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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Develop an Electricity Integrated Resource Planning Framework and to Coordinate and Refine Long-Term Procurement Planning Requirements.	R.16-02-007

COMMENTS OF SOUTHERN CALIFORNIA EDISON COMPANY (U 338-E) ON PROPOSED DECISION ADOPTING PREFERRED SYSTEM PORTFOLIO AND PLAN FOR 2017-2018 INTEGRATED RESOURCE PLAN CYCLE

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Pursuant to Rule 14.3 of the Rules of Practice and Procedure of the California Public Utilities Commission ("Commission" or "CPUC"), Southern California Edison Company ("SCE") respectfully submits these comments on the *Proposed Decision Adopting Preferred System Portfolio and Plan for 2017-2018 Integrated Resource Plan Cycle* ("PD").

I.

INTRODUCTION

SCE appreciates the important work the Commission has completed over the last three years in developing a new and more comprehensive Integrated Resource Planning ("IRP") process and evaluating load-serving entities' ("LSEs'") first IRPs, and commends Administrative Law Judge Fitch for crafting a well-reasoned PD resolving the 2017-2018 IRP cycle. SCE strongly supports most aspects of the PD and its adoption by the Commission.

In particular, the PD correctly approves SCE's IRP, determining that SCE's plan satisfied all requirements established by the Commission in Decision ("D.") 18-02-018.[1] The PD also properly concludes that the Preferred System Portfolio ("PSP") should be based on the Reference

[1] *See* PD at 59-60, Finding of Fact ("FOF") 3, Conclusion of Law ("COL") 2, Ordering Paragraph ("OP") 2.

System Portfolio ("RSP") adopted in D.18-02-018, updated with adjustments to reflect 2017 Integrated Energy Policy Report ("IEPR") assumptions and the most recent transmission cost and availability information from the California Independent System Operator's ("CAISO's") 2018-2019 Transmission Planning Process ("TPP"), rather than the Hybrid Conforming Portfolio ("HCP").[2] SCE agrees with the PD that the Commission should not adopt the HCP "because it does not meet the [greenhouse gas ('GHG')] emissions goals or the [Renewables Portfolio Standard ('RPS')] requirements in 2030, and also represents a less reliable portfolio than the RSP adopted in D.18-02-018, as updated to reflect the 2017 IEPR assumptions."[3] Similarly, while SCE believes that studying a portfolio with a deeper decarbonization target would provide more useful and informative results, SCE supports the PD's recommendation that the CAISO study the PSP as the reliability and policy-driven base case in the 2018-2019 TPP, as well as two additional policy-driven sensitivity cases.[4] As discussed in Section II, however, the Commission should not include an assumption of a 40-year life for fossil-fueled resources in the PSP.

Additionally, the PD appropriately recognizes that "the integrity of the IRP process, and the development of the PSP in particular, depends on the provision of accurate, up-to-date data and information by all LSEs."[5] SCE agrees, and fully supports the PD's expectations that all LSEs "tailor their IRP development process to meet the Commission's requirements for implementing the statute, rather than expecting our process to conform to their local ones" and that all LSEs will be required "to file their IRPs according to the timetable and process required by the Commission."[6] As the PD notes, the "Commission's portfolio aggregation and evaluation process, which relies on fulfillment of IRP filing requirements by all LSEs, is the only process capable of assessing the overall needs of the CAISO grid and meeting the statewide GHG,

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2 *See id.* at 2-3, 100-113, FOF 14-22, COL 10-12, OP 9.
3 *Id.* at COL 10.
4 *See id.* at 3, 116-121, FOF 23-24, COL 13-14, OP 10.
5 *Id.* at 17.
6 *Id.* at 17-18.

reliability, and least-cost goals collectively."[7] For the Commission's IRP process to successfully meet these goals, the Commission should exercise the full extent of its authority to require all LSEs to submit meaningful IRPs for Commission review and oversight, and ensure that all IRP requirements are met by those LSEs. For example, SCE supports the PD's requirement that LSEs that did not include any criteria pollutant emissions information in their IRPs re-file their plans to include such information.[8]

While the IRP process is focused on meeting the state's GHG emissions goals, SCE also agrees with the PD that it must do so "in way that is reliable and least cost."[9] The IRP process plays a key role in ensuring that California's electric system has sufficient resources to maintain reliability as it meets the state's GHG emissions and other state goals at an affordable cost to customers. SCE appreciates the PD's recognition of the core importance of reliability and affordability, along with GHG reduction, in the IRP process. Most notably, SCE strongly supports the PD's statement that: "We … wish to make it clear to all LSEs that there is a shared responsibility among all of them for a reliable electric system that meets the state's environmental goals at least cost."[10]

As addressed in Section III, SCE supports the initiation of an IRP procurement track and believes it will be an important venue for beginning to tackle some of the key questions faced by the state to ensure there are sufficient resources needed to meet California's environmental goals while maintaining reliability and affordability. SCE suggests a few clarifications and additions to the scope of the procurement track in these comments.

