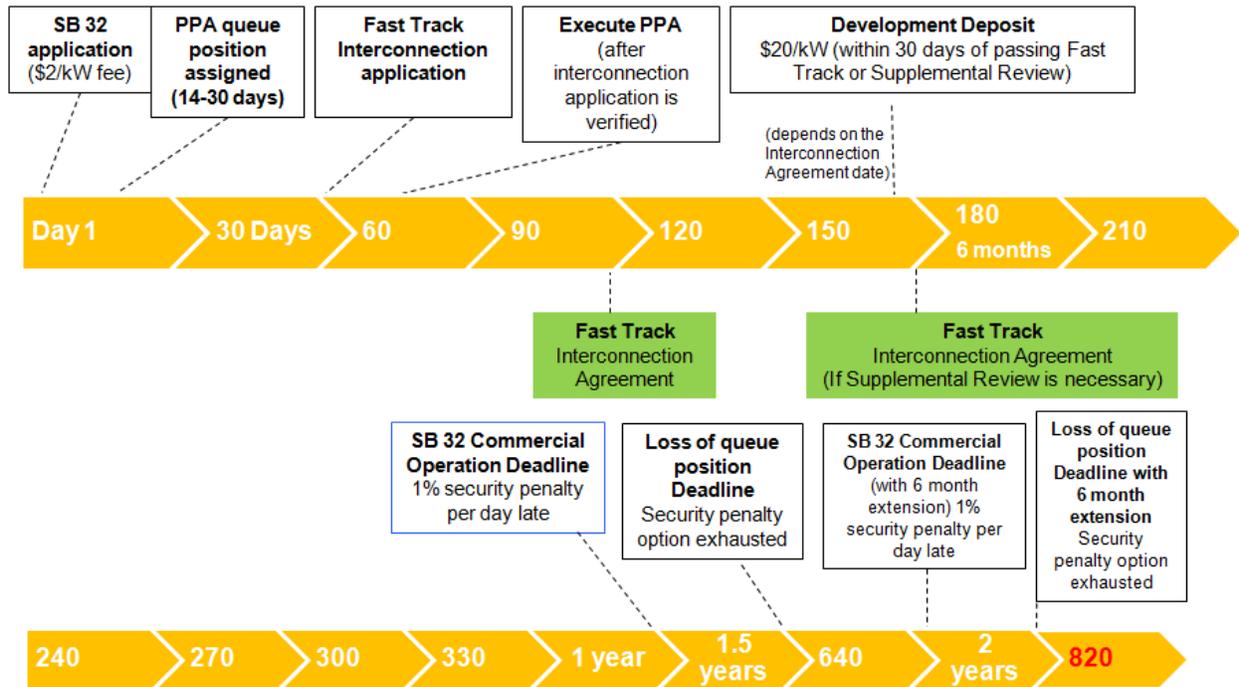


Figure 6. Clean Coalition proposed requirements for SB 32 mapped onto ISP.

