UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection ) Docket No. RM21-17-000

REPLY COMMENTS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION
# TABLE OF CONTENTS

I. EXECUTIVE SUMMARY .................................................................................................................. 2

II. REPLY COMMENTS .................................................................................................................. 14

   A. Commenters Claiming the CAISO Has a “Siloed” Planning Process Focus Too Much on Terminology and Misunderstand the Actual Functioning of the CAISO’s Process ................................................................. 14


   C. Requiring Each Region in the Interregional Planning Process to Use the Same Benefit Metric Does Not Fully Resolve the Interregional Project Cost Allocation Issue ................................................................. 37

   D. The Commission Must Reject the Proposal of PIO and ACEG to Require the Creation of Interregional Planning Boards with FPA Section 205 Authority ................................................................................................. 39

   E. Transmission Oversight ........................................................................................................... 51

   F. The Commission Should Not Expand the Requirements for Competitive Solicitation Processes in this Proceeding .......... 60

   G. The Commission Should Reject LS Power’s Request to Remove Qualification Considerations from the Project Sponsor Evaluation Processes ....................................................................................................... 77

III. CONCLUSION ............................................................................................................................ 82

I. EXECUTIVE SUMMARY

The CAISO supports the ANOPR’s objectives to plan for anticipated future generation, identify resource zones in transmission planning processes, undertake more proactive, scenario-based, and forward-looking planning, better integrate transmission planning and generator interconnection processes, allocate transmission costs roughly commensurate with benefits, improve interregional coordination, and implement a more efficient interconnection queue process. As discussed in the CAISO’s initial comments in this proceeding (Comments), the Commission should provide general direction to transmission providers but afford them sufficient flexibility to develop and implement the specific reforms they believe are necessary to achieve these objectives in their regions, while accounting for regional differences and the specific challenges they face. The Commission should not impose “one-size-fits-all” requirements on every planning region.

The aforementioned objectives are most critical to address future transmission needs and meet climate goals. The effort to develop and implement the measures necessary to achieve these critical objectives will be significant. Given the vast scope of this challenge, the Commission should (1) prioritize those reforms that are most needed and will be most effective in meeting these objectives and (2) focus on
measures that are feasible and will not cause undue burden or unnecessarily disrupt well-functioning processes. The Commission should not get sidetracked by proposed reforms not directly related, or unnecessary, to achieve, climate goals and the ANOPR’s primary planning objectives. That will only detract from the effort necessary to implement a more robust, forward-looking transmission planning process and a more efficient generator interconnection process.

The CAISO’s existing transmission planning and generator interconnection processes reflect many reforms and concepts discussed in the ANOPR. However, the CAISO faces challenges arising from existing supply conditions, an “overheated” generation interconnection queue, and the need to accelerate the pace of procuring and interconnecting generation to meet climate goals. The CAISO must address these issues imminently and move forward with process enhancements before the likely timeline for any Final Rule in this proceeding. The CAISO has commenced a 2021 Interconnection Process Enhancements (IPE) initiative to address the important interconnection-related issues it faces. The CAISO is targeting two filings under Section 205 of the Federal Power Act (FPA) arising from this initiative -- the first in May/June of 2022, and the second in December/January of 2022/2023. The CAISO urges the Commission not to defer action on such filings pending the outcome of this proceeding. The CAISO must promptly address the specific issues it faces in the 2021 IPE initiative, and these issues are best addressed through a CAISO stakeholder process that considers the CAISO’s specific circumstances and challenges; not a generic, national rulemaking.

The CAISO’s Reply Comments focus on three categories of comments submitted
by other parties in this proceeding. First, the CAISO responds to comments that misunderstand the CAISO’s transmission planning process. Second, the CAISO addresses the problems with proposals related to general reforms or concepts discussed in the ANOPR. Third, the CAISO urges the Commission to reject certain proposals that are not specifically identified in the ANOPR and are unnecessary to achieve climate goals and the ANOPR’s key planning objectives.

**Sequential Review of Transmission Needs**

Some commenters state that planning processes, including the CAISO’s, that consider reliability, public policy, and economic projects sequentially are inappropriately “siloed” and fail to capture the multiple benefits a project can provide, *i.e.*, they do not allow for multi-value projects (*i.e.*, MVPs). These commenters misunderstand the CAISO’s transmission planning process. Although the CAISO’s planning process considers reliability, public policy, and economic projects sequentially, it allows the CAISO to revisit projects identified in a prior stage if an alternative project identified in a subsequent stage can meet the previously identified need and provide additional benefits not considered in the prior stage. Thus, the CAISO’s iterative planning process ultimately allows the CAISO to consider and approve transmission projects with multiple benefit streams (*e.g.*, reliability, public policy, and economic) and to modify or upsize transmission solutions identified in earlier stages in order to achieve additional benefits. The CAISO does not require a separate MVP category of transmission to achieve this result. The CAISO’s transmission planning process does not reduce the benefits potential economic projects might produce due to earlier identified reliability projects.
because the CAISO’s sequential process allows it to “back out” of previously identified reliability projects and count the avoided cost of a separate reliability project as an economic benefit.

Recommendations that the Commission should direct planning entities to allocate the costs of portfolios of projects as a group rather than on a project-by-project basis to ensure a more “predictable and stable” allocation and “consider the full suite of benefits that transmission facilities provide,” is unnecessary for the CAISO. A “balanced portfolio” approach is not the only approach that can achieve such cost allocation results. The CAISO allocates the costs of all new transmission facilities 200 kV and above system wide through its Regional Access Charge regardless of the primary driver (i.e., reliability, economics, or public policy) for the transmission project. It is hard to imagine a more “predictable and stable” cost allocation methodology. Further, the “problems” commenters identify with planning processes that have separate cost allocation methodologies for reliability, economic, and public policy projects do not apply to the CAISO because the CAISO does not have separate cost allocation methodologies based on the driver or driver of the project. The CAISO’s transmission planning and cost allocation framework provides for holistic planning, accounts for all benefits a transmission project may provide, and recognizes that high-voltage facilities benefit all customers on the system regardless of the specific driver for the project. The CAISO does not need an additional category of transmission for MVP Projects or a Balanced Portfolio framework to achieve these objectives.
**Maintenance and Asset Management Processes**

In the CAISO, unlike in some other planning regions, transmission owners can only approve maintenance and asset management projects in their local processes. As the Commission has previously recognized, CAISO transmission owners cannot approve transmission expansion projects. Only the CAISO can approve projects that upgrade and expand the transmission system. In its regional planning process, the CAISO evaluates all expansion projects at all voltage levels and at all locations on its system.

The Commission should reject requests to require the CAISO also review and approve maintenance and asset management projects in its regional transmission planning process. The Commission has found this bifurcated framework in the CAISO planning region complies with Order Nos. 890 and 1000. Requiring the CAISO to review and approve all maintenance and asset management projects in its transmission planning process would drastically change the CAISO’s role and impose an unwarranted and significant burden on the CAISO, consuming resources better spent on implementing effective regional planning and interconnection processes. The CAISO is not well-positioned to assume this role. It does not have the information, asset familiarity, expertise, or sufficient staff resources, and it does not have locations near all of the transmission assets, to review, assess, and approve every transmission maintenance and asset management project comprehensively.

Further, the CAISO need not oversee transmission owners’ maintenance and asset management projects. CAISO transmission owners cannot “evade” competition for transmission projects, favor their own projects, or discriminate against other
transmission developers because they cannot approve expansion projects in their maintenance and asset management processes. Maintenance and asset management processes cannot supplant the CAISO's planning process. Further, the Commission has found that maintenance and asset management projects do not present the undue discrimination concerns targeted by Order No. 890, and commenters offer no evidence of undue discrimination.

Claims local transmission processes will undermine decarbonization goals or make achieving those goals more costly are misplaced. In the CAISO, the significant buildout necessary to achieve climate goals and the ANOPR's planning objectives will involve new high-voltage transmission expansion facilities already subject to CAISO oversight and competitive solicitation, not asset management and maintenance projects. If necessary, the Commission should focus its efforts on promoting open and transparent local maintenance and asset management processes, not requiring all non-expansion, maintenance and asset management processes be reviewed and approved in the regional transmission planning process. As the Commission has found, CAISO review and approval of maintenance projects is unnecessary to ensure just and reasonable rates. Improved transparency and information availability should address any concerns, and parties can pursue FPA Section 206 complaints if necessary.

**Interregional Coordination**

A couple of commenters suggest the Commission should require all regions to form interregional planning boards that would have full authority to submit filings to the Commission under FPA Section 205 that select and allocate the costs of interregional transmission projects. The FPA and precedent thereunder preclude this proposal.
Commenters correctly acknowledge these interregional planning boards would not be public utilities under the FPA. However, nothing in the FPA allows the Commission to enable non-public utilities to exercise Section 205 filing rights; only public utilities have that right. Further, precedent clarifies that the Commission cannot compel a public utility in a particular planning region to relinquish involuntarily any of its FPA Section 205 rights to another entity, including a non-public utility. Nothing in Order No. 1000 and the appellate decision upholding it support a contrary decision.

Proposals to require that all regions use the same benefit metrics to allocate the costs of interregional transmission projects is an improvement over the existing approach that permits regions to use different benefit calculation methodologies; however, it does not go far enough and can still result in regions paying more than their fair share of an interregional project. The benefits-based approach may be appropriate in limited circumstances where benefits are not tied to quantifiable capacity that can be readily allocated to specific regions. However, in cases where the incremental capacity can clearly be quantified and allocated, the only way to ensure a fair and equitable \textit{ex ante} allocation of interregional project costs is to allocate the costs of such projects to the regions based on the capacity each region will have in the interregional project. For example, if three regions each will have 1/3 of capacity of the project, they should be allocated 1/3 of the costs. Even if regions use the same benefit metric, the benefits can vary by region, causing a region to bear more (or less) than 1/3 of the project costs. This is a barrier to interregional project development and to negotiated outcomes because regions are less likely to agree willingly to bear more costs than the amount derived by the \textit{ex ante} methodology. Regions need flexibility to meet their needs
effectively. The CAISO’s proposed framework follows open access principles because each region will make its portion of the interregional project’s capacity available to potential customers through applicable open access tariffs. The CAISO emphasizes this framework should serve only as a default approach to interregional cost allocation. The CAISO’s experience indicates interregional transmission development is best accomplished in an environment where motivated transmission providers work together on agreed-to projects, with negotiated capacity sharing and cost allocation methods. Accordingly, the CAISO recommends the Commission focus on measures to facilitate collaboration and increase discussions among regions, rather than focus on prescriptive solutions that may, in fact, inhibit effective coordination between parties.

**Transmission Planning Oversight**

One commenter supports the establishment of regional state committees charged with evaluating and approving bidders’ proposals in competitive solicitation processes. In the Order No. 1000 compliance process, the Commission rejected the concept of siting authorities selecting project sponsors in the competitive solicitation process. The Commission ruled that the transmission provider must make the selection decision, and the Commission, not the states, is ultimately responsible for ensuring the rates, and terms and conditions of service provided by public utility transmission providers are just and reasonable and not unduly discriminatory or preferential. Because that regulatory framework has not changed, the Commission must reject the
proposal that state commission or regional state committees select project sponsors in competitive solicitation processes.

The Commission should also reject requests to require independent system operators (ISOs) and regional transmission organizations (RTOs) have independent monitors to monitor their transmission planning processes and decisions. This is wholly unnecessary and potentially problematic. Unsubstantiated claims and innuendo that ISOs and RTOs are biased and cannot serve as the basis for the Section 206 reform these commenters seek. If a specific transmission provider violates its tariff or engages in unduly discriminatory behavior, the Commission should take action against that transmission provider. The appropriate corrective action is not to impose an independent transmission monitor requirement on every transmission provider in the country especially given the lack of evidence these transmission providers are engaged in any unjust and unreasonable conduct. An independent transmission monitor cannot provide greater transparency into the planning process than already exists. The conditions that may necessitate using an independent market monitor simply do not exist in the transmission planning context. If the Commission desires more insight into regional transmission planning processes, it should retain the necessary personnel. That would be much more efficient and effective because only the Commission has authority over regional planners; an independent monitor has no authority.

**Proposed Modifications to Competitive Transmission Processes**

Some commenters seek drastic changes to the competitive transmission processes planning regions undertake. The Commission should not entertain these
changes in this proceeding. They are problematic and unnecessary to enable more forward-looking transmission planning, ensure costs are allocated commensurate with benefits, improve interregional coordination, resolve problems with existing interconnection queues, or achieve important climate goals.

One proposed change the Commission should reject is the recommendation to make all projects down to 100 kV (and possibly even projects below 100 kV) subject to competitive solicitation. It is not only unnecessary to achieve the ANOPR’s primary planning goals, it will increase transmission planners’ burdens and costs and delay project approvals. On the CAISO system, the significant transmission buildout needed to access energy resource zones and anticipated future generation to support achievement of climate goals will be driven by high-voltage transmission facilities, not low-voltage transmission facilities. These facilities are already subject to competitive solicitation.

Blanket assertions that projects down to 100 kV are regional facilities and provide regional benefits on every transmission system are wholly unsubstantiated. The CAISO demonstrated in the Order No. 1000 compliance process that facilities on the CAISO system below 200 kV are not regional facilities and do not provide regional benefits unless they extend between the CAISO Balancing Authority Area (BAA) and another BAA or between two Participating Transmission Owners (PTOs). Facilities below 200 kV are local facilities used to deliver energy already transmitted over higher voltage transmission facilities to load pockets to meet transmission owners’ service obligations and to deliver local generation to local areas. The CAISO is also concerned about the potentially far-reaching cost allocation implications and potentially dramatic cost shifts
that might arise from any generic finding that transmission facilities down to 100 kV provide regional benefits and constitute regional transmission facilities for competitive solicitation purposes.

In Order No. 1000, the Commission expressly declined to eliminate the right of first refusal for transmission owners to build local transmission facilities to meet their reliability needs and service obligations within their own retail distribution service territory or footprint. No commenter discusses the possible implications of non-incumbents building local transmission facilities. The CAISO’s experience shows there is greater operational complexity on the lower-voltage transmission system than the high-voltage transmission system. The CAISO’s lower-voltage transmission system is much more integrated with the distribution system than the high-voltage system is. Operating lower-voltage facilities thus requires greater coordination between the transmission and distribution systems. Opening the local transmission system to competition could create a fragmented, patchwork local system that will intersect with the transmission owner’s distribution system. This raises potential coordination and seams issues at both the transmission and distribution levels. In these Reply Comments, the CAISO provides an actual example of the challenge this presents.

