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RCRC Comments on 20-EPIC-01 – EPIC 4 Investment Plan en banc

Additional submitted attachment is included below.



RURAL COUNTY REPRESENTATIVES
OF CALIFORNIA

October 15, 2021

California Energy Commission
Docket Unit
Docket No. 20-EPIC-01
715 P Street
Sacramento, CA 95814

RE: Comments on 20-EPIC-01 “EPIC 4 Investment Plan *en banc*”

Commissioners:

On behalf of the Rural County Representatives of California (RCRC), I am writing to provide brief comments on the Electric Program Investment Charge (EPIC) 4 Investment Plan and *en banc* hearing. RCRC is an association of thirty-seven rural California counties, and the RCRC Board of Directors is comprised of elected supervisors from each member county.

RCRC member counties contain much of California’s forested lands and have borne the lion’s share of destruction caused by wildfires. Our counties experience repeated Public Safety Power Shutoff (PSPS) events and unplanned power outages. We are sensitive to the wildfire risks posed by the electrical transmission and distribution system and strongly support utility efforts to reduce those risks. At the same time, **the state MUST improve energy reliability in rural areas** – especially as the state seeks to electrify the transportation system, phase out the use of natural gas, and restrict the types of backup generators that are available for purchase and use.

Our counties and residents are very sensitive to ever-increasing energy costs – especially amid declining local energy reliability. RCRC believes the EPIC Program should be leveraged to achieve the important baseline goals of reducing wildfire risk and increasing energy reliability. We are hopeful that targeted EPIC investments can spur development and adoption of new technologies that ultimately reduce ratepayer costs.

On balance, RCRC is encouraged by the current mix of strategic initiatives in the EPIC 4 Investment Plan Summary and offers some brief comments on the various policy areas articulated in that document.

Biomass Energy. We note that Governor Newsom recently signed Assembly Bill 322 (Salas) (Chapter 229, Statutes of 2021), which urges the EPIC program to consider biomass energy projects for funding. Increasing use of biomass is key to meeting the state’s wildfire risk

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reduction and forest health goals, will play a vital role in achieving the state’s organic waste recycling objectives, and is essential as agricultural burning is phased out in the Central Valley.

In the forestry and wildfire risk reduction context, biomass facilities convert residual materials (for which there is often no marketable use) into energy and avoid the emissions that result when material is managed through open burning, left to decompose naturally, or fuels future wildfires. In 2020, California’s wildfires burned over 4 million acres and released over 90 million metric tons of Greenhouse Gas (GHG) emissions. That is more than all the GHG emissions from industrial sources in 2018, over half of emissions from the entire transportation sector, and double all emissions from the commercial and residential sectors.

When compared with emission of criteria air pollutants, black carbon, and GHG emissions resulting from burning biomass in open piles, emissions from biomass facilities are significantly lower – even after considering transportation and processing emissions. A recent field study indicates that biomass energy generation results in 98-99 percent lower PM2.5, carbon monoxide, methane, and black carbon emissions compared to open pile burning (along with a significant reduction in NOx and carbon dioxide equivalent GHG emissions).

CalRecycle’s new Senate Bill 1383 Short Lived Climate Pollutant (SLCP) regulations require local governments to procure products derived from organic waste. As an alternative to using compost or mulch, locals may meet their procurement obligations through the purchase of electricity from biomass conversion. Finally, as the state phases out the open burning of agricultural waste in the Central Valley, biomass energy facilities will be vital for the beneficial reuse and disposal of those materials.

While bioenergy may be more expensive than other types of energy, it provides a magnitude and diversity of derivative benefits – especially in the forest health and wildfire risk reduction context. RCRC believes that use of EPIC funding for biomass energy will reduce ratepayer costs, complement utility vegetation management efforts, and mitigate future taxpayer obligations associated with firefighting and post-fire rebuilding.

Offshore Wind Energy. RCRC supports pursuit of offshore wind energy. Several of our coastal counties are at the forefront of offshore wind energy development. While we believe that private industry is well equipped to optimize component design and determine how to standardize manufacturing, assembly, and installation, we are particularly supportive of efforts that promote grid integration of offshore wind energy and provision of assistance for port infrastructure improvement. Given the nature of the projects, we recognize that tremendous work must be done on environmental impact assessments and mitigation and support efforts by the state to simplify and assist in those endeavors.

Advancing Geothermal Energy and Mineral Recovery. RCRC supports EPIC 4’s goal of expanding geothermal energy generation both to improve grid reliability and to increase in-state production of lithium for use in batteries. Several RCRC counties have extensive geothermal resources, and in light of recent widespread power outages, we believe that

increased production of geothermal electricity (and biomass) could offset the intermittent nature of the state’s other renewable resources. Given the high and growing demand for lithium for electric vehicles and battery storage, we support efforts to explore the potential for lithium recovery associated with geothermal energy production.