Lastly, given the challenges confronting California's electric system and the potential for near-term reliability issues, SCE urges the Commission to approve SCE's proposed reliability threshold mechanism to provide a process for expedited procurement and deployment of flexible

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7 *Id.* at 18.
8 *See id.* at 22-23, OP 5-6.
9 *Id.* at 128.
10 *Id.* at 132.

energy storage resources to address reliability concerns on the electric grid should they arise. Adoption of the reliability threshold mechanism is a no-regrets approach to bridge reliability concerns and promote an early transition away from GHG-emitting resources. Should the Commission determine approval of the reliability threshold mechanism is not needed at this time, SCE encourages the Commission to revisit the proposal in the IRP procurement track.[11]

II.

THE COMMISSION SHOULD ADOPT THE RSP AS ADJUSTED BY 2017 IEPR ASSUMPTIONS AND 2018-2019 TPP DATA AS THE PSP, BUT SHOULD NOT INCLUDE A 40-YEAR LIFE ASSUMPTION FOR FOSSIL-FUELED RESOURCES

The PD correctly rejects the use of the HCP as the PSP, concluding that the HCP does not meet the 2030 electric sector GHG emissions target; is less reliable than the RSP adopted in D.18-02-018, as updated with 2017 IEPR assumptions; and does not achieve the 60% RPS requirement in 2030.[12] The PD also notes that many community choice aggregators ("CCAs") stated that their conforming plans, which were used to create the HCP, "were not representative of their resource preferences."[13] In essence, the PD finds that "the individual resource choices by the LSEs collectively did not result in a diverse and balanced portfolio of resources needed to ensure a sufficiently reliable or environmentally beneficial statewide electricity resource portfolio."[14]

Instead of the HCP, the PD adopts the RSP approved in D.18-02-018 as the PSP, as adjusted to reflect 2017 IEPR assumptions, the most updated information about transmission availability and cost from the CAISO's most recent TPP, and a 40-year life assumption for

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[11] SCE's proposed modifications to the FOF, COL, and OP in the PD are included in Appendix A to these comments.
[12] *See* PD at 2-3, 100-106, FOF 14-19, COL 10.
[13] *Id.* at 102.
[14] *Id.* at 2.

fossil-fueled resources.[15] SCE supports the adoption of the RSP as the PSP, and agrees that the RSP better meets California's GHG emissions goals and is more reliable than the HCP.[16] SCE also supports the PD's adjustments to the RSP adopted in D.18-02-018 to reflect 2017 IEPR assumptions and the most updated TPP data. Moreover, while SCE would prefer studying a portfolio with a more aggressive GHG emissions target, SCE agrees with the PD's recommendation that the PSP be studied by the CAISO as the reliability and policy-driven base case in the 2018-2019 TPP, along with two additional policy-driven sensitivities.[17]

Although SCE generally supports the PD's approach to the PSP, SCE is concerned that inclusion of a 40-year life assumption for fossil-fueled resources over-simplifies the complex analysis necessary to evaluate retirement of fossil-fueled resources. SCE appreciates the Commission's desire to address the shortcomings in the RSP's assumption that most existing fossil-fueled resources will be available in perpetuity.[18] SCE agrees the assumption that no fossil-fueled resources will retire (other than planned retirements of once-through cooling ("OTC") resources) is unrealistic. However, assuming a 40-year life for all fossil-fueled resources introduces its own problems. As SCE stated in prior comments, in order to properly analyze fossil-fueled resource retirements, modeling should incorporate plant economics, load distribution, generator location, and transmission capabilities at the individual plant level.[19] A 40-year life assumption does not account for these factors. SCE also notes that the 40-year life assumption significantly reduces the amount of 2030 combined heat and power ("CHP") capacity, from 1,685 MW to 446 MW,[20] which may not be realistic, particularly given the

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15 *See id.* at 3, 106-113, FOF 20-22, COL 11-12, OP 9.