The Commission should reject one commenter’s proposals to (1) require transmission planners to ignore project sponsor qualifications when evaluating project sponsors in the competitive solicitation evaluation process and (2) require competitive solicitation evaluations be completed within a specified timeframe. For starters, these proposals are unrelated to any topic in the ANOPR. Comparing one project sponsor’s qualifications (e.g., financial capabilities) to the qualifications of competing project
sponsors is a legitimate consideration in the comparative evaluation process, and it
does not result in unnecessary “duplication.” It distinguishes project sponsors’
capabilities and differentiates the risks each project sponsor may present. During the
Order No. 1000 compliance process, the Commission approved the CAISO’s
consideration of qualification criteria when comparing project sponsors in the
comparative evaluation process. The one commenter identifies no changed
circumstances that warrant a different result now.

Finally, the Commission should not impose unreasonable deadlines for
completing competitive solicitation processes following project sponsor qualification.
Although the CAISO’s target evaluation timeline generally is designed to fall within the
90-day deadline the commenter proposes, many factors can affect the time it actually
takes to conduct a particular competitive solicitation – the number of competing
proposals, the complexity of the project, the number of competitive solicitations a
transmission planning is conducting concurrently, and staff and consultant availability
and conflicts. Transmission planners should seek to complete the evaluation process
within a reasonable amount of time after the qualification process concludes, but the
Commission should not impose deadlines that may not be achievable or realistic.
Commenters’ proposal to expand the number of projects eligible for competitive
solicitation will cause further delays in the overall process.
II. REPLY COMMENTS

A. Commenters Claiming the CAISO Has a “Siloed” Planning Process Focus Too Much on Terminology and Misunderstand the Actual Functioning of the CAISO’s Process

Several commenters object to the purportedly “siloed” planning that occurs when transmission planners separately assess reliability, public policy, and economic transmission needs on a project-by-project basis.\(^1\) They allege all such processes fail to assess the multiple benefits a project may provide, \(i.e.,\) they do not account for “multi-value projects (MVPs).”\(^2\) These commenters further claim this “siloed” evaluation process “fails to allocate the costs of such facilities roughly commensurate with the benefits.”\(^3\) Commenters urge the Commission to direct planning entities to implement a “balanced portfolio” approach that allocates the costs of projects as a group rather than on a project-by-project basis because that approach recognizes the wide-range of benefits new transmission projects provide.”\(^4\)

In formulating a proposed rule in this proceeding, the Commission must look beyond the specific terms used (or not used) in a transmission provider’s tariff and instead look at how the planning process actually functions to determine if it can achieve the Commission’s objectives. For example, just because the CAISO’s planning process reviews reliability, public policy, and economic transmission solutions in a sequenced and layered manner to produce a comprehensive plan based on solutions that ultimately may meet multiple needs, and does not use the terms “MVP” or

\(^{1}\) Americans for a Clean Energy Grid (ACEG) at 7; American Council on Renewable Energy (ACORE) at 21; Americans for Clean Power and Energy Storage Association (ACP/ESA) at 22-23.

\(^{2}\) ACEG at 3; ACORE at 20-21; ACP/ESA at 22-23, 47-48.

\(^{3}\) ACEG at 8. See also ACP/ESA at 23.

\(^{4}\) ACEG at 5, 8; ACP/ESA at 47-48.
“Balanced Portfolio,” does not mean it is inappropriately “silcoed” or fails to plan the system holistically. The Commission should not undo the CAISO’s planning process that holistically plans the system to meet identified transmission needs, effectively promotes achievement of the goals articulated in the ANOPR, fairly allocates costs, and recognizes all of the benefit streams a project provides simply because it has no defined MVP category of transmission, considers transmission solutions on a project-by-project basis, and does not employ a so-called “balanced portfolio” approach.

ACP/ESA argues that the sequencing of upgrade determinations can cause sub-optimal transmission buildout.5 ACP/ESA recognizes that the CAISO identifies upgrades to address reliability needs first, then policy needs, and finally economic needs, but then wrongly claims this “can result in a set of ‘band-aid’ solutions that address only reliability needs when a policy and economic upgrade could bring benefits across all three aspects.”6 ACP/ESA adds that “[w]hen smaller reliability upgrades are approved first and then included in economic models, the economic benefits of regional lines evaluated in the second process are often reduced because of the earlier, similar upgrades, thus making it impossible for the larger economic upgrades to meet required benefit-to-cost ratios.”7 ACEG similarly claims that the CAISO’s planning process does not consider multiple value streams8 and that CAISO’s economic evaluation “is not integrated into a holistic multi-benefit plan.”9

5 ACP/ESA at 23.
6 Id.
7 Id. at 23-24.
8 ACEG at 3.
9 Id.
These commenters misunderstand the CAISO’s transmission planning process. As the CAISO explained in its Comments, although the CAISO does not have a category of transmission labelled "Multi Value" and its transmission planning process considers transmission needs sequentially, the CAISO’s planning process allows the CAISO to approve transmission projects with multiple benefit streams and modify projects identified earlier in the process.10 Specifically, the CAISO explained:

The CAISO considers reliability needs and solutions first, followed by public policy solutions, and then economic solutions. At each stage of phase two, the CAISO may modify or enhance a solution identified in an earlier stage to meet the next level of need (and the previously identified need) more efficiently or cost-effectively, or it may adopt an entirely new solution to meet both needs. For example, a public policy need can cause the CAISO to modify the initial solution it identified for a reliability need if a proposed public policy solution meets both needs more efficiently or cost-effectively. In such a case, the CAISO would categorize the solution based on the latter-studied benefit type, in this example, a “policy-driven” transmission project; although, the transmission solution would provide multiple benefits. Likewise, an economic study can change or modify the preferred initial solution for a reliability need, a public policy need, or both. The CAISO finalizes its preferred solution only after it completes all three stages. The CAISO’s iterative approach allows the CAISO to approve transmission solutions that provide multiple benefit streams (e.g., reliability, public policy, and economic). Thus, the CAISO does not need a separate multi-value category of transmission to approve transmission projects that provide multiple types of benefits.11

The CAISO further stated:

Using TEAM [the CAISO’s Transmission Economic Assessment Methodology], the CAISO identifies its preferred transmission solutions. If a solution identified in the economic study is more efficient than a solution identified in the reliability or public policy evaluations, and can meet the applicable reliability or public policy needs, the CAISO will include the economic solution in the transmission plan, and it will categorize the solution as an economic project.12

---

10 CAISO Comments at 22-23, 31, 77-78.
11 Id. at 22-23 (footnotes omitted).
12 Id. at 31.
Under its economic evaluation methodology, the CAISO considers the avoided cost of an earlier identified reliability (or public policy) project as an economic benefit in its assessment of economic projects.\textsuperscript{13}

Thus, claims the CAISO’s “serial” transmission planning process does not permit it to consider and approve projects with multiple benefits are incorrect. Likewise, ACP/ESA’s claim the CAISO’s transmission planning process reduces the benefits that potential economic projects might produce because of earlier identified reliability projects is incorrect.\textsuperscript{14} The CAISO’s sequential process allows it to “back out” of previously identified reliability projects and count the avoided cost of a separate reliability (or public policy) project as an economic benefit. The Commission should not undo the CAISO’s well-functioning planning process based on commenters’ misunderstanding of how the process actually functions or because it does not use the specific terminology they prefer.

Many of these same commenters also argue that the Commission should direct transmission planners to plan the system on a portfolio basis because “project-by-project” review results in “haphazard” planning and fails to evaluate solutions for the overall system.\textsuperscript{15} For example, the Public Interest Organizations (PIO) wrongly allege that separately examining reliability, economic, and public policy benefits, instead of


\textsuperscript{14} Commenters also ignore that the CAISO only requires a 1:1 benefit-to-cost ratio to approve an economic project as opposed to the 1.25:1 benefit-to-cost ratio some other transmission providers require.

\textsuperscript{15} ACORE at 20-21; ACEG at 5.
conducting a multi-value analysis that considers needs simultaneously, precludes the opportunity to “upsize” projects. These conclusory and unsubstantiated views are misplaced, especially as to the CAISO’s transmission planning process. Again commenters seem more focused on the terminology used, or not used, in a transmission provider’s tariff, rather than examining how the individual planning process actually functions.

Commenters wrongly assume that just because a transmission provider approves transmission solutions using a project-by-project approach it necessarily must be operating in a vacuum, myopically looking only at one transmission need at a time, and not planning the system holistically. Nothing can be further from the truth. As described above and in its Comments, the CAISO’s iterative planning process allows it to consider all of the benefits a new transmission project may provide. The CAISO has approved transmission projects that provide multiple types of benefits (e.g., reliability, economic, and public policy), and the CAISO has “upsized” or modified numerous transmission projects to meet multiple reliability contingencies and/or capture other additional benefits.

The CAISO’s annual transmission plan constitutes a holistic assessment of all the needs on the CAISO grid and the projects that will address those needs in the “more efficient or cost-effective manner.” In that way, the transmission plan essentially is a “portfolio” even though the CAISO does not use the terms Balanced Portfolio or MVP in its tariff. The Commission should not countenance conclusory claims that sequential review of transmission needs necessarily precludes multi-benefit evaluations, project

---

16 PIO at 49-50.
upsizing, or holistic planning assessments. The CAISO’s sequential planning approach
achieves these objectives without requiring a MVP category of transmission or a
“balanced portfolio” approach to achieve this result.

The CAISO is perplexed by objections to reviewing projects on a project-by-
project basis. A project-by-project review does not mean a transmission provider is
myopically examining only one transmission need at a time and cannot consider a
project that meets multiple needs or provides multiple benefits. Absent individual
project review, transmission planners arguably could approve projects that are not the
more efficient or cost-effective means of addressing an identified transmission need or
do not provide net benefits. Again, commenters appear to be caught up in terminology
rather than the actual functioning of the process. The CAISO’s approach ensures that
every individual project approved in the transmission planning process meets an
identified transmission need(s), is the more efficient or cost effective solution for the
need(s), and/or provides net benefits. The CAISO’s approach leaves no possibility that
an individual project that fails to provide net benefits will be approved simply because
other projects provide “extra” offsetting benefits. Also, as discussed below and in its
Comments, the CAISO’s project-by-project approval process does not create cost
allocation problems other planning regions may face.17

ACEG argues that the Commission should direct planning entities to allocate the
costs of portfolios of projects as a group rather than on a project-by-project basis to
ensure a more “predictable and stable” allocation, “consider the full suite of benefits that

17 CAISO Comments at 73-80.
transmission facilities provide," and ensure costs are allocated “roughly commensurate
the benefits.”  A “balanced portfolio” approach is not the only approach that can
achieve such cost allocation results. As the Commission has recognized, there are a
range of just and reasonable cost allocation methodologies. The CAISO allocates the
costs of all new transmission facilities 200 kV and above system-wide through its
Regional Access Charge regardless of primary driver (i.e., reliability, economics, public
policy) for the transmission project. The CAISO allocates the costs of transmission
facilities below 200 kV to the applicable PTO who recovers the costs from its customers
that withdraw energy from the low voltage facilities. It is hard to fathom a cost allocation
methodology more “predictable and stable” than this. Further, commenters’ concerns
regarding the effects of having separate cost allocation methodologies for reliability,
economic, and public policy projects do not apply to the CAISO because the CAISO
does not have separate (and different) cost allocation methodologies for each category
of transmission. As the CAISO stated in its Comments, MVP Project and Balanced
Portfolio models are unnecessary for the CAISO to achieve the ANOPR’s objectives.19
Also, the CAISO’s cost allocation methodology does not pose the potential problem
identified in the ANOPR, i.e., that customers located outside of zones where renewable
resources are located are not bearing their fair share of the costs of the high voltage
transmission facilities accessing such resources.20

---

18  ACEG at 7-8.  ACEG states that the CAISO uses a “portfolio-based” approach in its economic
analysis, but not for its transmission planning process generally. It is unclear what exactly ACEG means
by this. As the CAISO indicated in its Comments, it uses the same portfolios in its reliability and public
policy assessments.

19  CAISO Comments at 75-79.

20  ANOPR at P 85.
Finally, the Department of Energy (DOE) states that some regions impose preliminary reliability requirements before projects are considered eligible for study based on their economic merits.\textsuperscript{21} For example, DOE incorrectly claims that economic project proposals in the CAISO are subject to a feasibility review by CAISO staff to determine whether they address an identified constraint on the system.\textsuperscript{22} DOE argues that such alleged requirements may preclude the study of projects of merit primarily based on economic and other benefits rather than reliability.\textsuperscript{23}

DOE’s criticism is misplaced and apparently based on a misunderstanding of the CAISO’s process. The CAISO does not require a reliability constraint before it will assess an economic project. The CAISO is unaware of the basis for DOE’s claim because DOE’s comments provide no specific example, cite no tariff or business practice manual (BPM) provision, and offer no explanation why DOE even thinks there is a reliability requirement. Perhaps DOE mistakenly has in mind the CAISO’s Request Window for reliability solutions under which the CAISO will reject a submitted solution if there is no identified reliability need the project meets.\textsuperscript{24} However, that step applies solely to reliability projects, not economic projects, and it does not preclude the CAISO from considering a rejected project as an economic project in the CAISO’s planning process.