Lithium-ion Battery Reuse and Recycling. California is at the forefront of transitioning to electric vehicles. As battery life is expected to be 7-10 years, the state will soon see a large volume of discarded lithium-ion vehicle batteries as they are no longer suitable for their intended purpose. RCRC has long supported efforts to prepare the state for the proper handling and diversion of batteries from the waste stream. As such, we support using the EPIC program to figure out how to reuse and recycle end-of-life lithium-ion batteries. We agree that such efforts will help conserve critical materials and avoid significant costs to consumers and local governments associated with management and disposal of those batteries. Given the state’s pressing need to significantly expand energy storage, we also support efforts to determine whether end-of-life lithium-ion vehicle batteries can be adapted for standalone energy storage.

Transportation Electrification and Charging. The EPIC 4 Investment Plan Summary calls for conducting additional research, development, and technology demonstrations of high efficiency vehicle charging devices and systems. While RCRC understands the need to continuously improve technology, we believe the state’s priority should be on thoroughly deploying charging infrastructure throughout the state.

As mentioned, many rural areas have unreliable electricity. In 2019 and 2020, millions of Californians were subject to lengthy power shutoffs to avoid wildfires. 2020 and 2021 also saw the return of rolling blackouts across large parts of the state. As utilities improve their systems to reduce the need to call PSPS events, many smaller rural communities are experiencing even more unplanned outages, with average durations lasting for 8-24 hours before service is restored. Small communities in El Dorado, Tuolumne, and Santa Cruz Counties have been hit especially hard by these unplanned outages, which is of even greater concern given their increased risk of wildfire.

On top of a lack of reliable electricity in many areas, data currently shows that the lowest number of charging stations per capita are in areas with median household incomes between \$50,000 and \$75,000, including Lassen, Merced, Lake, and Modoc Counties. Most electric vehicles (EVs) have a range of no more than 250 miles — not exactly a practical vehicle for rural residents who traverse long distances for work each day, particularly combined with the dearth of charging infrastructure. The relatively low range and lack of charging infrastructure poses very real and life-threatening risks, especially for residents in those communities prone to the yearly specter of catastrophic wildfires and who must evacuate upon very short notice. These factors may also significantly impair mobility of residents in those communities that are subject to frequent and back-to-back multi-day PSPS events.

These factors prompt questions about whether the state can (or should) focus on rapidly transitioning to electric vehicle fleets without first ensuring the provision of safe and reliable electricity and adequate charging infrastructure. While there is nothing inherently wrong with trying to improve existing charging technology, RCRC firmly believes that we must first improve energy reliability and expand access to charging infrastructure.

Energy Storage to Promote Grid Reliability. As is evident from rolling blackouts, loss of nuclear energy generation, impact of the drought on the state's major hydroelectric facilities, and the intermittent nature of solar and wind generation, California must increase energy storage. Energy storage and distributed generation can improve reliability and resiliency of the larger grid; however, strategic deployment of those resources in those communities at greatest risk of losing power can also promote local energy resiliency. The added benefit of strategic deployment is that those resources can help keep the lights on in high-risk communities during periods of acute local need even when the larger grid is stable. The loss of electricity can have a devastating impact on residents and local communities, especially when critical facilities and infrastructure lose power and cannot provide vital public services. These concerns are even heightened in high fire risk areas, where those facilities and local governments are often called upon to respond to major public safety threats on short notice. For these reasons, RCRC strongly supports leveraging the EPIC program to promote innovation and strategic deployment of energy storage-systems and the deployment of clean, dispatchable generation.

Use of Electric Vehicles as Distributed Energy Resources. The EPIC 4 Investment Plan Summary suggests advancing and demonstrating technologies that enable electric vehicles to coordinate and discharge power to the grid as necessary. We do not dispute the vast storage potential enabled by the bidirectional flow of energy to and from electric vehicles. As mentioned, many rural communities are located in high fire risk areas and already lack adequate charging infrastructure. Those residents may need to evacuate on short notice. For these reasons, it is essential that bidirectional charging/discharging systems incorporate safeguards so that residents will always be left with sufficient power in their vehicles to safely evacuate if the need arises. Systems should also be designed with a default setting to curtail flow of energy from the vehicle to the grid in the event of a local power outage.

For the above reasons, RCRC is pleased to offer these comments on the EPIC 4 Investment Plan Summary and *en banc*. If you should have any questions, please do not hesitate to contact me at jkennedy@rcrcnet.org.

Sincerely,



JOHN KENNEDY
Legislative Advocate