

February 18, 2022

President Alice Reynolds
Alice.Reynolds@cpuc.ca.gov
California Public Utilities Commission
505 Van Ness Avenue, Fifth Floor
San Francisco, CA 94102

Re: SCE Response to CPUC January 24 letter Regarding Infrastructure Investment and Jobs Act of 2021 – Federal Funding Opportunities

Dear President Reynolds,

Thank you for your January 24, 2022 letter regarding federal funding opportunities arising from the Infrastructure Investment and Jobs Act of 2021 (IIJA) to be awarded by federal agencies through competitive grant processes. SCE appreciates the time that the California Public Utilities Commission (Commission) has taken to provide a list of potential federal grants and we are committed to partnering with the Commission and other state agencies and stakeholders to apply for and ultimately secure a portion of the federal funds made available by this one-time opportunity on behalf of our customers.

SCE agrees with the Commission that the IIJA represents a “generational investment” that can help provide critical funding for California’s electrical infrastructure that benefits customers and communities. Indeed, SCE engaged in proactive and supportive advocacy at the federal level while the IIJA was pending to promote the inclusion of numerous provisions in the final bill, ranging from electrification of the transportation and building sectors to grid resiliency, among others. SCE also shares the Commission’s policy objectives of improving the reliability and resiliency of the grid, achieving the state’s ambitious climate change goals, and helping to minimize customer energy bills. These objectives are directly connected with our company’s mission and our corporate goals and objectives. Most importantly, achieving these objectives is essential for an equitable and affordable transition to clean energy for all customers.

Our potential IIJA funding requests are grounded in these three key objectives, and our ongoing review of potential requests includes categories such as:

- the expansion or acceleration of safety and reliability upgrades ready for implementation,
- assessment of novel infrastructure solutions to solve emerging grid challenges, and
- innovative demonstration projects required to Reimagine the Grid and fulfill SCE’s Pathway 2045 vision for decarbonizing California’s economy.

The projects SCE is evaluating complement and support existing and planned programs and activities before the Commission, including as set forth in SCE’s Wildfire Mitigation Plans (WMPs) and Transportation Electrification applications. SCE currently is evaluating more than a dozen projects and has begun initial analysis on potential transmission system project proposals that may be eligible for funding. These proposals are still preliminary, however, and SCE looks forward to discussing and finalizing its requests with appropriate stakeholders. If successful, these IIJA-funded projects can be scaled up by SCE in the future using traditional utility financing mechanisms.

The IJA also provides billions of dollars to California directly through a formula funding mechanism. SCE is actively engaged with our communities, customers and other important stakeholders to collaboratively secure a portion of this funding as well and anticipates acting in some cases as a sub-applicant or in a planning-support role for additional projects on behalf of our customers. Last month, SCE proactively reached out to more than 6,000 of our governmental, commercial and industrial customers, educating them about the availability of IJA-authorized funding and offering to partner with them on potential grant applications. To that end, SCE will coordinate its operational plans with state and local agencies to minimize community and business impacts arising from future construction of IJA-funded projects. In addition, the IJA authorizes more than \$3 billion to the Department of Interior and the U.S. Forest Service for wildfire risk reduction, wildland fire management, mechanical thinning of fuels, controlled burns, ecosystem restoration, and firefighting resources. SCE is working closely with the leadership of these federal land management agencies to ensure that a significant portion of these funds is dedicated to high fire risk areas in SCE's service area.

Continuing to Harden the Grid to Ensure Safety, Resiliency and Reliability

In addition to SCE's foundational work of continuing to safely provide reliable, affordable and clean energy, mitigating the extraordinary wildfire risk currently facing our customers and communities has been SCE's primary focus for the last several years. Under the direction and guidance of the Commission and the Office of Energy Infrastructure Safety (OEIS), over the last four years SCE has invested billions of dollars to harden the grid and take other immediately necessary measures to reduce wildfire risk associated with utility infrastructure, a risk which is exacerbated by climate change and continued population expansion into the urban-woodland interface. Through these efforts, coupled with investments that California has made in forest management and fire suppression, SCE has materially reduced that risk. But much more remains to be done.

At this time, SCE anticipates submitting IJA grid hardening project proposals that complement the extensive grid hardening initiatives SCE has pursued to date and has proposed in SCE's 2022 WMP Update being submitted today to OEIS as well as SCE's 2021 PSPS Action Plan in R.18-12-005. Some of these will be to pilot new, promising technologies that may lead to more cost-effective wildfire mitigation in the future. For example, SCE is considering grant proposals to install and evaluate the efficacy of ground fault neutralizers that can immediately detect downed power lines and reduce the amount of current flowing through those lines. SCE is also evaluating potential grant proposals to install targeted undergrounding and other mitigations on circuits that were recently impacted by the Thanksgiving 2021 Public Safety Power Shutoff (PSPS) event, in light of the fact that other grid hardening technologies reduce but do not eliminate the need for PSPS.