Also, it is possible DOE misunderstands the difference between economic constraints and reliability constraints in the CAISO’s planning process. If there is a limit

\textsuperscript{21} DOE at 8.
\textsuperscript{22} \textit{Id}.
\textsuperscript{23} \textit{Id}.
\textsuperscript{24} CAISO tariff section 24.4.3.
(thermal, voltage, etc.) that precludes the CAISO from flowing energy from a lower-cost resource through its economic dispatch, but the CAISO can address the constraint (and maintain the system within thermal and voltage limits) by re-dispatching more expensive resources, then the constraint is merely an economic one, not a reliability constraint. If there is such a constraint, the CAISO’s economic assessment can examine the economic benefit of addressing the constraint (and other economic benefits) against the cost of the mitigation solution. In any event, the CAISO does not require the existence of a reliability constraint to examine an economic transmission solution. Further, the CAISO does not require a transmission solution to mitigate an economic constraint to qualify as an economically-driven project; the CAISO merely requires the project provide net economic benefits, which under TEAM are much broader.25

B. The Commission Should Not Require the CAISO to Review and Approve Maintenance and Asset Management Projects in Its Regional Transmission Planning Process

Several commenters recommend the Commission require so-called “self-approved” public utility transmission projects26 be reviewed and approved in regional transmission planning processes to ensure they are the most needed and cost-effective alternative.27 The CPUC states that “incumbent investor owned utilities (‘IOUs’), in

25 See CAISO Comments at 28-31, 83-84.
26 California Public Utilities Commission (CPUC) at 14; see also CPUC at 12-20. Self-approved transmission projects are transmission projects that public utilities approve in their local transmission processes. Self-approved transmission projects in some regions can include both (1) transmission expansion projects located solely within a public utility’s service territory (e.g., expansion projects to meet reliability, economic, and public policy needs), and (2) maintenance and asset management projects that do not expand the transmission system. In the CAISO region, they include only the latter.
27 See, e.g., CPUC, National Association of Regulatory Utility Commissioners (NARUC).
many instances with the approval of regional transmission organizations (‘RTOs’) and independent system operators (‘ISOs’) have deliberately contravened the intent of Order Nos. 890 and 1000 by shielding at least half of total investment across the country from meaningful stakeholder review in regional transmission planning processes, and insulating the vast majority, i.e., approximately 97%, of such investments from competition.”28 The CPUC objects that the CAISO does not review and approve in its regional transmission planning process transmission owners’ “repair and replacement projects that do not expand the capacity of the grid, or do so incidentally.”29 The CPUC suggests transmission owners can develop transmission projects without appropriate oversight and transparency, resulting in the approval of unduly discriminatory and preferential projects and undermining decarbonization efforts.30 The CPUC suggests that a public utility’s selection of projects that evades the regional planning process provides no opportunity to “consider … capacity addition projects that would be subject to competitive bids.”31 The CPUC thus argues that Order No. 890’s transparency principles should apply to all self-approved projects, including asset management and maintenance projects that do not expand the grid, and

---

28 CPUC at 2 (footnotes omitted).
29 Id. at 3.
30 Id. at 21-22.
31 Id. at 21.
recommends the Commission require all such public utility self-approved projects be approved in a regional transmission planning process.\textsuperscript{32}

To address commenters’ arguments, the CAISO first describes the transmission projects it reviews and approves in its regional planning process and the projects individual participating transmission owners (PTOs) review and approve in their processes. There are important differences between the CAISO’s framework for “self-approved” transmission projects and the frameworks in other planning regions. The CAISO conducts the transmission planning activities authorized under CAISO Tariff Section 24 for all upgrades and expansions of facilities under its operational control, which include transmission facilities at all voltage levels and at all locations on the system.\textsuperscript{33} The CAISO evaluates reliability, economic, public policy, and other transmission needs specified in the tariff at both the local level (\textit{i.e.}, low voltage transmission facilities within a single PTO’s footprint) and at the regional level (\textit{i.e.}, high-voltage transmission facilities). The CAISO alone determines if there is any need for a transmission upgrade or expansion within a PTO’s service territory. The CAISO does not evaluate, oversee, or approve load interconnection, transmission maintenance, or asset management projects in its regional transmission planning process; it only evaluates expansions and upgrades. However, if an asset management or maintenance project can be expanded or modified to address a CAISO-identified

\textsuperscript{32} \textit{Id.} at 4.

transmission need in a local area, the incremental portion of the asset management project would be subject to the CAISO’s transmission planning process.\textsuperscript{34}

The CAISO’s PTOs conduct separate maintenance and asset management processes designed primarily to connect load, assess their facilities to ensure they continue to operate in a safe and reliable manner, and to provide information to stakeholders. Southern California Edison Company has its Transmission Maintenance and Compliance Review process.\textsuperscript{35} Pacific Gas & Electric Company has the Stakeholder Transmission Access Review process.\textsuperscript{36} San Diego Gas & Electric Company has the TO5 Transmission Planning Process.\textsuperscript{37} In those processes, the PTOs cannot approve any kind of project that expands or upgrades the capacity of the transmission system (other than incidentally). They cannot approve transmission upgrades and expansion projects to meet applicable reliability criteria, public policy needs, or economic needs as those concepts are defined in the CAISO tariff. Only the CAISO can approve such projects, which it does through its regional transmission planning process. This distinguishes the CAISO’s transmission planning framework from the planning frameworks of other planning regions that allow individual public utilities to approve expansion projects within their service territory to meet reliability, economic, public policy, and other needs. On the other hand, CAISO PTOs can only approve transmission maintenance and asset management projects.

\begin{itemize}
\item \textsuperscript{34} \textit{Id.} at P 69.
\item \textsuperscript{35} \textit{Southern California Edison Co.}, 164 FERC ¶ 61,160 (2018) (SCE Maintenance Order), \textit{reh’g denied}, 168 FERC ¶ 61,170 (2019).
\item \textsuperscript{36} PG&E TO Tariff, FERC Electric Tariff. Volume No. 5, Appendix IX (STAR Process Tariff).
\item \textsuperscript{37} San Diego Gas & Electric Co, Docket No. ER19-221, SDG&E Offer of Settlement and Settlement Agreement (filed Oct. 18, 2018).
\end{itemize}
There is no basis to suggest the planning framework for “self-approved” projects in the CAISO planning region has “deliberately contravened the intent of Order Nos. 890 and 1000.” The CAISO’s longstanding framework is supported by (1) clear tariff and contractual provisions, (2) Commission orders approving the CAISO’s Order No. 890 and 1000 compliance filings, and (3) more recent Commission orders rejecting a complaint filed by the CPUC and finding the CAISO’s planning framework follows the intent of Order No. 890. The current framework appropriately requires the CAISO to identify and approve all regional and local transmission system expansions through the transmission planning process and delegates to transmission owners the duty to maintain their transmission assets placed under the CAISO’s operational control.

The CAISO’s Commission-approved Transmission Control Agreement (TCA) and tariff provide the foundational principles for determining the need for transmission infrastructure expansion through the regional transmission planning process. The TCA provides that CAISO Tariff Sections 24 (Transmission Planning Process) and 25 (Generator Interconnection) “will apply to any expansion or reinforcement of the CAISO
Controlled Grid.”  The TCA separately defines maintenance activities and specifies that the PTOs are responsible for these activities.

The Commission’s orders on CAISO start-up recognized the CAISO’s transmission planning process applies to transmission facility expansion, in particular expansions to meet reliability and economic needs, whereas each PTO is responsible for maintaining its transmission lines. As recently as 2018, the Commission reaffirmed this distinction noting “[n]othing in the Commission’s orders accepting CAISO’s

---

38 TCA Section 11. In the context of the TCA and the CAISO’s transmission planning process, an “expansion” is a project that increases the transmission capacity to meet needs identified by the CAISO based on tariff requirements. As the CAISO explained its Order No. 1000 Compliance Filing, the tariff identifies the transmission needs the CAISO addresses through the transmission planning process. These needs include the following:

- reliability needs;
- economic needs;
- public policy requirements and directives;
- location-constrained resource interconnection facilities (which are radial generation tie facilities ultimately paid for by generators as they come on-line);
- maintaining the feasibility of long-term CRRs.

See the transmittal letter for the CAISO’s Order No. 1000 compliance filing, Docket No. ER13-103, p. 11, (Oct. 11, 2012) (CAISO Order No. 1000 Compliance Filing). The CAISO cannot evaluate and approve transmission work that is not specified in CAISO Tariff Section 24. CAISO Tariff Sections 24.4.5 and 24.4.6 detail the categories of transmission solutions that the CAISO must review and/or approve through the transmission planning process. The CAISO does not evaluate transmission activities that fall outside of these specified categories, which include maintenance and asset management projects that do not increase the capacity of the transmission system.

39 TCA Section 4.3 provides that the PTOs are responsible for operating and maintaining the transmission lines and associated facilities placed under the CAISO’s operational control in accordance with the TCA, applicable reliability criteria, and CAISO operating procedures and protocols. TCA Section 6.3 requires PTOs to inspect, maintain, repair, replace, and maintain the rating and technical performance of their facilities under the CAISO’s operational control in accordance with the applicable reliability criteria and performance standards established under the TCA. Appendix C of the TCA defines maintenance as “inspection, assessment, maintenance, repair, and replacement activities performed with respect to Transmission Facilities.” The TCA does not require that non-expansion, non-reinforcement, maintenance and compliance-type projects be approved through the CAISO’s transmission planning process.

40 Pacific Gas & Electric Co., et al., 81 FERC ¶ 61,122 at 61,559 (1997). The CAISO subsequently added other categories of transmission need (e.g., public policy) that it evaluates in its transmission planning process.
second Order No. 890 compliance filing or its Order No. 1000 compliance filing indicated that CAISO would evaluate non-expansion transmission-related work."\textsuperscript{41}

Further, the Commission has rejected the CPUC’s claims that Order No 890’s principles apply to maintenance and asset management projects and require review of such projects in the CAISO’s regional transmission planning process. In its 2018 orders, the Commission confirmed that transmission-related asset maintenance and compliance activities are not subject to Order No. 890’s transmission planning requirements and need not be reviewed in the CAISO’s regional transmission planning process. In rejecting the CPUC’s complaint against Pacific Gas and Electric Company (PG&E), the Commission found:

Complainants’ assertion that PG&E’s TO tariff violates the transmission planning requirements of Order No. 890 is based on the premise that those requirements apply to any transmission-related projects and activities that are capitalized in a PTO’s transmission rate base including the asset management projects and activities at issue here. We disagree. While Order No. 890 does not explicitly define the scope of “transmission planning,” the Commission adopted the transmission planning requirements of Order No. 890 to remedy opportunities for undue discrimination in expansion of the transmission grid. As discussed above, the Commission was concerned that transmission providers may have a disincentive to remedy the increased congestion caused by insufficient transmission capacity, explaining that ‘[w]e cannot rely on the self-interest of transmission providers to expand the grid in a non-discriminatory manner.” Thus, the transmission planning reforms that the Commission adopted in Order No. 890 were intended to address concerns regarding undue discrimination in grid expansion. Accordingly, to the extent PG&E’s asset management projects and activities do not expand the grid, they do not fall within the scope of Order No. 890, regardless of whether they are capitalized in PG&E’s transmission rate base.\textsuperscript{42}

\textsuperscript{41} SCE Maintenance Order, 164 FERC ¶ 61,160 at P 35. \textit{See also} PG&E Complaint Order, 164 FERC ¶ 61,161 at P 70.

\textsuperscript{42} PG&E Complaint Order, 164 FERC ¶ 61,161 at P 66.
Similarly, the order approving Southern California Edison Company’s (SCE) transmission maintenance program noted that:

the Commission adopted the transmission planning requirements in Order No. 890 to remedy opportunities for undue discrimination in expansion of the transmission grid...Thus, the transmission planning reforms that the Commission adopted in Order No. 890 were intended to address concerns regarding undue discrimination in grid expansion. Accordingly, to the extent that SoCal Edison's asset management projects and activities do not expand the grid, they do not fall within the scope of Order No. 890.43

Thus, the framework in the CAISO planning region for reviewing and approving maintenance and asset management projects does not contravene the intent of Order Nos. 890 and 1000.

The CPUC suggests that the Commission’s orders regarding the applicability of Order No. 890 to maintenance and asset management projects are in conflict, citing to the Commission’s ruling that Supplemental Projects in PJM Interconnection, L.L.C. (PJM) must go through PJM’s No. 890-compliant transmission planning process.44 However, the Commission expressly rejected this argument in its order in the PG&E complaint proceeding ruling that:

The question of whether asset management projects and activities that do not increase the capacity of the grid must go through an Order No. 890-compliant transmission planning process was not an issue in the February 15 PJM Order. Instead, the February 15 PJM Order examined the PJM Transmission Owners’ implementation of a process for planning Supplemental Projects, a process that is set forth in the PJM Operating Agreement and Tariff.45

---

43  SCE Maintenance Order, 164 FERC ¶ 61,160 at P 31.
45  PG&E Complaint Order, 164 FERC ¶ 61,164 at P 72. The Commission reaffirmed its conclusion in its rehearing order and expressly found that its order on the PG&E Complaint in that proceeding was not inconsistent with its orders in PJM. PG&E Complaint Rehearing Order, 168 FERC ¶ 61,171 at PP 51-59. As the Commission clarified, the PJM orders merely addressed the question whether Supplemental
The CPUC also ignores that in PJM, unlike in the CAISO, public utilities can approve transmission expansion projects in their local transmission planning processes.46

Requiring the CAISO to review and approve all maintenance and asset management projects in its regional transmission planning process is unnecessary and highly problematic. It would constitute a dramatic change in the CAISO’s role and the framework that has been in place since CAISO start-up. The CAISO is not in a position—and does not have the information, expertise, or sufficient staff resources—necessary to review, assess, and approve the entirety of transmission maintenance activities in a comprehensive, efficient, and effective manner. The CAISO is neither well-positioned nor well-suited to make these assessments because it is not “on the ground” day-to-day, and it does not constantly monitor and assess the physical condition of transmission resources. Unlike transmission owners, the CAISO does not have a physical presence near the expansive transmission facilities that constitute the CAISO grid. Requiring the CAISO to undertake this role would fundamentally shift the duties and responsibilities of the CAISO and transmission owners. It would greatly expand the CAISO’s scope of activity and require staffing and skill sets well beyond the CAISO’s current capabilities. Transmission owners, not the CAISO, oversee maintenance on their respective transmission facilities, and it should remain that way.

Any CAISO review and/or approval of transmission owner maintenance would most likely subject the CAISO to increased liability risk. Requiring the CAISO to review

Projects were being treated in accordance with PJM’s Order No. 890-compliant process once PJM had elected to include them in that process. *Id.* at P 54.

46 PG&E Complaint Rehearing Order, 168 FERC ¶ 61,171 at PP 58-59.
and approve transmission owner maintenance activities would also require a significant increase in CAISO staffing to collect, verify, and analyze the condition of the transmission owners’ transmission facilities and their the expected useful life and to prioritize maintenance and replacement activities.

Unlike the CAISO, the PTOs have regional and local offices near their transmission facilities and are better able to collect the relevant information, make informed decisions, and provide information to stakeholders regarding the need for transmission maintenance on their respective facilities. The PTOs can also use their in-depth knowledge of their facilities and their transmission maintenance expertise to manage risks appropriately. The CAISO thus recommends that any processes for review and approval of PTO maintenance and asset management activities should be administered and overseen directly by the PTOs and should not occur in the CAISO’s regional transmission planning process. The CAISO can continue to work to coordinate with the PTOs to ensure that any CAISO-approved transmission expansion or reinforcement is aligned with planned maintenance activities, but the Commission should not require the CAISO to review and approve maintenance and asset management projects.