16 In the PD, SCE's modeling is referred to as part of the reason for adopting the RSP as the PSP. *See id.* at 104-107, FOF 21. For this modeling, SCE used assumptions provided by Energy Division, only modeled the year 2030, and did not model years between now and 2030. Based on this, SCE found that the system was operationally reliable with the Energy Division assumptions in 2030.

17 *See id.* at 3, 116-121, FOF 23-24, COL 13-14, OP 10.

18 *See id.* at 106.

19 *See Comments of Southern California Edison Company (U 338-E) to Administrative Law Judge's Ruling Seeking Comment on Proposed Scenarios for 2019-2020 Reference System Portfolio*, R.16-02-007, March 5, 2019, at 9-12.

20 *See* PD at 112.

complex factors that may drive CHP resources' operational decisions. Because it is uncertain whether any fossil-fueled plants will retire and what reasons may cause a specific plant to retire, SCE does not believe the Commission should include additional retirements as a default assumption. The Commission should instead consider a variety of sensitivities regarding retirements in future IRP cycles, in order to better understand the risks and contingencies caused by different retirement scenarios and the necessary mitigation actions as a result of such retirements.

As such, SCE recommends the Commission remove the 40-year life assumption for fossil-fueled resources from the PSP. In addition, the Commission should not include a 40-year life assumption as a default assumption in the next IRP cycle, as indicated in the PD.[21] Finally, as shown in Appendix A to these comments, the Commission should clarify FOF 16 of the PD to make clear that it is the aggregated HCP, and not every LSE's individual IRP, that showed a deficiency in the area of reliability and renewable integration resources necessary to achieve the 2030 GHG emissions and reliability needs of the system.

III.

SCE SUPPORTS THE INITIATION OF AN IRP PROCUREMENT TRACK AND RECOMMENDS CLARIFICATIONS AND ADDITIONS TO ITS SCOPE

The PD determines that realization of California's GHG emissions and other IRP goals by 2030 will require procurement of resources by many LSEs, with a heavy focus on procurement by CCAs to serve their expanded load, and that additional attention is warranted for the near- and medium-term reliability planning aspects of the IRP process.[22] For those reasons, the PD proposes to open a procurement track in the IRP proceeding to "begin to tackle some of the critical questions we face in ensuring adequate clean resources and reliability, at lowest cost, through 2030," including, e.g., who will procure; will all entities procure, or will some just have

[21] *See id.* at 134.
[22] *See id.* at 3-4.

their customers pay; and what type of resources and how much should be procured, and by when?[23] Among other issues, the procurement track will also consider closer coordination between the IRP process and Resource Adequacy ("RA") and exercise of the Commission's authority to require long-term commitments to renewable integration resources by CCAs.[24] SCE supports the initiation of an IRP procurement track and agrees that a venue is needed to address the key questions faced by the state to ensure there are sufficient resources needed to meet California's environmental goals while maintaining reliability and affordability.

SCE recommends a few clarifications and additions to the scope of the IRP procurement track. First, the question of "[w]ho will procure" should be expanded to cover "[w]ho will procure **both policy-driven**[25] **resources and reliability resources, including consideration of a possible central buyer**?" This addition is important to make clear that the procurement track will consider both resources needed to maintain reliability and the procurement of policy-driven resources. Furthermore, with increasing LSE fragmentation and disaggregation, it is important for the Commission to consider whether a central buyer is needed and if so, who would serve that role and what the scope of the central buyer's role would be.

Second, SCE suggests the following modification to the PD's question regarding resource mix: "Should all LSEs be required to show, in their individual IRPs, that they are procuring a resource mix proportional or partially proportional to the mix in the adopted reference or preferred system portfolio? **Are there other potential approaches to ensuring that LSEs procure the portfolio attributes needed to maintain reliability and meet state environmental goals?**" In addition to considering whether it may make sense for LSEs to show they are procuring a resource mix proportional to the RSP or PSP resource mix, the Commission should consider whether there are better approaches to ensuring that LSEs procure the resources

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[23] *Id.* at 136.
[24] *See id.* at 149-150, COL 18.
[25] Policy-driven resources would include, e.g., resources procured to meet the state's GHG emissions or RPS goals that are not procured for the purpose of meeting an electric system reliability need.

needed to satisfy reliability and environmental goals, including considering whether the focus should be on portfolio attributes rather than specific resources. To that end, SCE also suggests that the procurement track consider "**How should GHG emisisons intensity be factored into portfolio selection**?"