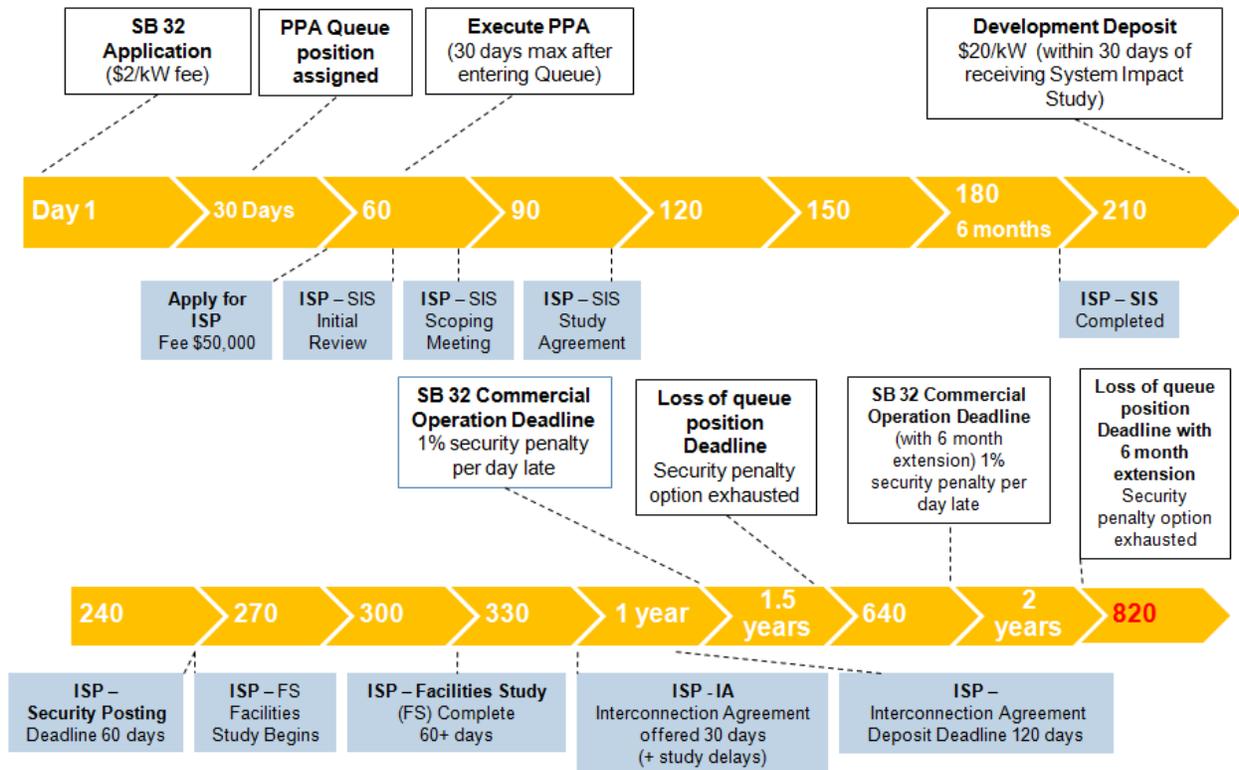
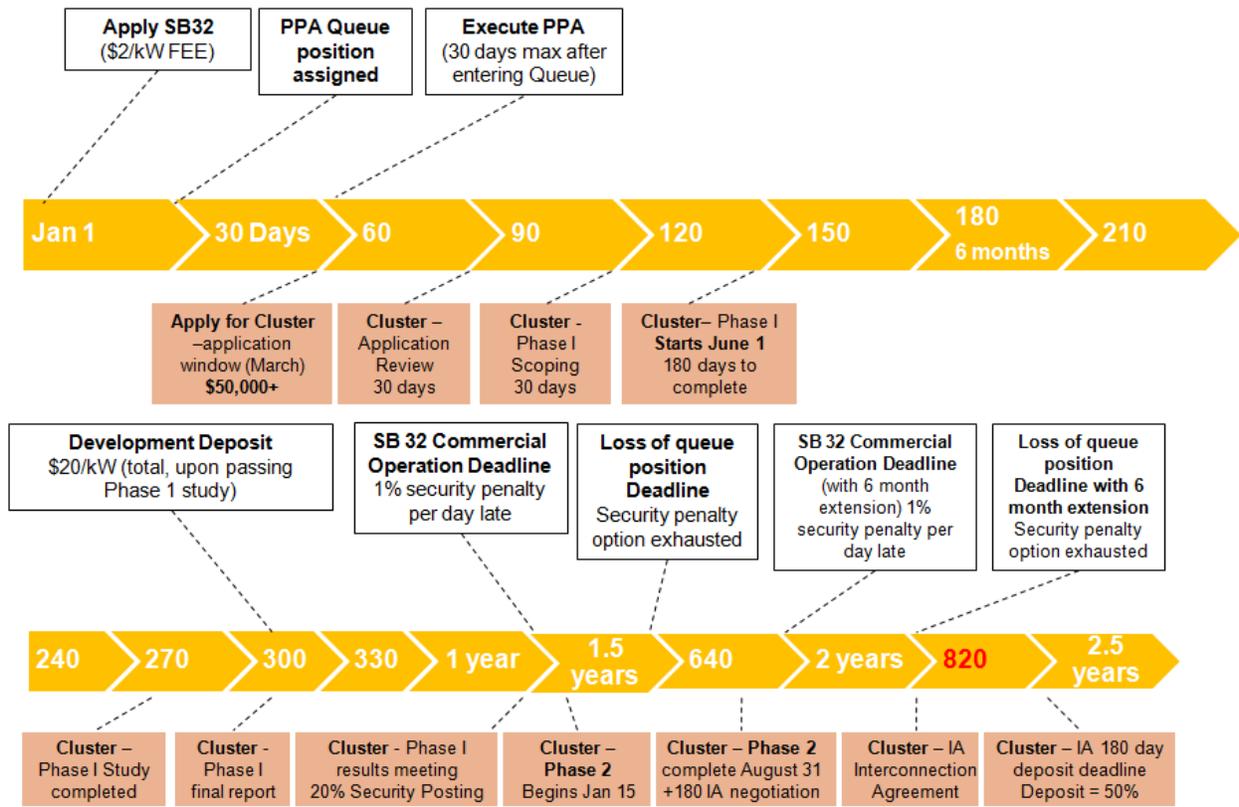


Figure 7. Clean Coalition proposed requirements for SB 32 mapped onto cluster process.



As should be clear from these diagrams, completion of interconnection should be feasible for SB 32 projects interconnecting under Fast Track or ISP within the 18+6 month timeframe of SB 32, even if the applicant has not submitted an interconnection request at the time of the SB 32 application. However, the cluster process is problematic for SB 32 because of its extended timeframe. The Clean Coalition feels, nonetheless, that there are sufficient safeguards built into our recommendations for SB 32, as well as built into the interconnection process, that applicants will be deterred from seeking SB 32 contracts unless they have a good chance of completing the interconnection process in time to come online under SB 32's requirements.

These timelines show that a Phase I or SIS, or equivalent Fast Track progress, does not need to be a pre-condition for an SB 32 application.