The CPUC states that Order No. 1000 “inadvertently created a perverse incentive that encouraged incumbent IOUs to concentrate transmission investment in local transmission facilities to avoid competition.”\textsuperscript{47} The CPUC similarly argues that preserving a right of first refusal (ROFR) for local transmission projects encourages

\textsuperscript{47} CPUC at 3.
incumbent utilities to prioritize investment in local facilities.\textsuperscript{48}

In the CAISO planning region, maintenance and asset management projects do not compete with -- and cannot supplant – any transmission facility for which the local transmission ROFR applies. The CPUC does not account for the fact that in the CAISO, unlike in some other planning regions, the PTOs cannot approve transmission expansion projects through their maintenance and asset management processes. The CAISO is solely responsible for approving all transmission system upgrades and expansions at all voltage levels and all locations on the system.\textsuperscript{49} As discussed above and in its Comments, the CAISO evaluates and approves expansion needs at both the local level (low-voltage facilities within a single PTO’s footprint) and at the regional level (high-voltage facilities). Thus, CAISO PTOs cannot approve transmission upgrades and expansions located entirely within their service territory to “avoid” competition or “avoid” the CAISO’s regional planning process. Stated differently, they are unable to approve new transmission projects for which the Order No. 1000 “local” transmission facilities ROFR applies because the CAISO determines all local (and regional) transmission needs and transmission solutions in its regional planning process. For the same reason, the PTOs cannot “prioritize” new local transmission projects at the expense of projects the CAISO would otherwise approve in its regional planning process or “divert investment” to local transmission expansion instead of regional projects.\textsuperscript{50}

\textsuperscript{48} Id. at 31, 37-38.

\textsuperscript{49} CAISO Comments at 17; transmittal letter for CAISO Order No. 1000 Compliance Filing at 15; CAISO Comments on Complaint, Docket No. EL17-45, at 15-16 (Feb. 22, 2017); PG&E Complaint Order, 164 FERC ¶ 61,161 at P 10.

\textsuperscript{50} The CAISO is concerned the CPUC’s (and others’) comments would have the CAISO review every maintenance project intended to maintain existing service levels (\textit{e.g.}, reconductoring) to determine if new transmission lines could be constructed instead just so the project would be subject to competitive

32
alone determines the need for all new local transmission projects.

The CPUC argues lack of oversight of maintenance and asset management projects in regional transmission planning processes creates “ripe opportunities for the incumbent utility to engage in unduly discriminatory and preferential treatment” and “can lead to unduly discriminatory and preferential outcomes favoring incumbents.”51 The CPUC provides no actual examples in the CAISO planning region or how it can even happen given the CAISO alone determines the need for, and approves, all expansion projects.52 The CPUC thus fails to carry its burden of proof to justify a FPA Section 206 change. Merely “express[ing] a belief that undue discrimination is occurring and assert[ing] that ‘a planning process needs to be in place so that customers can determine whether undue discrimination is occurring and then address it’” falls far short of the evidence required to justify such a drastic mandate.53

solicitation. That is both counterintuitive and unjustifiable. It would add a further layer of review that is unnecessary, costly, and unlikely to produce a different result. The CAISO already evaluates all potential transmission needs on its system and determines whether any transmission upgrades are needed in any part of the transmission system. If they are, the CAISO will evaluate the transmission and non-transmission solutions needed to address them, which may include modifying a maintenance or asset management project. If the CAISO identifies no transmission need in an area, then there is no compelling reason for the CAISO to review annually the thousands of maintenance projects primarily intended to maintain service to customers. The significant additional workload this would create would require the CAISO to increase its staffing levels significantly. Adding a layer of CAISO review above and beyond the transmission owner review would further delay project approvals. Importantly, in most instances, building a brand new greenfield transmission line would be significantly more costly than reconductoring and maintenance activities. Also, it would have greater environmental impacts, which is problematic because the requisite environmental review will require identification and consideration of less environmentally impactful alternatives. Under these circumstances, any desire to transform mere maintenance projects into greenfield transmission projects just so they can be subject to competitive solicitation is misplaced.

51 CPUC at 20-21.
52 See PG&E Complaint Rehearing Order, 168 FERC ¶ 61,171 at P 42.
53 Id. at PP 38-41.
The Commission has recognized that asset management projects do not present the type of undue discrimination targeted by Order No. 890; therefore, excluding them from regional planning processes does not “perpetuate the undue discrimination [that Order No. 890] sought to eradicate.”[^54] Because asset management projects do not involve expansion of the transmission grid, they rarely present the potential for the discrimination for which the Order No. 890 transmission planning requirements were intended to address, *i.e.*, discrimination in transmission access.[^55] Notably, CAISO transmission owners are not evaluating and choosing between incumbent and non-incumbent projects in their maintenance processes. Thus, potential undue discrimination concerns do not require the CAISO to review and approve every maintenance and asset management project.

The CPUC does not explain why its concern about potential discrimination or cost prudence cannot be addressed through the process of information sharing and review in appropriately-designed local asset management processes, nor does it explain why a complaint under FPA Section 206 cannot address any issues arising from a decision in such a process.[^56] As stated above, PG&E, SCE, and SDG&E already have stakeholder processes for reviewing maintenance and asset management activities. Ultimately, only the Commission, not the CAISO, can determine the existence of undue discrimination or imprudence. The Commission has rejected the argument that public utility investments pursued through local processes without third-party review

[^54]: *Id.* at PP 39-41.  
[^55]: *Id.* at P 41.  
[^56]: *Id.* at P 42.
in a regional planning process “eviscerates” the Commission’s obligation to ensure just and reasonable transmission rates.”\(^{57}\) First, the Commission noted that because the costs of maintenance projects are included in transmission rates, they are subject to Commission review in a Section 205 proceeding, and any interested party can intervene and challenge such costs.\(^{58}\) Second, the Commission emphasized that transmission planning processes are not ratemaking processes, and requests to consider the justness and reasonableness of maintenance expenditures are inconsistent with the nature and purpose of planning processes.\(^{59}\) Regional planners such as the CAISO are not ratemaking bodies.

Arguments that failure to provide for CAISO review of all maintenance and asset management projects will undermine achievement of decarbonization goals are similarly misplaced. The PTOs’ asset management processes do not involve determining what generation to develop or procure, and generation interconnection occurs through CAISO tariff processes. The PTOs have no authority in their maintenance and asset management processes to approve (or reject) transmission expansions to access energy resource zones. Moreover, they have no authority in those processes to approve (or reject) new energy storage projects. Further, PTOs have no authority in their maintenance processes to approve (or reject) any new technology (including Grid Enhancing Technologies), device, piece of equipment, or transmission facility that

---

\(^{57}\) *Id.* at PP 43-44.

\(^{58}\) *Id.* at P 44.

\(^{59}\) *Id.*
expands the capacity of a transmission line.\textsuperscript{60} They have no authority to approve public policy transmission projects. The projects they are pursuing in their maintenance and asset management processes primarily involve maintaining service to customers. As discussed in Section II.F.1 of these Reply Comments, the significant buildout necessary to achieve climate goals and the ANOPR’s planning objectives will involve constructing new high voltage transmission expansion facilities, not asset management and maintenance projects. Further, maintenance and asset management projects do not support the ANOPR’s primary planning goals, \textit{i.e.}, planning for anticipated future generation, accessing and integrating remote resources, and implementing forward-looking, scenario-based planning.

In conclusion, the CAISO believes its unique model that bifurcates review and approval of transmission expansion projects from maintenance and asset management projects strikes a reasonable, efficient, and effective balance. It also best reflects the respective capabilities of the CAISO and its transmission owners. Transmission owners have no ability to approve expansion projects and thus cannot evade regional planning and competitive processes, discriminate against non-incumbents, favor maintenance projects over expansion projects, or undermine efforts to build-out the grid to meet climate goals. If the Commission feels compelled to take any action in this proceeding, it should focus its efforts on reforming planning frameworks that allow for the approval of transmission upgrade and expansion projects in local planning processes. But, the

\textsuperscript{60} To the extent the CPUC desires transmission owners to utilize Grid Enhancing Technologies that do not expand system capacity, they should identify such solutions in respective maintenance and asset management processes. The CPUC should also participate in the ongoing proceedings to develop performance-based incentives to encourage the use of such technologies. If the CPUC believes a transmission owner is imprudently selecting other alternatives, it should take action under FPA Section 206.
Commission should not require all non-expansion, maintenance and asset management processes be reviewed in regional transmission planning processes.

C. Requiring Each Region in the Interregional Planning Process to Use the Same Benefit Metric Does Not Fully Resolve the Interregional Project Cost Allocation Issue

Many commenters suggest that the Commission can improve the interregional transmission planning process by requiring all regions to use the same benefit metrics.61 The CAISO agrees this would be an improvement to the existing approach that allows regions to calculate benefits differently when allocating the costs of interregional projects. However, it does not go far enough to ensure equitable interregional cost allocation.

As the CAISO stated in its Comments, the rules that exist today allow regions to count transmission project benefits differently, and dissimilar benefit calculation methodologies can cause one region to bear a disproportionate share of the costs of an interregional project simply because it calculates certain benefits a neighboring region(s) does not consider.62

Aligning the benefit metrics among regions for purposes of interregional cost allocation would make the cost allocation more equitable, but it would not solve the problem entirely. Assume a scenario where two regions will share the capacity of a new transmission line equally (i.e., 50-50) to meet transmission needs identified in their regions. Assume further that both regions utilize an identical benefits calculation, e.g., the avoided cost of the regional transmission facility that would be built in lieu of the

---

61 ACORE, ACEG, PIO, R Street Institute, Center for Sustainable Energy.
62 CAISO Comments at 61-63.
interregional project to meet the region’s transmission need. Because the cost of the avoided transmission line in each region may vary, the \textit{ex ante} cost allocation formula can cause each region to bear a different share of the costs of the interregional transmission line even though each region is receiving an equal share of the capacity (and only needs that equal share). For example, a region with 50 percent of the capacity may bear 60 percent of the costs of the interregional project simply because its “avoided” regional project would cost more than the other region’s “avoided” project.

In cases where the incremental capacity can clearly be quantified and allocated, any \textit{ex ante} cost allocation scheme that requires a transmission provider to bear costs disproportionate to the capacity it is receiving is unfair and inequitable and acts as a deterrent to transmission providers (and states) collaborating on interregional transmission projects.\textsuperscript{63} The Commission should adopt a default cost allocation framework for interregional transmission that allocates the costs of new interregional facilities based on the capacity a particular region needs from (and will have) in an interregional project, as opposed to allocating costs based on separate regional benefits calculations. This will ensure no region is allocated costs for an interregional transmission facility disproportionate to its share of the capacity in the new facility. Such an allocation framework raises no open access issues because the regions will make their shares of the capacity available to customers under applicable open access tariffs. This follows the practice today on jointly owned lines and lines where the CAISO has an entitlement to a portion of a line’s capacity.

\textsuperscript{63} If a region knows application of the \textit{ex ante} formula will allow it to bear less than a proportionate share of the costs of a project, it has less incentive to agree to bear a higher – albeit proportionate – share of the project costs.
The CAISO emphasizes this proposal is designed only to improve existing interregional cost allocation methods required by Order No. 1000. This proposal should not be read to preclude voluntary agreements among regions on how best to allocate the capacity and costs of interregional projects. As the CAISO explained in its Comments, overly-prescriptive interregional planning requirements can impede interregional project development. The CAISO’s experience indicates interregional transmission development is best accomplished in an environment where motivated transmission providers and states work together on agreed-to projects, with negotiated capacity sharing and cost allocation schemes.

D. The Commission Must Reject the Proposal of PIO and ACEG to Require the Creation of Interregional Planning Boards with FPA Section 205 Authority

The CAISO supports efforts to improve coordination in the study of interregional transmission projects, but certain commenters’ proposals are nonstarters. PIO and ACEG propose that the Commission consider requiring regions throughout the U.S. to form interregional planning boards that would have full authority to submit filings to the Commission under FPA Section 205 that select and allocate the costs of interregional transmission projects. The Commission should reject this proposal. The interregional

---

64 See CAISO Comments at 56-64.

planning boards suggested by PIO and ACEG are contrary to law and would be a highly flawed vehicle for achieving the Commission’s policy objectives.66

A key element of the PIO and ACEG comments is that the proposed interregional planning boards could resolve challenges to interregional planning because the boards would have “full authority” to make FPA Section 205 filings addressing the selection of projects and the allocation of transmission costs, even though both commenters acknowledge these boards would not be public utilities.67 This proposal is contrary to statute and precedent.

The commenters are correct from a legal standpoint only insofar as they concede that such interregional boards would not be public utilities under the FPA. The FPA defines a “public utility” as “any person who owns or operates facilities subject to the jurisdiction of the Commission.”68 Therefore, an interregional planning board that does not own or operate interstate transmission or other Commission-jurisdictional facilities cannot be a public utility.

This concession highlights the legal error at the heart of PIO’s and ACEG’s interregional planning board proposal. FPA Section 205(c) provides that

every public utility [may] file with the Commission . . . schedules showing all rates and charges for any transmission or sale subject to the jurisdiction of the Commission, and the classification, practices, and regulations affecting such rates and charges, together with all contracts

66 This concept has no basis in the ANOPR itself. Although the Commission inquired whether certain reforms to the current interregional transmission coordination process were appropriate, the creation of interregional planning boards was not one of the potential reforms identified in the ANOPR. See ANOPR at PP 62-64.
67 PIO at 70-72; ACEG, Appendix C at 69, 84.
68 FPA Section 201(d), 16 U.S.C. § 824(d).
which in any manner affect or relate to such rates, charges, classifications, and services.\textsuperscript{69}

Nothing in the statute allows the Commission to enable non-public utilities to exercise Section 205 filing rights addressing the rate, terms, and conditions of service over transmission facilities. As the courts have recognized, Section 205 “gives a utility the right to file rates and terms for services rendered with its assets.”\textsuperscript{70} But a non-public utility, which does not own or operate any Commission-jurisdictional assets, cannot submit a FPA Section 205 filing for Commission acceptance.\textsuperscript{71}

Nor can the Commission compel a public utility in a particular planning region to relinquish any of its rights under FPA Section 205 to another entity, including a non-public utility. FPA Section 205 gives public utilities the absolute right to propose rates and charges for services under Commission jurisdiction, subject only to the Commission’s review and determination that such rates and charges are just, reasonable and not unduly preferential or discriminatory.\textsuperscript{72} The Commission exceeds

\begin{footnotesize}
\textsuperscript{69} FPA Section 205(c), 16 U.S.C. § 824d(c) (emphasis added).

\textsuperscript{70} \textit{Atl. City Elec. Co. v. FERC}, 295 F.3d 1, 9 (D.C. Cir. 2002). See also \textit{Entergy Servs., Inc.}, 119 FERC ¶ 61,190, at P 19 (2007) (explaining that “[t]he Commission’s holding in Opinion Nos. 480 and 480-A did not change the fundamental tenets of section 205 of the FPA. Public utilities have a statutory right to amend their rates and charges”).

