Motion

The Los Angeles Aqueduct consists of two main projects that together bring water to City residents. Using gravity alone, the Los Angeles Aqueduct has a total length of approximately 370 miles, with the first section finalized in 1913 being 233 miles, and the second section being 137 miles. In recent years, in collaboration with local community members and organizations, and in partnership with government partners, the City has lessened its reliance on water through the LA Aqueduct, focusing on reusing, recycling and conserving water.

The last three years have been the driest on record, requiring the State to take extraordinary measures to conserve water. Similarly, the residents of Los Angeles have taken considerable steps to conserve and reuse water, reducing the need for imported water. However, with the recent spikes in heat, and the worsening drought, there has been concern regarding the amount of water lost to evaporation through the hundreds of miles-long journey that is required for Los Angeles Aqueduct water. This water source was approximately 38% of total water supply for Angelenos each year between 2016 - 2019, close to 55.5 billion gallons.

The California State budget has at least one named project funded for a renewable energy generating and evaporation control purpose, and grant funding for competitive bids. These projects would be the first of their kind in the nation, and in Los Angeles' case, focused on saving rate payer money and water, while generating the most power at locations where transmission currently exists. According to a recent study partially funded by the US Department of Energy, there are immense water saving and power generation benefits from potential projects that could cover canal infrastructure. The Los Angeles Department of Water and Power should review all possibilities to create "solar canals," and then recommend solar installations that achieve the dual purpose of power generation, while preventing water evaporation on as much of the LA Aqueduct as possible.

The LA 100 study effectuated under CF 21-0352 highlights the need for solar, especially when taking advantage of co-located infrastructure. LADWP currently manages transmission corridors within close proximity of the LA Aqueduct: the Pacific DC Intertie and the Inyo-Rinaldo / Owens Gorge Corridor, allowing an opportunity to maximize LA's carbon free energy goals.

I THEREFORE MOVE that the Los Angeles Department of Water and Power examine the potential to generate photovoltaic power over the Los Angeles Aqueduct, including state and federal grant options, and create a report outlining water evaporation issues specific to the Los Angeles Aqueduct, with the dual goal of reducing water evaporation and generating power.

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