Leading the Way Towards California's Green Energy Future

While we have necessarily focused our efforts on reducing wildfire risk over the last several years, we also have taken action to support the State's primary objective of combatting the climate change effects that are exacerbating wildfire risk. As noted in Edison's September 2021 "Mind the Gap" whitepaper, unparalleled action and improved coordination — starting now — are needed to meet California's 2030 decarbonization goals and put the state on a feasible path to meet its 2045 goals of cleaning the grid, achieving carbon neutrality, and preparing our society for a continually changing climate. Widespread electrification of the California economy utilizing increasingly carbon-free electricity is the most feasible and cost-effective way to meet the state's ambitious greenhouse gas objectives, which is why it is the

foundation of SCE's Pathway 2045 vision. But optimizing widespread electrification using clean resources and customer adoption of new technologies to transition to a clean energy economy can only be accomplished through comprehensive grid modernization. The electric system must have sufficient capacity and continue to modernize to enable and harness the full potential of electrification, demand management and other customer resources, and we must make other necessary changes to fully unlock its decarbonization potential.

Therefore, at this time, SCE anticipates submitting IJJA grid modernization/electrification project proposals to advance the state's carbon neutrality goals while continuing to keep energy safe, reliable and affordable. For example, SCE is evaluating potential grant proposals for projects related to long duration non-lithium battery energy storage, multi-family building electrification infrastructure and public charging stations for medium- and heavy-duty vehicles, among others. SCE is also evaluating a potential project that would blend hydrogen fuel in natural gas pipelines for ultimate end-use in electric generation combustion turbines. These potential projects align with SCE's continuing investments in widespread electrification and decarbonization initiatives, including as set forth in SCE's medium- and heavy-duty (A.17-01-021) and Charge Ready 2 (A.18-06-015) applications.

Facilitating Continuing Customer Affordability for Energy

Finally, SCE shares the Commission's focus on the affordability of electric utility service while mitigating the impacts of ongoing and accelerating climate change. Customer affordability is a complex topic, and one that the Commission continues to focus on in various venues, including in the ongoing Affordability OIR. SCE is fully engaged in those processes, as well as educating and engaging other policymakers and stakeholders, and committed to keeping customer electricity rates affordable. As California continues to decarbonize, the overall cost of energy must remain affordable for all of the state's consumers, including our most vulnerable residents. The clean energy and grid investments required to meet 2045 goals also represent a tremendous economic development opportunity for California. Comprehensive electrification—including the ability and willingness of customers to adopt new technologies and programs—will ultimately lead to lower average overall energy costs for California customers, while simultaneously driving the greenhouse gas emissions reductions that are imperative to combat global climate change. SCE's potential IJJA grant proposals are intended to sync up with the Commission's long-term decarbonization objectives, which are anticipated to make the overall cost of energy more affordable for all Californians and our planet more sustainable.

To prepare for this unique funding opportunity, SCE has assembled a cross-functional team to compile, vet, and prioritize potential projects for further analysis. Our team has extensive state and federal grant proposal writing experience, and we anticipate partnering with the Commission and other key stakeholders to finalize a detailed list of projects to best position the company and our customers for successful attainment of IJJA grants.

To the extent that anticipated proposed grants are awarded, SCE has a long track record that demonstrates our ability to efficiently and expeditiously execute on approved infrastructure projects supported by large and small DOE-funded grants. To cite three relatively recent examples, the Irvine Smart Grid Demonstration (ISGD) project (total budget of \$80 million, including \$40 million of federal American Recovery and Reinvestment Act (ARRA) funding) conducted an end-to-end demonstration of numerous Smart Grid technologies, replicating and testing many of the interlocking pieces of the Smart Grid from transmission and distribution, to devices at the customer's home, and which laid the groundwork for many automation technologies being rolled out more broadly today. The Tehachapi

Wind Energy Storage Project (TSP) (total budget of \$50 million, including \$25 million in ARRA funding) was at the time of its commissioning the largest lithium-ion battery energy storage demonstration project in North America. The project explored the use of electrical energy storage to address grid instability and capacity issues that result from the interconnection of variable renewable generation resources. More recently, SCE is nearing completion of the Electric Access System Enhancement (EASE) project (a cost share-funded project with the DOE, the California Energy Commission and SCE), which explores how a distributed-controls-systems architecture can support integrating high penetration of distributed energy resources on the grid and provide more energy capacity on existing infrastructure. In addition to these larger projects, SCE has participated in numerous other DOE-funded research and demonstration projects led by DOE's national laboratories, universities, Electric Power Research Institute (EPRI) and other industry participants.

SCE stands ready to collaborate closely with the Commission, the Governor's Office, other state agencies, local and tribal governments, our customers and community partners to support state policies and secure IJJA funding. We thank the Commission for its efforts to help advance this unique opportunity to benefit California utility customers and make critical grid infrastructure investments.

Sincerely,



Steven D. Powell
President and Chief Executive Officer

cc:

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