\textsuperscript{71} See, e.g., \textit{Bonneville Power Admin. v. FERC}, 422 F.3d 908, 911, 921 (9th Cir. 2005) (“FERC’s long-standing interpretation of §§ 205 and 206 confirms that governmental entities/non-public utilities lie outside its rate-making and refund authority.”); \textit{New West Energy Corp.}, 81 FERC ¶ 61,416 (1997), \textit{reh’g denied}, 83 FERC ¶ 61,004 (1998) (rejecting FPA Section 205 filing on the grounds that it was submitted by a non-public utility). Even if a non-public utility such as an interregional planning board wished to be regulated as a public utility, that would not provide a legally sufficient basis for the Commission to accept its FPA Section 205 filing. A non-public utility “cannot be regulated as a public utility simply because it desires to be so regulated.” 83 FERC ¶ 61,004, at 61,015.

\textsuperscript{72} \textit{Atl. City Elec. Co. v. FERC}, 295 F.3d at 9-10 (citing relevant court precedent); PJM Interconnection, L.L.C., 176 FERC ¶ 61,053, at P 31 (2021) (stating that it is a “well-established statutory principle that the Commission cannot compel a public utility to give up its section 205 rights”). “Of course, utilities may choose to voluntarily give up, by contract, some of their rate-filing freedom under section 205.” 295 F.3d at 10. But that type of voluntary arrangement is not what PIO and ACEG propose.
\end{footnotesize}
its authority when it “attempts to deprive utilities of their rights ‘to initiate rate design changes with respect to services provided by their own assets.’”

PIO and ACEG argue that the Commission could require creation of interregional planning boards with FPA Section 205 filing rights by relying on the same authority it exercised in Order No. 1000 when the Commission required regional planning to be conducted even in regions without an ISO or RTO. This argument misreads what the Commission required in Order No. 1000. In the portion of Order No. 1000 cited by PIO and ACEG, the Commission only required that “each public utility transmission provider participate in a regional transmission planning process that produces a regional transmission plan and that complies with the transmission planning principles of Order No. 890.” The Commission exercised its authority under FPA Section 206 to impose certain requirements on existing public utilities to ensure that rates are just and reasonable and not unduly discriminatory or preferential. Nothing in the cited portions of Order No. 1000 compel a public utility to give up its Section 205 rights.

A finding the Commission made elsewhere in connection with Order No. 1000 further confirms the Commission cannot require a public utility to relinquish its FPA Section 205 filing rights in any circumstance. The Commission addressed an argument by a commenter (ColumbiaGrid) that “with respect to non-RTO regions (where there are

---

74 PIO at 70; ACEG, Appendix C at 84.
no regional service tariff rates), directing public and non-public utilities to adopt a specific cost allocation method in advance could infringe upon a utility’s right to propose rates under section 205 of the FPA.\footnote{Order No. 1000 at P 526.} The Commission clarified that its directive to adopt a specific cost allocation method did not mean that public utilities had to relinquish their FPA Section 205 filing rights in any way:

> Directing a public utility transmission provider to adopt a specific cost allocation method or methods in advance does not infringe upon a utility’s right to propose rates under section 205 of the FPA. It simply requires that rate filings meet certain standards. ColumbiaGrid cites Atlantic City as supporting the contrary position. In that case, the court held that the Commission could not require that the PJM Transmission Owners Agreement be modified to eliminate a provision that allowed a public utility transmission owner to make a unilateral filing to make changes in rate design or terms and conditions of jurisdictional services. The court held that public utilities have an express right under section 205 to make such filings, and the Commission could not require them to relinquish it. \footnote{Id. at P 547 (citation omitted) (emphasis added).} Nothing in this Final Rule \footnote{Order No. 1000-A at P 589, 649; Order No. 1000-B at P 25.} has the effect of disenfranchising any individual or entity of rights under section 205 to make filings. The Commission regularly establishes standards for filings under section 205, and doing so does not negate any rights under that section.\footnote{Order No. 1000-A at P 636.}

The Commission upheld these findings in Order Nos. 1000-A and 1000-B,\footnote{Order No. 1000-A at P 589, 649; Order No. 1000-B at P 25.} and also “clarif\[ied\] that the Order No. 1000 interregional cost allocation requirements are not intended to alter the section 205 rights of transmission owners and RTOs.”\footnote{Order No. 1000-A at P 636.} The Commission was consistent and clear throughout the Order No. 1000 proceeding that its directives did not affect the FPA Section 205 filing rights of ISOs and RTOs or other public utilities.
Judicial precedent cited by PIO and ACEG come nowhere near supporting their proposal. They cite decisions where the D.C. Circuit Court of Appeals (1) found that Order No. 888 allows the Commission to “mandat[e] open access where it finds circumstances of undue discrimination to exist,”80 and (2) found in a separate decision that Order No. 1000 allows the Commission to impose mandatory “coordination and interconnection arrangements . . . in regard to the planning of future facilities.”81

However, these decisions involved cases where the Commission established requirements for public utilities. Nowhere in these decisions did the D.C. Circuit Court state or suggest that a public utility could be compelled to relinquish its FPA Section 205 rights or that the Commission could bestow Section 205 rights affecting transmission facilities owned or operated by others on a non-public utility. The Atlantic City decision clearly rules otherwise.

PIO argues that the Commission could require the formation of new, independent entities that would serve as interregional planning boards in collaboration with states under FPA Section 209.82 In a footnote, PIO acknowledges that “[i]t is not clear whether [FPA] section 209 currently grants such interregional planning boards [FPA] section 205 filing rights.”83 PIO does not go far enough. There is nothing to indicate that the Commission could use FPA Section 209 to mandate the formation of interregional planning boards with authority to make FPA Section 205 filings addressing the selection

82 16 U.S.C. § 824h.
83 PIO at 71 & n.214.
of projects and the allocation of transmission costs. Section 209(a) provides for the Commission to refer certain matters to a board that includes a member or members from the State or States affected by such matter.\textsuperscript{84} Nothing in Section 209 suggests that it could override the express requirements of FPA Section 205, a part of the same statute. PIO cites no precedent to support the notion that an exception to the requirements of Section 205 exists, and the CAISO is unaware of any such precedent. Therefore, the Commission should reject the idea that FPA Section 209 provides authority to mandate the formation of interregional planning boards with Section 205 rights.

PIO and ACEG also cite a policy statement on regional transmission groups (RTGs) that the Commission issued in 1993 to support their position proposal.\textsuperscript{85} However, the RTG Policy Statement only concerns voluntary associations, not mandatory ones. The Commission explained in the RTG Policy Statement that “[i]t is important to recognize the Commission’s limited authority in the development and success of RTGs. \textit{RTGs are purely voluntary associations of transmission owners, users, and others with differing interests.}”\textsuperscript{86} The Commission then stated that it “does not have authority to ‘certify’ RTGs,” and it would only be after participants voluntarily

\textsuperscript{84} Commission regulations relevant to its interpretation of FPA Section 209 provide that, “It is believed that the statutory provisions of sections 209 and 17, respectively, of the Federal Power and Natural Gas Acts, for the reference of a proceeding to a board constituted as therein provided, were designed for use in unusual cases, and as a means of relief to the Commission when it might find itself unable to hear and determine cases before it, in the usual course, without undue delay.” 18 C.F.R. § 385.1304 (2021). PIO, by contrast, proposes the establishment of such boards that would exist at all times and have a much broader application than select unusual cases.


\textsuperscript{86} RTG Policy Statement at **12-13.
reached RTG-related agreements that the agreements would have to be filed for Commission acceptance.\textsuperscript{87} Therefore, the RTG Policy Statement does nothing to support the proposal by PIO and ACEG that the Commission can direct the establishment of non-public utility, interregional planning boards with Section 205 rights.

PIO and ACEG also propose that the Commission could require that “relevant RTO agreements and utility tariffs provide for the participation of [an interregional planning] board and designation to such board [of] full, binding authority to select and cost allocate projects in a manner that cannot be subsequently second guessed by the relevant individual RTO boards or utilities.”\textsuperscript{88} There is no legal basis to force ISOs and RTOs or other public utilities to revise their agreements and tariffs to relinquish their FPA Section 205 rights to interregional planning boards. It would be inconsistent with the FPA as well-recognized by the Commission and courts in the precedent discussed above.

Even assuming the legal defects in the proposal could be remedied, the PIO and ACEG interregional planning board proposal is poor policy and likely to be counter-productive. As the CAISO explained in its Comments, a Commission requirement for mandatory interregional planning (in any form) is unnecessary. It is incorrect to assume that transmission development between neighboring balancing authority areas will occur only if the Commission mandates interregional planning. The CAISO has approved several projects outside of the CAISO planning region.\textsuperscript{89} In its initial Comments, the

\begin{footnotesize}
\textsuperscript{87} \textit{Id.} at **13-14.
\textsuperscript{88} PIO at 71-72; ACEG, Appendix C at 85.
\textsuperscript{89} CAISO Comments at 56-57.
\end{footnotesize}
CAISO offered recommendations on ways to improve the existing voluntary interregional coordination process;\textsuperscript{90} it urged the Commission to be mindful of four considerations in evaluating the effectiveness of interregional coordination.\textsuperscript{91} PIO and ACEG ignore of all four of these considerations.

First, states, not the Commission, oversee resource procurement, and most transmission line siting occurs at the state and local level. Mandating interregional transmission planning may not be the most effective or efficient means of aligning resource procurement and state policies with transmission planning or facilitating state permitting authorizations.\textsuperscript{92} On the other hand, the proposed interregional boards would have the power to dictate which interregional projects are selected, and how their costs should be allocated, under Section 205 filings only the boards would have authority to make. This is an extreme form of mandatory interregional planning. In the CAISO’s experience, interregional transmission development is best accomplished by a framework in which motivated transmission providers and states work together on agreed-to projects, with negotiated capacity sharing and cost allocation schemes. The Commission should encourage transmission providers and neighboring states to identify mutually beneficial transmission solutions and allow them to negotiate fair and workable capacity and cost-sharing arrangements.\textsuperscript{93}

\textsuperscript{90} ld. at 62-64.
\textsuperscript{91} ld. at 57-58.
\textsuperscript{92} ld. at 58.
\textsuperscript{93} ld. at 62.
The Commission recognized the benefits of voluntary interregional coordination when it issued its *Policy Statement on State Voluntary Arrangements to Plan and Pay for Transmission Facilities* on June 17, 2021 (i.e., only a month before the ANOPR was issued). The Voluntary Arrangements Policy Statement clarified that voluntary agreements among states and/or public utility transmission providers to develop transmission facilities are not categorically precluded by the FPA or the Commission’s rules and regulations, and stated that the Commission “encourage[s] interested parties considering the use of such agreements to consult with Commission staff.” The Voluntary Arrangements Policy Statement also explained that voluntary agreements between states and/or transmission providers can further the Commission’s goals of “[d]eveloping cost-effective and reliable transmission facilities” even if those facilities “are not being developed pursuant to the regional transmission planning processes required by Order No. 1000.” The Commission’s support of these voluntary agreements belies PIO’s contention that interregional coordination cannot produce effective results.

Second, a transmission project developed on an interregional basis may not be the more efficient or cost-effective transmission solution for any particular region given there can be legitimate differences regarding resource portfolios and public policy objectives among regions, and among states in a region. The Commission should

---

94 See id. (citing 175 FERC ¶ 61,225 (2021) (Voluntary Arrangements Policy Statement)).
95 Voluntary Arrangements Policy Statement at PP 1, 3, 6.
96 Id. at P 2 (citing Order No. 1000 at P 146). This is the same paragraph of Order No. 1000 that, as the CAISO discusses above, PIO and ACEG misconstrue as allowing the Commission to compel a public utility to give up its Section 205 rights.
97 See PIO at 69-70.
retain the Order No. 1000 requirement that an interregional project must first be
selected in each neighboring region’s transmission planning process.\textsuperscript{98} The
interregional planning board framework proposed by PIO and ACEG ignores these
legitimate differences among regions, instead imposing a top-down approach to
transmission planning that could ignore states’ resource and procurement and resource
development choices and attempt to select projects and allocate costs over the
objections of individual regions.

Third, mandatory interregional planning poses significant implementation
challenges that can create additional burdens, layers of administration, increased
contention in the planning process, and potential litigation.\textsuperscript{99} This issue is particularly
acute in the western U.S. where many transmission providers are not public utilities
under the FPA. The interregional planning board could create a “Swiss cheese”
approach to interregional planning, where public utility transmission providers would be
forced to participate in the boards while critical transmission providers over whom the
Commission has no FPA jurisdiction elect not to participate out of fear of losing control
and the potential for signing up for involuntary cost allocation.

Fourth, predetermined, formulaic cost allocation methodologies are a barrier to
interregional transmission project development because they create the risk of
unintended and inappropriate outcomes. Inappropriately designed \textit{ex ante} benefit
calculation methodologies can cause one region to bear a disproportionate share of the
costs of an interregional project because it calculated certain benefits that other

\textsuperscript{98} CAISO Comments at 59-60.
\textsuperscript{99} \textit{Id.} at 60-61.
region(s) did not even consider.  Nothing in the PIO and ACEG interregional planning board proposal addresses these concerns.

The same reasons the Commission should not require interregional planning boards also apply to the more extreme proposals of PIO and ACEG to create entities responsible for large groupings of existing transmission planning regions (e.g., for the entire eastern and western interconnections) or even a national transmission planning authority that would perform planning and cost allocation for the contiguous states’ transmission needs. Those suggested approaches would entail the same legal and policy flaws as the proposed interregional planning boards, except they would be even larger. And as the CAISO explained in its Comments, there are significant differences between various regions of the country that require the application of different, region-specific rules:

There can be legitimate differences between regions and among states in a region. Those differences can be much greater when expanding from regional transmission planning to interregional transmission planning. For example, states may have different resource priorities for achieving their policy objectives or maintaining reliability. For some, it may be more efficient or cost-effective to develop remote in-state resources or distributed energy resources. Others may prefer a resource mix that includes a portfolio of out-of-state resources. Some states may have a robust transmission system, others may not. If a region does not need a specific interregional project in its regional transmission planning process, customers in that region should not be required to pay for the costs of the project. Also,...the Commission should not allow a region to allocate the costs of a project identified in its regional transmission planning process involuntarily to another region.