Third, while the PD indicates that questions regarding the need for closer coordination between the IRP and RA processes will be addressed during the procurement track,[26] SCE encourages the Commission to specifically consider coordination between the two proceedings to ensure that shorter term RA incentives support the procurement of the resources needed to meet longer term policy and reliability objectives identified in the IRP proceeding. LSEs will be more likely to procure the resources and portfolio attributes that are needed to satisfy long-term IRP planning goals if such procurement is aligned with the incentives in the RA market. In addition, SCE also recommends that the Commission work closely with the CAISO during the procurement track. If the procurement track is going to help to address reliability needs, the CAISO must be involved from the beginning and have a significant role in any need determination.

Finally, the PD includes a list of types of resources that will be considered in the procurement track, including diverse renewable resources in the near term, at levels sufficient to reach the 2030 optimized portfolio, in coordination with the RPS program; existing natural gas resources; and long-duration (8 hour) storage, among others.[27] Instead of limiting the procurement track to specific types of resources, the Commission should focus on the needed attributes and consider any resources that meet the need. This will ensure that the procurement track does not foreclose consideration of resources that may be the optimal procurement solution for meeting an identified need.

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[26] *See* PD at 149-150.
[27] *See id.* at 137, OP 11.

For instance, the procurement track should not be limited to long-duration (8 hour) storage devices. For an energy need with a duration of eight hours, any combination of energy resources, regardless of the duration of those resources, can successfully meet the energy need if there is sufficient energy from the collective set of resources (irrespective of their duration time). This means that resources with a four-hour duration or shorter could fulfill the need. Indeed, this may be the most efficient way to meet an energy need with a duration of eight hours, rather than to mandate that each resource have sufficient runtime duration to meet the entirety of the time duration need. Limiting procurement options to long-duration storage is potentially more costly and less efficient than considering a broader set of options. Accordingly, rather than pre-determining that it will consider procurement of long-duration storage, the Commission should consider the need for energy storage and any devices that can meet that need at the least cost.

IV.

THE COMMISSION SHOULD APPROVE SCE'S RELIABILITY THRESHOLD MECHANISM PROPOSAL

As detailed in SCE's IRP and prior comments, the reliability of the California electric system is currently in a delicate balance.[28] OTC units have retired or will retire by the end of 2020. Natural gas plants are also facing increasing economic pressures as zero-marginal cost resources like wind and solar proliferate, resulting in the potential retirement of non-OTC units for economic reasons. The CAISO's *2017-2018 Transmission Plan* suggests that while additional natural gas plant retirements are expected, there is little buffer to accommodate such

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[28] *See Integrated Resource Plan of Southern California Edison Company (U 338-E)*, R.16-02-007, August 1, 2019 ("SCE IRP"), at 20, 120-125; *Reply Comments of Southern California Edison Company (U 338-E) on Load-Serving Entities' Integrated Resource Plans*, R.16-02-007, September 26, 2018, at 8-11; *Comments of Southern California Edison Company (U 338-E) on Ruling of Assigned Commissioner and Administrative Law Judge Seeking Comment on Policy Issues and Options Related to Reliability*, R.16-02-007, December 20, 2018, at 3-11, 16-17; *Reply Comments of Southern California Edison Company (U 338-E) on Ruling of Assigned Commissioner and Administrative Law Judge Seeking Comment on Policy Issues and Options Related to Reliability*, R.16-02-007, January 14, 2019, at 3-6.

retirements.[29] As a result, the CAISO has invoked "back-stop" procurement constructs, such as reliability must-run ("RMR") agreements and capacity procurement mechanism designations, to retain resources to provide necessary reliability services.[30] The Commission's recent RA report also shows how the RA market is becoming tighter, stating:

> While many new resources were added during 2017, the overall capacity that can be used to meet LSEs' RA requirements decreased considerably…. 3,851 MW of older gas and cogeneration facilities retired during 2017. While this was partially offset by 438 MW of new resources, overall 2017-2018 saw a significant decrease in available capacity.[31]

Additionally, there have been problems in Southern California with regard to fuel supply and storage capacity.[32] The recent challenges to Southern California Gas Company system deliverability, due to the de-rating of the Aliso Canyon natural gas storage facility and other recent unplanned pipeline outages, impairs the system's ability to deliver the natural gas needed for electric generation plants and has resulted in penalty charges that generators pass on to electricity wholesale markets. This, in turn, affects the ability of the natural gas generation fleet to meet system and/or local reliability needs in an affordable manner.