Our recommendations for SB 32 include an application fee of \$2/kW, a development security deposit of \$20/kW, and a requirement that the interconnection application be submitted within 30 days of obtaining an SB 32 queue position. Moreover, the interconnection procedures require a major payment upfront for ISP and the cluster process (\$50k plus \$1k per MW) and a more modest payment of \$1k for Fast Track, plus development security deposits that equal the entire cost of projected interconnection costs. The sum total of all of these financial and logistical requirements is a heavy safeguard against unserious developers.

We do recommend, however, that **if a developer withdraws from its interconnection process after obtaining an SB 32 queue position, and doesn't enter a new interconnection process within 30 days, it should lose its SB 32 queue position.** This provides one additional safeguard against queue hogging.

e. Security deposits

We disagree with staff's recommendation that the development security (deposit) should be \$50/kW for projects between 1 and 3 MW. We recommended previously and recommend again that this be \$20/kW for all SB 32 projects. This is a more reasonable figure that is still sufficiently high to discourage unserious developers (particularly when we consider the many other costs facing developers, such as interconnection fees, SB 32 application fees, land lease fees, etc.) and avoid "queue hogging."

f. Experience criterion

The Clean Coalition contends that the development security and other viability criteria are sufficient such that an additional experience criterion (staff suggests SB 32

applicants must have at least one team member that has completed a similar project or have worked on one that is underway) is unnecessary and potentially harmful. As opposed to the RAM, SB 32 is intended to provide access to new market entrants and non-professional developers (property owners, farmers, etc.) Such participants may not have had any other opportunity to develop a project and precedent should not be set here for what may turn out to be a much larger program than the initial 750 MW.

g. Deliverability

We agree with staff that deliverability should not be required for SB 32 projects and we recommend instead that the Commission simply require any projects that do obtain deliverability be obligated to sell resource adequacy benefits to the host utility (matching the clear language of SB 32).

h. Program expansion

We fully support staff's suggestion that the Commission may in the future expand the program size for SB 32 upwards.

i. Using PG&E's 1 MW and below PPA

We also agree with staff that PG&E's 1 MW and under PPA should form the basis for a single SB 32 PPA.

j. Transitioning from AB 1969 to SB 32

With respect to transitioning from AB 1969 to SB 32, staff recommends that once "the new rules are in place" under SB 32, all AB 1969 projects will be subject to the new

rules. We request that the Commission clarify what this phrase means: does it mean upon completion of a final decision in this proceeding, or the final Advice Letter filing implementing the final decision? Or some other date? We would prefer that the new rules apply upon issuance of a final decision.

k. Interconnection tariff

The Clean Coalition strongly supports the staff proposal to allow SB 32 developers to choose Rule 21 or WDAT to interconnect, until the new Rule 21 is in place (which should apply to all SB 32 projects and all other distribution-interconnected projects).

1. Seller concentration limits

We agree with the staff's proposed seller concentration limit of 25% of each IOU's total capacity cap, but we urge the Commission to clarify how this limit will be operationalized. For example, will it be on a rolling basis, such that once an IOU's total capacity is comprised of 25% by a single developer then no more contracts will be allowed for that developer? Or is there some other method of operationalizing this limit that staff have contemplated?

m. Utility authority to reject SB 32 projects

We disagree with staff's suggestion that section 399.20(n) provides utilities any new authority to reject proposed SB 32 projects. Rather, as we recommended in previous comments, existing or new interconnection rules already provide this authority entirely independent of SB 32. Thus, no new authority is conferred and the Commission can consider this language in SB 32 already implemented.

Alternatively, the Clean Coalition recommends that utilities only be allowed to reject SB 32 projects that are otherwise eligible if they would exceed 100% of the minimum load on the relevant substation. We strongly disagree that project eligibility should be limited to "preferred" areas identified in IOU maps.

n. Reporting requirements

The Clean Coalition agrees with staff's recommended data reporting requirements. We also agree that a uniform reporting format should be developed.

o. Definition of "effective capacity"

We suggest that "effective capacity" should be interpreted to mean the AC capacity of each SB 32 project (rather than DC).

p. Commercial online date

We urge the Commission to clarify that the required online of 18 months (plus one six month extension) should start from the date of power purchase contract execution.

The Clean Coalition strongly opposes SCE's suggestion that up to 60 months for COD will be allowed. Rather, we reiterate our previous recommendation that COD requirements match RAM (18 months from the time of contract execution plus one six month extension).

Respectfully submitted,

TAM HUNT

A handwritten signature in black ink, consisting of several fluid, overlapping strokes that form the letters 'TAM HUNT'.

Attorney for:
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Dated: Nov. 2, 2011

VERIFICATION

I am an attorney for the Clean Coalition and am authorized to make this verification on its behalf. I am informed and believe that the matters stated in the foregoing pleading are true.

I declare under penalty of perjury that the foregoing is true and correct.
Executed this 2nd day of November, 2011, at Santa Barbara, California.

Tam Hunt

A handwritten signature in black ink, appearing to read 'TH' followed by a long, sweeping horizontal stroke.

Clean Coalition