---

100 *Id.* at 61-62.
101 PIO at 72; ACEG, Appendix C at 68-69.
102 CAISO Comments at 59.
The same considerations counsel against requiring uniform transmission planning and cost allocation throughout large portions of the U.S. The Commission should reject proposals for uniform and mandatory transmission planning by interregional planning boards at any geographic level, including throughout the eastern or western interconnection or nationwide.

E. Transmission Oversight

1. The Commission Should Encourage Active Participation by State Representatives in Regional Transmission Planning Processes

In response to the ANOPR, some commenters argue for greater involvement by states and state committees in the regional transmission planning process.103 The CAISO supports participation by state and municipal representatives in its regional planning process. As discussed in its Comments, the CAISO’s transmission planning process allows for significant participation by state authorities even without a formal regional state committee. This participation includes incorporating long-term demand forecasts developed by the California Energy Commission, resource portfolios adopted by the CPUC, and an open stakeholder process in which the CAISO develops study plans and scenario analyses with input from all participants, including state and municipal representatives. In addition, the CAISO makes its modeling results available to all stakeholders.

The Commission should encourage active participation by state representatives in regional transmission planning processes, but it need not adopt a one-size-fits-all

---

103 See, e.g., NARUC at 46-47; CPUC at 46.
approach for that participation. The CAISO recommends the Commission leverage the Joint Federal-State Task Force on Electric Transmission to identify best practices to enhance state participation in regional transmission planning processes. Sometimes, that may involve engagement by a state committee; in other cases it may require only ongoing engagement with individual public service commissions and other state policymakers. The CAISO believes ongoing discussions with state representatives, especially regarding resource procurement and development, should produce more effective transmission planning decisions.

In its comments, the CPUC supports establishing state committees charged with evaluating and approving bidders’ proposals in response to competitive solicitations.\(^{104}\) The Commission should reject this proposal. In its Order No. 1000 compliance filing, the CAISO proposed that if all project sponsors in a competitive solicitation designate the same siting authority from which they will seek siting approval, the CAISO would permit the siting authority to select the transmission developer, not the CAISO.\(^{105}\) Interveners protested this proposal arguing that the CAISO must select a transmission developer in the competitive solicitation process and may not delegate that decision to the siting authority.\(^{106}\) The Commission agreed and rejected the CAISO’s proposal to allow the siting authority to select a project sponsor.\(^{107}\) The Commission ruled that “public utility transmission providers in a transmission planning region must make the

\(^{104}\) CPUC at 46.


\(^{106}\) Id. at P 224.

\(^{107}\) Id. at PP 224, 227.
selection decision with respect to the developer, not the state entity or regional state commission.” The Commission recognized that it, not state regulatory authorities, must ensure that rates, terms and conditions of service provided by public utility transmission providers are just and reasonable and not unduly discriminatory or preferential and that public utility transmission providers comply with the Commission’s rules and regulations enacted to meet such responsibility. The Commission stated that it is responsible ensuring that public utility transmission providers in a region adopt transparent and not unduly discriminatory criteria for selecting a new transmission project in a regional transmission plan for cost allocation. Because the regulatory framework has not changed, the Commission should reject the request for a state committee to select project sponsors in the CAISO’s competitive solicitation process. Now as then, state representatives may provide input to the CAISO at any stage of the CAISO’s regional transmission process. The Commission should not propose a new rule providing state committees or state representatives with the authority to approve bidders’ proposals in response to Order No. 1000 competitive solicitations.

2. The Commission Should Not Require RTOs/ISOs to Hire Independent Transmission Monitors

In response to the ANOPR, several commenters support requiring both RTOs/ISOs and non-RTOs/ISOs to establish independent transmission monitors to undertake several functions. As explained in the CAISO’s Comments, requiring all RTOs/ISOs to establish an independent transmission monitor makes little sense. In the

---

108 Id. at P 227 (footnotes omitted).
109 Id.
case of the CAISO, there is insufficient record evidence to support even a preliminary finding that the CAISO’s transmission planning process requires an independent transmission monitor to remain just and reasonable.

a. The CAISO’s Transmission Planning Process Is Open and Transparent, and the CAISO Has Awarded Numerous Projects to Independent Transmission Providers

As explained in the CAISO’s Comments, the planning work the CAISO performs occurs through a transparent process, and the CAISO vets input assumptions and a study plan with stakeholders. The CAISO’s transmission planning process incorporates demand forecasts developed in coordination with the California Energy Commission that reflects state energy policies. The CAISO works with stakeholders to incorporate CPUC-developed resource portfolios into its transmission planning process to inform the need for transmission upgrades or additions. The CAISO also considers alternatives when assessing the need for transmission projects, including non-wires alternatives. The CAISO has approved non-wires solutions in its transmission planning process.

Some commenters claim that ISOs and RTOs are inherently biased in favor of incumbent transmission owners, and thus an independent transmission monitor is appropriate. However, they offer no specific examples of undue discrimination or tariff violations. Innuendo and conclusory allegations cannot constitute the basis for action under FPA Section 206.\(^{110}\) If an individual transmission provider is engaging in undue discrimination or tariff violations, then the appropriate remedy is to file a formal complaint with the FEA or the CAISO’s board.\(^{111}\) See, e.g., Californians for Green Nuclear Power, Inc. v the N. Am. Elec. Reliability Corp. et al. 174 FERC ¶ 61,203 at P 49 (2021), citing Ill. Muni. Elec. Agency v. Cent. Ill. Pub. Serv. Co., 76 FERC ¶ 61,084, at 61,482 (1996).
discrimination in its planning processes or not following its transmission planning tariff provisions, the appropriate course of action is to take action against that specific transmission provider, not impose an independent transmission monitor on every planning region in the country.

No party argues or demonstrates that the CAISO’s planning process is insufficiently open and transparent or that the CAISO has made biased decisions in favor of incumbents. The CAISO’s existing process allows all stakeholders to provide input and review the results of the CAISO’s transmission plan in a manner that ensures the CAISO considers the cost of approved transmission projects.

Additionally, the CAISO tariff-based competitive solicitation process has resulted in approved project sponsor agreements with both incumbent and non-incumbent entities. The process is highly competitive. The CAISO has selected project sponsors from competing applicants in 11 competitive solicitations and has awarded six projects to independent transmission developers, two projects to incumbent PTOs, two projects to collaborations between incumbent PTOs and independent developers, and one project to a public power entity that was not an existing PTO. The CAISO’s reassessment of transmission needs through its annual planning process has also resulted in the cancellation of some transmission projects when resource development and reductions in load forecasts addressed the identified need. The CAISO also has been transparent regarding the total costs of transmission approved through its transmission planning process. See, e.g., CAISO 2020-2021 Transmission Plan at 443-445.
processes on its High Voltage Transmission Access Charge. As part of this effort, the CAISO forecasts the High Voltage Transmission Access Charge trend over the period covered by the transmission plan. The CAISO has made its model to complete this estimate available to stakeholders and will continue to update and enhance the model. Based on the foregoing, there is no basis to impose an independent transmission monitor on the CAISO.

b. The Commission and States Can Perform the Proposed Functions of an Independent Transmission Monitor

In its comments, the CPUC argues independent transmission monitors should perform functions to ensure that future buildout of the grid is cost-effective and maximizes cost containment for transmission customers. Among other functions, the CPUC recommends independent transmission monitors develop benchmark cost estimates, monitor actual project costs compared to estimates, monitor progress and assess continued need for incomplete projects, assess the prudency of selected projects as compared to alternatives, facilitate and monitor reform of Order No. 1000 competitive processes, monitor the cost and efficacy of transmission incentives, and periodically issue public reports that describe the state of transmission spending in its region.

Many of these activities, e.g., assessing the prudency of selected projects as compared to alternatives, fall squarely within the oversight functions the Commission exercises over planning entities. The Commission should not delegate this authority to another entity. Many of the other proposed functions involve monitoring and reporting

\[^{112}\text{CPUC at 54-61.}\]
that the CAISO already does. The CAISO makes all planning process information and models available, allowing stakeholders to conduct their own modeling and analyses to assess transmission needs and solutions. The CAISO also runs scenario analyses based on stakeholder feedback and provides the results to stakeholders. The CAISO provides planning cost estimates for new transmission projects in the transmission planning process and in its functional specifications for competitive solicitations. The CAISO also monitors the need for transmission projects it has approved in previous planning cycles on a case-by-case basis when warranted by circumstances. The CAISO has canceled many projects -- including projects awarded in competitive solicitations -- that it subsequently determined were no longer needed. The CAISO also has implemented several reforms to its competitive solicitation process since its inception, including submitting tariff amendments and improving its project sponsor selection report. For example, after completing its two most recent competitive solicitation processes, the CAISO undertook a “lessons learned” effort to assess what improvements it could make to the application and templates it uses. Given the access to information in the CAISO’s transmission planning process, there is no need to house a new office within the CAISO to perform these functions.

NARUC recommends the Commission investigate the need for independent transmission monitors to report to a state committee comprised in part of members of a state commission.\footnote{NARUC at 55.} No need for this measure exists. State committees and individual state public service commissions can each secure the services of staff or consultants with specific expertise in transmission development. State commissions oversee the
siting of most transmission projects, and the decisional process includes reviewing alternatives to the selected projects. CPUC staff actively participate in the CAISO’s transmission planning process and comment on the matters under consideration. Again, the Commission and state representatives can adequately perform the functions the ANOPR suggests might be performed by independent transmission monitors. If additional information is necessary to enhance transparency of the costs associated with authorized transmission, the Commission could require planning regions to publish information in their transmission plans or through other mechanisms.

c. Unlike Independent Market Monitors, an Independent Transmission Monitor Would Duplicate Work Within the CAISO Planning Region

Commenters suggest independent transmission monitors in RTO/ISO regions could function like existing market monitors.\textsuperscript{114} For example, Potomac Economics argues that effective monitoring involves expert review of the inputs and outputs of the process similar to the role performed in connection with organized wholesale electricity markets by independent market monitors. In contrast to wholesale electricity markets that involve multiple markets, numerous market participants submitting day-ahead and real-time bids and schedules, complex inputs, algorithms, and market results, the CAISO transmission planning process is significantly more straightforward and transparent. The Commission established independent market monitors in part

\textsuperscript{114} \textit{Id.}; Reply Comments of Potomac Economics.
because RTO/ISO markets are operationally complex and the Commission determined a need existed to evaluate market participant behavior in these markets.\textsuperscript{115} There is no comparable market participant behavior or market manipulation or gaming to monitor in the transmission planning process. Only the transmission planner is making decisions.

The CAISO provides information to stakeholders and explains it throughout the entire process. The CAISO explains its decisions in the final transmission plan adopted by the CAISO’s Board of Governors and in the competitive solicitation decisional reports it issues. The CAISO develops its study plan, identifies input assumptions, and explains the results of its planning studies through processes open to the public. In its transmission plan, the CAISO also estimates the impact of the capital projects identified in the annual transmission planning processes on its High Voltage Transmission Access Charge. The CAISO makes its underlying modeling available to stakeholders. The CAISO’s competitive solicitation process assesses bids to build specific transmission projects, but this process involves a few bids for a specific project. This is a far cry from the massive volume of information in the CAISO energy and ancillary services markets for which a market monitor can shed light on market outcomes and market participant behavior. The CAISO’s competitive solicitation designation reports summarize the information from every applicant, and describe the cost and cost containment measures of the winning bidder. Based on prior Commission decisions, the CAISO does not post the cost containment information of bidders that do not receive a competitive solicitation award, but in a prior technical conference proceeding, the CAISO requested that the

\textsuperscript{115} Market Monitoring Units in Regional Transmission Organizations and Independent System Operators, 111 FERC ¶ 61,267 (2005) at P 3.
No entity has filed a complaint against the CAISO regarding the results of a competitive solicitation.

Potomac Economics argues that an independent transmission monitor may identify sensitivity case(s) to determine the effects of a particular assumption. The CAISO already undertakes this effort through an open stakeholder discussion when it develops its transmission study plan. Further, the CAISO provides sufficient information and tools for stakeholders to run their own sensitivity studies and make adjustments to the CAISO’s studies. Overlaying an independent transmission monitor to second guess the outcomes of this stakeholder process duplicates work and is unnecessary.

Potomac Economics argues that the planning processes allow multiple rounds of input and feedback with stakeholders and thus could accommodate additional input from a transmission monitor. This is true, but transmission planning processes still follow schedules and deadlines. The risk posed by a transmission monitor is that it will result in a shadow transmission planning process that undermines the effectiveness of work the CAISO and stakeholders are already performing.

F. The Commission Should Not Expand the Requirements for Competitive Solicitation Processes in this Proceeding

In Order No. 1000, the Commission eliminated the right of first refusal (ROFR) for an incumbent transmission provider for all transmission facilities selected in a regional transmission plan for regional cost allocation. The Commission did not

---

117 Reply Comments of Potomac Economics at 2.
118 Id. at 3.
119 Order No. 1000 at P 313.
eliminate the ROFR for local transmission facilities whose costs are not allocated regionally. Order No. 1000 defined a local transmission facility as “a transmission facility located solely within a public utility’s service territory or footprint that is not selected in the regional transmission plan for purposes of cost allocation.” The CAISO’s implementation of Order No. 1000 eliminated the ROFR for (1) all new regional transmission facilities, which are facilities 200 kV and above (even if they are located solely within the footprint or service territory of a PTO), and (2) all new transmission facilities regardless of voltage that span two (or more) PTO systems or span the CAISO BAA and another BAA. Consistent with Order No. 1000, a ROFR applies to upgrades or improvements to, additions on, and replacements of, a part of an existing PTO facility.

Several commenters urge the Commission to adopt reforms to require more transmission projects be procured through competitive solicitation processes. They propose to eliminate existing exemptions based on minimum voltage thresholds. Some commenters suggest all transmission projects above 100 kV should be subject to competitive solicitation, and transmission projects below 100 kV could be subject to competitive solicitation depending on the results of distribution factor (DFAX) or line outage distribution (LODF) studies. LS Power argues that transmission facilities

---

120 Id. at PP 63, 318.
121 CAISO tariff section 24.5.1; see Order No. 1000 at P 319.
122 CPUC at 24-34; LS Power Grid, LLC (LS Power) at 49-60; Electricity Transmission Competition Coalition (ETCC) at 16-19.
123 CPUC at 37-39; LS Power at 50.
124 LS Power at 49-60; ETCC at 16-19.
125 LS Power at 60-61.
operating at 100 kV or higher have regional benefits and should be considered regional transmission facilities for competitive solicitation purposes regardless of how the region allocates the costs of such facilities. However, LS Power would allow stakeholders in each region to decide how to allocate the costs of such facilities. LS Power and ETCC refer to a 100 kV interregional line between PJM and the Midcontinent Independent System Operator, Inc. (MISO) that the Commission found provided interregional benefits, causing the Commission to direct MISO to eliminate its 345 KV voltage threshold requirement for interregional economic projects. LS Power and ETCC state that facilities above 100 kV are part of the bulk electric system under the NERC standards and can affect the reliable operation of the interconnected transmission system. ETCC argues that network upgrades arising from the generator interconnection process should also be subject to competitive solicitation.