For all of these reasons, SCE proposed a reliability threshold mechanism to provide a process for expedited procurement and deployment of flexible energy storage resources to address reliability concerns on the electric grid should they arise before the resolution of the next

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29 The CAISO "identified potential system-wide reserve margin issues emerging with as little as 1000 to 2000 MW of retirements beyond the current planned retirements." CAISO, *2017-2018 Transmission Plan*, March 22, 2018, at 22, available at: www.caiso.com/Documents/BoardApproved-2017-2018_Transmission_Plan.pdf. This buffer is already shrinking with the announcement of additional retirements.

30 *See id*.

31 Energy Division, *The 2017 Resource Adequacy Report*, August 2018, at 6, available at: http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442458520.

32 *See* Commission, California Energy Commission, CAISO, and Los Angeles Department of Water and Power, *Aliso Canyon Risk Assessment Technical Report Summer 2018*, May 7, 2018, available at: www.cpuc.ca.gov/uploadedFiles/CPUC_Website/Content/About_Us/Organization/Divisions/News_and_Outreach_Office/Aliso%20Canyon%20Summer%202018%20Technical%20Assessment.pdf. *See also* SCE IRP at 123-125.

IRP cycle.[33] SCE's reliability threshold mechanism proposal would not authorize procurement. Rather, it would put a process in place that would allow the Commission to expeditiously approve procurement should it be needed to address a reliability issue.

Although the PD references SCE's proposed reliability threshold mechanism,[34] it does not rule on SCE's proposal. Given the current state of the California electric system and the potential for near-term reliability issues, SCE urges the Commission to approve the reliability threshold mechanism in this decision. There will not be a Commission decision on the next cycle of IRP submittals until at least late 2020. Moreover, there is not likely to be a decision in the upcoming IRP procurement track until 2020 or later. In the interim, if an event that reduces the flexibility of the system occurs and the Commission decides that additional flexible resources are required to maintain system or local reliability, the reliability threshold mechanism will provide an established process for quickly deploying flexible resources to maintain system and/or local reliability. Having such an interim mechanism in place is intended to help avoid the potential need for the CAISO to designate RMR resources or use other backstop mechanisms, which could be unduly costly to customers and create inefficient market outcomes.

Adoption of SCE's proposed reliability threshold mechanism is a no-regrets approach to bridge reliability concerns and promote an early transition away from GHG-emitting resources. If near-term reliability challenges do not emerge and none of the reliability thresholds are reached, no action will be taken. Even if a reliability threshold is reached, that would only trigger an expedited impact assessment wherein the Commission and CAISO would determine whether the event creates reliability concerns. It will be better to establish a mechanism the state ultimately may not need, than to be forced to address such reliability issues on an emergency basis if they do occur.

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[33] *See* SCE IRP at 20-21, 120-135.
[34] *See* PD at 121, 124.

If the Commission decides that it is not necessary to adopt a reliability threshold mechanism at this time, SCE recommends that the Commission consider SCE's proposal in the IRP procurement track.

V.

CONCLUSION

SCE appreciates the opportunity to provide these comments on the PD and urges the Commission to adopt the PD with the limited modifications discussed herein and included in Appendix A to these comments.

Respectfully submitted,

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Appendix A

SCE's Proposed Modifications to the PD's FOF, COL, and OP

SCE's Proposed Modifications to the PD's FOF, COL, and OP

Proposed text deletions are in bold and strikethrough (**~~abcd~~**)

Proposed text additions are in bold and underlined (**abcd**)

Reference	Proposed Modifications
FOF 16	**~~All of the LSEs collectively~~** **The HCP** showed a deficiency in the area of reliability and renewable integration resources necessary to achieve the 2030 GHG or reliability needs of the system.
FOF 21	It is possible to infer based on analyses **of the year 2030** conducted by Commission staff, CAISO, and SCE, that the RSP adopted in D.18-02-018, with adjustments updated to reflect the 2017 IEPR assumptions **~~and including a new assumption of a 40-year life for natural gas resources,~~** would represent a more reliable portfolio than the HCP.
FOF 22	The RSP, with adjustments updated to reflect the 2017 IEPR assumptions **~~and including a new assumption of a 40-year life for natural gas resources,~~** would meet the RPS requirements in 2030 and the Commission's target for the electric sector of 42 MMT of GHG emissions by 2030.
FOF 40	**Given the potential for near-term reliability issues, the record supports approval of SCE's proposed reliability threshold mechanism.**
COL 11	The Commission should update the RSP adopted in D.18-02-018, with adjustments to reflect the 2017 IEPR assumptions