The CAISO has long been a proponent of competitive solicitation processes for regional transmission facilities. The CAISO implemented competitive solicitations for regional economic- and public policy-driven transmission projects before the Commission issued Order No. 1000. The CAISO has awarded many regional transmission projects to independent transmission developers. For the reasons

\[\text{Id. at 50-58.}\]

\[\text{Id. at 54. The CPUC also would delink a transmission project’s eligibility for competitive solicitation from cost allocation. CPUC at 35-43.}\]


\[\text{LS Power at 42-53; ETCC at 16-17. The CPUC states that the Mansfield test for determining whether a facility is integrated with the rest of the transmission grid does not reference voltage levels. CPUC at 40.}\]

\[\text{ETCC at 18.}\]

explained below, however, the CAISO does not support commenters’ proposal to make transmission projects between 100 kV and 200 kV (and possibly projects below 100 kV) subject to competitive solicitation.

1. **Expanding the Scope of Transmission Projects Eligible for Competitive Solicitation Is Unnecessary to Meet Climate Goals or Implement the ANOPR’s Planning Reforms**

The ANOPR proffers numerous potential reforms to transmission planning, cost allocation, and generation interconnection processes to address the growth of resources seeking to connect to the grid and the different characteristics of those resources and, ultimately, to support achievement of climate goals. These reforms focus on planning the system for anticipated future generation, accessing remote generation, preventing “siloed” transmission planning, allocating the costs of new transmission facilities and interconnection-related network upgrades more fairly, promoting greater collaboration among transmission planners, state regulators, and stakeholders, and unclogging interconnection queues. The specific reforms commenters recommend, which deviate drastically from Order No. 1000, are unnecessary to achieve these objectives.

The critical reforms the ANOPR seeks to achieve are ambitious and extensive. Implementing them will require significant effort. On the CAISO system, the significant transmission buildout needed to access energy resource zones and anticipated future generation to support achievement of climate goals will be driven by high-voltage transmission facilities, not low-voltage local, transmission facilities or maintenance and asset management projects. High-voltage transmission facilities are already eligible for
competitive solicitation. Opening up low-voltage, local transmission facilities to competition will only interfere with, and delay, the effort to achieve the NOPR’s key planning objectives. Accordingly, the Commission should not consider such reforms in this proceeding.\footnote{The CPUC also suggests the Commission “investigate requiring all RTOs/ISOs to use a ‘sponsorship model’ in which ‘the transmission planning region identifies regional transmission needs’ and then bidders sponsor or propose transmission projects to meet the identified need” rather than the competitive solicitation process used by the CAISO, SPP, and MISO. CPUC at 45-46. This recommendation strays far beyond any specific question or reform in the NOPR. The CAISO’s competitive solicitation process allows all stakeholders to suggest solutions to the transmission needs the CAISO identifies, and then allows all interested persons to compete to construct the most cost-effective solution identified during the transmission planning process. Thus, the CAISO’s competitive solicitation model maximizes competition and cost reduction at two levels, compared to the sponsorship model, which only maximizes competition and cost reduction at one level. The CAISO has previously explained to the Commission how its framework “expands the role of competition and the competitive opportunities for potential project sponsors in the transmission development process, while still providing opportunities and incentives for parties to offer the most innovative and cost-effective solutions to meet transmission needs.” CAISO Initial Comments, Docket No. RM10-23 at 61-66 (Sept. 29, 2010). See also CAISO Motion for Leave to Answer Protests and Answer, Docket No. ER13-103 at (Oct. 4, 2013). The Commission should not seek to undo the CAISO’s and others’ competitive solicitation processes that have been working effectively and have awarded numerous projects to independent transmission developers.}

The specific reforms commenters recommend raise many questions and potential issues. They are based on broad, conclusory allegations that ignore the specific circumstances of individual transmission planning regions and transmission systems. There is no consensus on this issue and an insufficient evidentiary record demonstrating the need for any change. Many commenters take the contrary position and urge the Commission to roll-back the ROFR measures it adopted in Order No. 1000. Another commenter, ACEG, states that “Order No. 1000’s removal of the right-of-first-refusal has had the unintended consequence of undermining regional transmission planning in some instances.”\footnote{ACEG at 9.} ACEG suggests “the Commission can reasonably conclude that a rule relaxing the broad requirement for a competitive...
process is appropriate and upholds the Commission’s duties under Sections 205 and 206 of the Federal Power Act.”134 ACEG states that by “taking a region-by-region or even context specific approach to rights-of-first-refusal, the Commission may achieve better results across all regions.”135

The CAISO’s competitive solicitation framework ensures projects providing regional benefits are subject to competition, properly aligns competitive solicitation with cost allocation, and effectively balances the objectives and burdens of conducting competitive solicitations. Commenters seeking to eliminate or establish lower minimum voltage thresholds for competitive solicitation eligibility ignore that the CAISO’s competitive solicitation framework already is more robust than what Order No. 1000 requires. Under Order No. 1000, transmission facilities located entirely within a single transmission owner’s service territory – regardless of voltage level -- are exempt from competitive processes unless the transmission owner seeks regional cost allocation for the facility. However, the CAISO does not provide its PTOs the choice allowed under Order No 1000 – all new transmission facilities above 200 kV are automatically subject to regional cost allocation and subject to competitive solicitation even if they are located entirely within a single PTO’s service territory.136

134  ld.
135  ld.
136  Further, transmission facilities below 200 kV are subject to competitive solicitation if they extend between the CAISO BAA and another BAA or between two PTOs.
2. There Is No Basis to Find All Projects Down to 100 KV Are Regional Transmission Facilities on the CAISO System

There is no factual basis for the broad-based claim that every transmission facility 100 kV and above on every transmission system in the country is a regional facility and provides regional benefits. As the CAISO explained in its Order No. 1000 compliance filing, on the CAISO grid transmission facilities 200 kV (high-voltage transmission lines) and above provide regional benefits, but facilities below 200 kV (low-voltage transmission lines) are local in nature. The CAISO reiterated this fact when describing the difference between regional and local facilities on the CAISO grid in its Comments:

The CAISO’s transmission cost allocation scheme recognizes that the high voltage transmission lines on the CAISO grid perform a backbone function that supports regional flows of bulk energy throughout the system; whereas, the lower voltage facilities are essentially local facilities designed (1) to deliver energy already transmitted over the high voltage lines to local customers in load pockets, or (2) to deliver energy from smaller-scale, individual generating units used to serve local areas. The high voltage facilities support the attachment and delivery of bulk energy throughout the system. They also enable the CAISO to maintain reliability on the overall system, support the import and export of power, provide access to remote resource areas, and facilitate reserve sharing among load serving entities.

The CAISO’s Order No. 1000 Compliance Filing described how facilities below 200 kV in each of the PTO service territories (i.e., PG&E, SCE, and SDG&E) are configured

---

138 CAISO Comments at 74.
and operated to provide a local function, not a regional function.\textsuperscript{139} The CAISO stated that "[a]lthough there could be instances in which a low-voltage transmission facility provides some regional benefits, the [CA]ISO does not view this as anything more than a rare occurrence in light of the configuration and operation of the [CA]ISO grid and expected future conditions and need."\textsuperscript{140} The CAISO will not repeat that discussion here.

The CAISO also notes the legislation that created the CAISO -- California Assembly Bill 1890 -- directed the development of a new transmission access charge and established a default methodology (if CAISO Governing Board action did not develop an alternative approach) consisting of a uniform "regional" transmission access charge and a utility-specific "local" access charge. The default methodology in the statute defined regional transmission as facilities operating at 230 kV and above and local transmission as facilities operating below 230 kV.\textsuperscript{141} To implement the legislation, the CAISO worked with stakeholders for over two years to model and evaluate extensive data. The result is reflected in the CAISO’s demarcation of regional transmission facilities (200 kV and above) and local transmission facilities (below 200 kV).\textsuperscript{142}

Commenters seeking to impose the 100 kV requirement on all planning regions, including the CAISO, ignore the CAISO’s enabling legislation, the CAISO’s prior filings and testimony, and the actual configuration and operation of the CAISO grid. They offer

\textsuperscript{139} Transmittal letter for CAISO Order No. 1000 Compliance Filing at 26-28 and Prepared Testimony of Neil Millar at 3-7.

\textsuperscript{140} Transmittal Letter for CAISO Order No. 1000 Compliance Filing at 29-30.


\textsuperscript{142} Transmittal Letter for CAISO Order No. 1000 Compliance Filing at 24.
no CAISO-specific evidence to demonstrate that all transmission facilities 100 kV and above and located entirely within a single CAISO PTO’s service territory are regional transmission facilities providing regional benefits. Conclusory and general claims cannot convert local CAISO transmission facilities into regional facilities.

The mere fact a 100 kV facility is interconnected to, or integrated with, the remainder of the transmission system, or is part of the Bulk Electric System, is irrelevant. That fact alone does not make a transmission facility a regional facility or mean the facility provides regional benefits. If that were the “test”, every transmission facility – not just those 100 kV and above -- would automatically be deemed regional and would be deemed to provide regional benefits. That is not the case. The fact a 100 kV transmission facility can affect reliability does not mean it provides more than de minimis regional benefits to customers beyond a single transmission owner’s footprint. These are two entirely different considerations. If a 100 kV facility is out of service or derated, it can affect other parts of the integrated system because electricity must be diverted elsewhere. However, that does not mean the specific facility is providing regional benefits.

LS Power’s and ETCC’s references to the NIPSCO case are misplaced. The Commission found the facility at issue in NIPSCO provided regional benefits not because it was 100 kV but because it was an interregional transmission line that connected two BAAs, permitting energy transfers between the two BAAs and providing economic benefits to both regions.\(^{143}\) Order No. 1000 already provides that the ROFR only applies to transmission facilities within a single transmission owner’s service

\(^{143}\) NIPSCO, 155 FERC ¶ 61,058 at P 131.
territory. A transmission line that spans two different BAAs is not entirely in a single
transmission owner’s service territory. Thus, the ROFR already should not apply to
such facilities. Accordingly, it is unnecessary to establish “a bright line 100 kV threshold
[to] remove barriers to the development of interregional transmission solutions.”144 On
the CAISO grid, all transmission facilities that extend between the CAISO BAA and
another BAA, or extend between two PTO systems, are regional facilities subject to
competitive solicitation regardless of their voltage level. In other words, under the
CAISO tariff, a ROFR would not apply to the transmission line in NIPSCO.

Finally, the CAISO is concerned about the potentially far-reaching implications of
comments that facilities down to 100 kV provide regional benefits and constitute
regional facilities eligible for competitive solicitation, but stakeholders in each region can
separately determine how to allocate the costs of such facilities.145 Commenters have
not adequately explained how a transmission facility can provide regional benefits and
be a regional facility for competitive solicitation purposes, but not for cost allocation.
The Commission should not adopt proposals that create greater uncertainty and could
prompt parties to seek to undo longstanding, well-functioning cost allocation
methodologies and effectuate dramatic cost shifts.

---

144 See LS Power at 59.
145 Id. at 54-62.
3. Commenters Fail To Address the Implications of Making Local Transmission Facilities Subject to Competitive Procurement

Commenters arguing the Commission should mandate competitive procurement for local transmission projects focus on the link between cost allocation and competitive procurement, but they ignore the other component of the “equation” articulated in Order No. 1000, i.e., the fact the Commission recognized transmission providers were generally responsible for building local transmission facilities to meet reliability needs and service obligations within their own retail distribution service territory or footprint.146 Local transmission facilities directly affect service to the transmission providers’ retail and wholesale customers. No commenter discusses the possible implications of other developers constructing and operating transmission facilities local transmission system, including facilities needed to meet the transmission owner’s local service obligations and to ensure local system reliability.

The CAISO’s experience shows there can be much greater complexity in developing projects and obtaining permits on the lower-voltage transmission system than the high-voltage transmission system because the CAISO’s lower-voltage transmission system is much more integrated with existing transmission owners’ distribution systems. Also, the distribution system is much more dynamic and has a much shorter planning horizon because the distribution system must be upgraded and reconfigured more frequently to address distribution system connections. Although the high-voltage system interconnects with distribution facilities in some locations, the lower-voltage system has extensive interconnections to the distribution system and is

---

146 Order No. 1000 at PP 318, 329; Order No. 1000-A at PP 366-430.
much more integrated with the distribution system. Conditions on the distribution system can more directly affect the low-voltage transmission system and vice-versa. Operating and maintaining these lower-voltage facilities thus requires greater coordination between the transmission and distribution systems. Opening the local transmission system to competition could cause a proliferation of transmission owners operating bits and pieces of an otherwise single, integrated local system that intersects with the transmission owner’s distribution system. Such a patchwork arrangement raises potential coordination issues and fragments the local system by increasing seams within an individual utility’s transmission and distribution systems, while providing less opportunity for cost savings than high-voltage, regional projects due to the relatively lower capital costs associated with low-voltage, local projects. No comments address these coordination issues.

The CAISO’s Estrella 230/70 kV substation project provides an example of how the complexities of distribution system issues, coupled with transmission system issues, can make competitive procurement processes problematic even when there is a supportive PTO. The CAISO approved the Estrella project in 2014 to address two sets of concerns -- the risk of thermal overloads and voltage concerns on the 70 kV system during contingency conditions on the 70 kV system and potential contingency conditions on the 230 kV system. The CAISO Board of Governors approved the project in March 2014, the CAISO completed the competitive solicitation process in March 2015, and the proponents submitted the environmental assessment in January 2017. The target in-service date was May 2019. The competitive part of the Estrella project involved constructing a new 230/70 kV substation and related work. The non-
The competitive part of the project involved installing a 45 MVA 230/12 kV distribution transformer and related work. The combined project contemplated two yards at the substation – a transmission yard and a distribution yard for the PG&E distribution facilities.

The facilities subject to competitive solicitation were at the intersection of the transmission and distribution systems, and the environmental review process delved deeply into distribution system-related issues and examined alternative distribution-level alternative solutions. It also created significant coordination issues between the transmission component of the project and the distribution component of the project.