	~~**and including an assumption of a 40-year life for fossil-fueled resources**~~.
COL 12	The updated RSP, with adjustments to reflect the 2017 IEPR assumptions~~**, including an assumption of a 40-year life for fossil-fueled resources,**~~ and reflecting the most updated information about tranmission availability and cost of upgrades gleaned from the most recent TPP, should be adopted as the preferred system plan for 2019.
COL 19	**The Commission should initiate a procurement track to begin to tackle some of the critical questions we face in ensuring adequate clean resources and reliability, at lowest cost, through 2030, including, but not limited to:** • **Who will procure both policy-driven resources and reliability resources, including consideration of a possible central buyer?** • **Will all entities procure, or will some just have their customers pay?** • **What types of resources and how much should be procured, and by when?** • **How will we handle the potential need for joint procurement among multiple smaller entities, for large resources? What procurement implementation ideas can we draw from the upcoming workshops to be held in the resource adequacy rulemaking?**

	• **Should we place limits on the amount of uncontracted and/or unspecified power to serve load in particular years throughout the planning horizon, to ensure sufficient resource availability and more precisely identify procurement need?** • **Should all LSEs be required to show, in their individual IRPs, that they are procuring a resource mix proportional or partially proportional to the mix in the adopted reference or preferred system portfolio? Are there other potential approaches to ensuring that LSEs procure the portfolio attributes needed to maintain reliability and meet state environmental goals?** • **How should GHG emisisons intensity be factored into portfolio selection?** The Commission should focus a procurement track of the IRP proceeding on the following types of resources **or other resources with the attributes to meet identified needs**: diverse renewable resources in the near term at levels sufficient to reach the 2030 optimized portfolio, in coordination with the RPS program; near-term resources with load following and hourly or intera-hour renewable integration capabilities; existing natural gas resources; and ~~**long-duration (8 hour)**~~ storage. **The Commission shall work with the CAISO on the procurement track.**

COL 26	**The Commission should approve SCE's proposed reliability threshold mechanism.**
OP 9	The Preferred System Portfolio shall be based on the Reference System Portfolio adopted in Decision 18-02-018, updated with adjustments to reflect the 2017 Integrated Energy Policy Report assumptions, ~~**utilitizing a 40-year life assumption for fossil-fueled generation,**~~ and updated with the most recent transmission cost and availability information from the California Independent System Operator's 2018-19 Transmission Planning Process.
OP 11	**The Commission hereby initiates a procurement track, alongside the planning activities in this proceeding, to begin to tackle some of the critical questions we face in ensuring adequate clean resources and reliability, at lowest cost, through 2030, including, but not limited to:** • **Who will procure both policy-driven resources and reliability resources, including consideration of a possible central buyer?** • **Will all entities procure, or will some just have their customers pay?** • **What types of resources and how much should be procured, and by when?** • **How will we handle the potential need for joint procurement among multiple smaller entities, for large resources? What procurement implementation ideas can we draw from the**

	upcoming workshops to be held in the resource adequacy rulemaking? • **Should we place limits on the amount of uncontracted and/or unspecified power to serve load in particular years throughout the planning horizon, to ensure sufficient resource availability and more precisely identify procurement need?** • **Should all LSEs be required to show, in their individual IRPs, that they are procuring a resource mix proportional or partially proportional to the mix in the adopted reference or preferred system portfolio? Are there other potential approaches to ensuring that LSEs procure the portfolio attributes needed to maintain reliability and meet state environmental goals?** • **How should GHG emisisons intensity be factored into portfolio selection?** The ~~**Commission hereby institutes a**~~ procurement track~~,~~ ~~**alongside the planning activities in this proceeding, in or**~~ **will** evaluate the need for the following types of resources **or other resources with the attributes to meet identified needs**: diverse renewable resources in the near term at levels sufficient to reach the 2030 optimized portfolio, in coordination with the RPS program; near-term resources with load following and hourly or inter-hour renewable integration

	capabilities; existing natural gas resources; and ~~**long-duration (eight hour)**~~ storage resources.
OP 15	**The Commission hereby approves Southern California Edison Company's proposed reliability threshold mechanism.**