The project is still in the environmental review process. There have been five rounds of deficiency letters and six rounds of data requests in that review process. There has been extensive discussion of the potential for storage to meet all or part of the distribution and/or transmission system reliability needs. Depending on the options to meet distribution system needs, other alternatives for meeting the transmission system need were then raised, e.g., upgrading existing substations rather than developing a new injection point into the 70 kV distribution system (which was the aim of the competitively procured project).

The Estrella experience highlights the challenges in the permitting process associated with awarding a project to a non-incumbent transmission developer when the permitting process raises distribution-related issues and issues about upgrading existing facilities, and puts most of the burden on rationalizing the need for the project and the acceptability of various alternatives (including distribution alternatives and upgrades to existing facilities), on the incumbent transmission owner. This experience
highlighted the complexities of moving forward with an integrated solution directly affecting, and affected by, distribution system planning, that also requires exploring a host of alternatives in the permitting process that may not involve the competitively awarded solution ultimately moving forward. Given the dependence on the incumbent utility to address the distribution issues and other alternatives, it becomes increasingly challenging for a non-incumbent project sponsor to manage the overall permitting process effectively, raising concerns about the efficacy of the competitive process in such circumstances.

Moreover, these circumstances affect the firmness of the winning bidder’s cost cap for the project, which allows for cap adjustment due to changes in project scope, design, or schedule. At this rate, the project likely will not be placed in service until at least four or five years after the planned-for in-service date. All of this calls into question the benefit of running time-, resource-, and cost-consuming competitive solicitations for lower-voltage, local transmission facilities, particularly when cost containment proposals allow for cost cap adjustment due to force majeure events and project scope or schedule changes.

4. Commenters Do Not Address Any of the Issues Associated With Making Interconnection-Related Upgrades Subject to Competitive Solicitation

Some commenters also seek to reverse the Commission’s prior ruling that Order No. 1000 does not apply to transmission facilities constructed through the
Extending competitive solicitations to every network upgrade resulting from the generator interconnection process raises numerous issues. First, conducting competitive solicitations for these upgrades would invariably delay construction timelines, which are already the primary reason interconnection customers take so long to come online. Any reform the Commission proposes to accelerate interconnection processes could be negated by requiring interconnection upgrades to go through competitive solicitation. Second, most interconnection-related network upgrades are not large transmission projects like building new transmission lines. Third, conducting competitive solicitations would complicate generator interconnection agreements, relationships, and processes, which are three-party arrangements.

The Commission recognized potential problems in Order No. 2003-A when it rejected arguments that interconnection customers should be able to construct and operate Transmission Provider Interconnection Facilities and interconnection-related Network Upgrades on the transmission provider’s system. The Commission stated that “such a regime would fragment the Transmission System, thereby undermining reliability.” In Order No. 1000, the Commission ruled that issues related to the generator interconnection process were outside the scope of the rulemaking.

\[\text{ETCC at 18.}\]
\[\text{The opportunity for an interconnection customer to build stand-alone upgrades puts the construction of the upgrade under the control of parties who have an interest in having the upgrade completed in a timely manner. Opening the process to parties who have no stake in the generation project and possibly competing interests with the proposed generator could result in unintended consequences.}\]
\[\text{Order No. 760 at P 760.}\]
Commenters do not address these issues and identify no changed circumstances that warrant reversal of the Commission’s prior findings.

5. Commenters Do Not Address the Potential Burdens, Costs, and Delays Associated with Making Projects Below 200 kV Subject to Competitive Solicitation

The CAISO expends significant costs, staff time, and resources conducting competitive solicitations for regional transmission facilities. Oftentimes CAISO resources required to focus on the planning challenges associated with the transition to renewable energy integration and other matters are diverted to support competitive solicitations. Also, the CAISO has had to outsource other work to contractors while its staff are working on competitive solicitations. Commenters’ proposal to make projects below 200 kV subject to competitive solicitation will increase the challenges. Further, when faced with multiple competitive solicitations, the CAISO has had to stagger them, delaying the approval process for some projects. Expanding the projects eligible for competitive solicitation will increase the number of competitive solicitations the CAISO must conduct, likely causing additional delays. The Commission should consider these factors in determining whether to expand the projects eligible for competitive solicitation. Further, local low-voltage transmission upgrades typically are smaller in scale, and cost less, than regional transmission upgrades.\(^{151}\)

Finally, until this point, the CAISO has avoided the need to seek a ROFR for “immediate need” projects. However, if the CAISO has to conduct more competitive

\(^{151}\) Local facilities are also generally located closer to existing transmission owner maintenance facilities and staff.
solicitations because of expanded eligibility or it faces timing constraints for local
transmission projects with shorter completion timelines, it may have to consider seeking
approval for such a mechanism.

6. Cost Savings Clarifications

Finally, the CAISO corrects some of the competitive solicitation cost savings
numbers parties have referenced in their comments. ETCC states that the Initial
Incumbent Bid for the Suncrest project was $75 million, and the Final Competitive
Project Cost was $37 million.\textsuperscript{152} These numbers are incorrect. The final project cost
was $42,288 million (excluding additional approved costs), not $37 million. The CAISO
does not understand what ETCC means by the term Initial Incumbent Bid. The
incumbent’s bid for the project was only slightly higher than the bid of the winning
developer (and was below $50 million). Perhaps ETCC is referring to the CAISO’s
planning cost estimate for the project, but that estimate was a range from $50 million to
$75 million, not simply $75 million.\textsuperscript{153} ETCC’s claim the competitive solicitation resulted
in a 50 percent cost savings is incorrect.

ETCC states that the Final Project cost for the Harry Allen-El Dorado Project was
$133 million.\textsuperscript{154} That too is incorrect. The final project cost was $145.5 million in 2020

\textsuperscript{152} ETCC at 7.

\textsuperscript{153} Suncrest 230 kV 300 MVar Dynamic Reactive Power support Description and Functional
Specification for Competitive Solicitation, p.3 (April 15, 2014). The primary reason for the broad range in
the cost estimate for Suncrest was because sponsors could propose one of three types of reactive power
devices – with varying costs -- to meet the identified transmission need. These included Synchronous
Condensers, Static Synchronous condensers, and Static Var Compensators.

\textsuperscript{154} ETCC at 7.
dollars (excluding additional approved costs). ETCC also states that the Initial Incumbent Bid was $144 million. There was no “incumbent” for this project because the transmission line is located entirely in Nevada, outside of the service territory of any CAISO PTO. If ETCC is referring to the CAISO’s planning cost estimate for the project, that cost was $144 million in 2015 dollars.155

When assessing potential cost savings associated with competitive procurement, the Commission should focus on completed project costs. Cost cap proposals can include a variety of exclusions that allow the cap to be adjusted upward. The CAISO has seen bid cap exclusions or cap adjustment provisions for routing changes, scope or design changes, force majeure events, labor and materials cost increases, regulatory and schedule delay, inflation, siting authority or regulator-imposed environmental mitigation measures, and other regulatory changes.

G. The Commission Should Reject LS Power’s Request to Remove Qualification Considerations from the Project Sponsor Evaluation Processes

LS Power claims that an inefficiency of competitive solicitation processes is the alleged “duplication of qualification information in a qualification process as well as in the evaluation process.”156 LS Power argues that once entities are identified as qualified to participate in the competitive solicitation process, the competitive solicitation process should be focused solely on the technical elements of the proposal and the

156 LS Power at 110.
expected cost of the proposal.157 LS Power also recommends the project evaluation window should be no more than 90 days.158

As an initial matter, LS Power’s proposals do not respond to any specific question in the ANOPR, are unrelated to any proposed reform, and are not a necessary step to achieve the ANOPR’s primary objectives. Second, it is unclear what “duplication of information” is occurring. For example, under the CAISO’s competitive solicitation process, a project sponsor submits one application for a project that includes the information required for both project sponsor qualification and evaluation. The project sponsor does not submit qualification information twice. Further, the CAISO’s assessment of qualifications is not “duplicative.” In the qualification step of the completive solicitation process, the CAISO determines if the project sponsor meets the minimum qualifications to permit, construct, own, and operate the transmission project.159 In the evaluation process, the CAISO compares a project sponsor’s qualifications to the qualifications of the other competing project sponsors.160

Third, any presumption that if a project sponsor meets the bare minimum qualifications, then it is equally as capable as every other competing project sponsors to permit, finance, build, own, reliably operate, and maintain a specific transmission facility, is misplaced.161 During the Order No. 1000 compliance process, the Commission

157 Id. at 110-111.
158 Id. at 111.
159 CAISO Tariff section 24.5 3.
160 Id. at section 24.5.4.
161 To the extent LS Power is requesting that the Commission require planning regions to have a separate pre-qualification process that generically allows project sponsors to compete for all future projects that might be up for competitive solicitation once they are deemed “qualified”, the CAISO has previously demonstrated why such a practice is problematic and can still require the submission of
approved CAISO Tariff section 24.5.4, which provides the CAISO will consider both the qualification criteria in Tariff section 24.5.3.1 and the selection factors in Tariff section 24.5.4 when comparing (and selecting) project sponsors in the comparative evaluation process.\textsuperscript{162} LS Power identifies no changed circumstances that warrant a different result now. It is important and necessary to recognize the degree of difference between project sponsors regarding their qualifications (and each of the selection criteria). The Commission necessarily recognized this in approving the comparative analysis provisions of the CAISO’s competitive solicitation process. For example, one project sponsor may have the minimum financial capabilities to construct a $300 million dollar transmission project, but it can pose financial risk greater than a project sponsor with more resources. Suggesting that a transmission planner should not consider this qualification factor and other qualification factors at all when comparing competing project sponsors in the project sponsor selection process is misplaced and problematic. That is like saying an employer should not compare candidates’ qualifications in making a hiring decision. The comparative analysis standard in the CAISO tariff appropriately requires the CAISO to consider various risks posed by a project sponsor and its

\textsuperscript{162} Also, when the Commission approved the CAISO’s revised transmission planning process in 2010, it approved the precursor to Tariff section 24.5.4 -- then Tariff section 24.5.2.4 -- that likewise allowed the CAISO to consider qualification criteria in the comparative evaluation process to select a project sponsor. See CAISO tariff amendment filing, Docket No. ER10-1401 (June 4, 2010), which the Commission approved on December 16, 2010. \textit{Cal. Indep. Sys. Operator Corp.}, 133 FERC ¶ 61,224 (2010).
The CAISO’s approach allows it to maximize competition and participation and compare all minimally eligible project sponsors without having to restrict competition early in the process by eliminating more project sponsors at the qualification stage.

Finally, the Commission should reject LS Power’s proposal to require regional planners to complete their competitive solicitation processes within 90 days after they find project sponsors to be qualified. The CAISO takes approximately six months after the deadline for project sponsors to submit their applications to complete a competitive solicitation process. As specified in the Transmission Planning Process Business BPM, this includes up to 35 business days for Validation of the application submissions, up to 35 business days for project sponsor and project Qualification, and up to 70 business days after qualification to undertake a comparative evaluation of all project sponsors/proposals and issue a detailed written project sponsor selection report. Although the CAISO believes this timeline falls within the deadline LS Power

---

163 CAISO Tariff section 24.5.4.
164 Under the Transmission Planning Process Business Practice Manual (BPM), the bid window must be open for a minimum of 10 weeks and the CAISO typically “kicks-off the competitive solicitation process in the month after the CASO Governing Board approves the annual transmission plan. Transmission Planning Process BPM at Table 2-1.
165 The CAISO reviews all of the material submitted by a project sponsor in its application to ensure the application is complete and all question have been answered appropriately. This typically involves the CAISO identifying deficiencies in responses and requiring project sponsors to cure the deficiencies by providing additional responsive information.
166 This process involves the CAISO evaluating a project sponsor’s application to ensure the project sponsor is minimally qualified to construct, own, operate, finance, and permit the specific project up for competitive solicitation. See CAISO Tariff section 24.5.3.1. It also involves the CAISO reviewing the project sponsor’s specific project proposal to ensure the design of the transmission solution meets the needs identified by the CAISO and satisfies all applicable reliability criteria and the CAISO Planning Standards. See CAISO Tariff section 24.5.3.2. This can involve the CAISO issuing follow-up questions, and the CAISO provides project sponsors an opportunity to cure any deficiencies.
167 CAISO Transmission Planning Process BPM at Figure 2-1 and Table 2-1.
seeks to impose, there is no guarantee the CAISO can meet its target timeline in all cases.

The CAISO believes planning regions should make a diligent effort to complete their competitive transmission processes in a timely manner without undue delay, but the Commission should not impose unreasonable, inflexible, or unrealistic deadlines on such processes. Many factors can affect the actual time to conduct a particular competitive solicitation, e.g., the number of competing proposals, the complexity of the project, the number of competitive solicitations a transmission planner is conducting concurrently, and staff and consultant availability and conflicts. That is why the CAISO’s timelines in the Transmission Planning BPM for conducting competitive solicitations are “approximate,” and the CAISO may adjust or stagger competitive solicitation dates based on the number or complexity of projects being considered. The CAISO already faces significant challenges in meeting its deadlines, let alone any stricter deadlines. In addition, when confronted with multiple transmission projects subject to competitive solicitation in a single planning cycle or with highly complex projects, the CAISO has had to stage/stagger the individual solicitations and/or adjust the timelines for completing the competitive solicitation. The circumstances of a particular solicitation may also affect timing as can the number of competitive solicitations a planning region must conduct. Further, there are constraints on CAISO staff and the consultants it engages in the competitive solicitation process. CAISO staff involved in the competitive solicitation process have numerous other responsibilities.

---

168 *Id.* at 14, Figure 2-1.

169 *See id.* at Figure 2-1.
Similarly, consultant options are limited because of industry conflicts, and, like CAISO staff, they have other responsibilities. LS Power’s proposal to make all projects down to 100 kV subject to competitive solicitation would cause even greater delays in competitive solicitation processes. The Commission should take no action that would make this process more challenging than it already is, and it should impose no strict deadlines to complete a competitive solicitation.

III. CONCLUSION

For the foregoing reasons, the Commission should take action in this proceeding consistent with the discussion herein and in the CAISO’s Comments.

By: /s/ Anthony Ivancovich
Roger E. Collanton
General Counsel
Anthony Ivancovich
Deputy General Counsel
Andrew Ulmer
Assistant General Counsel
Jordan Pinjuv
Senior Counsel
California Independent System Operator Corporation
250 Outcropping Way
Folsom, CA 95630

Counsel for the California Independent System Operator Corporation

November 30, 2021
CERTIFICATE OF SERVICE

I certify that I have served the foregoing document upon the parties listed on the official service list in the captioned proceedings, in accordance with the requirements of Rule 2010 of the Commission’s Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Folsom, California this 30th day of November, 2021.

/s/ Martha Sedgley
Martha Sedgley