

According to State Renewable Portfolio Standards (RPS), retail sellers and publicly owned utilities are required to procure 50 percent of their electricity from eligible renewable energy resources by 2030. To meet these goals the Department of Water and Power (DWP) will be expanding their portfolio of renewable energy. Furthermore, the Federal Environmental Protection Agency (EPA) requires water utilities to cover open-air reservoirs that hold treated water in order to prevent contamination. In the past, LADWP has utilized shade balls, small black plastic spheres, to create a blanket cover over reservoirs.

Floating solar is an emerging and extremely efficient form of renewable clean energy. Standard photovoltaic panels are installed onto floating plastic bases and placed in large bodies of water such as drinking water reservoirs, lakes, ponds, and irrigation canals. By covering the surface area of a body of water, floating solar conserves water by reducing evaporation and prevents algae growth by blocking out sunlight.

Additionally, because a floating solar system utilizes a body of water, there is no cost of land and there is greater efficiency output due to the cooling effect of water. Floating solar technology is being utilized all over the world today with large scale projects in China, Japan, and the United Kingdom. The City has the opportunity to become a global leader by bringing floating solar to Los Angeles.

The Lower Van Norman Reservoir (LVN), also known as the Los Angeles Reservoir, is an ideal candidate for a floating solar system. Located in Granada Hills, the LVN Reservoir is adjacent to two high voltage transmission lines and the Sylmar Converter Station making it possible to connect solar energy directly to the grid. The LVN Reservoir is our first preference for a floating solar system to be implemented at, although all Los Angeles reservoirs should be considered.

This type of renewable clean energy project is desperately needed in the Northwest Valley. The Northwest Valley community has historically carried the burden of several detrimental environmental impacts including from the Aliso Canyon Gas Storage Field, responsible for the single worst natural gas leak in US history, and from the CO₂ and Methane emitted by the Sunshine Canyon Landfill, one of the largest landfills in the country.

While a floating solar system will not lead to the closure of the Sunshine Canyon Landfill or the Aliso Canyon Gas Storage Field, it will offset these environmental impacts by leaving zero carbon footprint, offsetting millions of pounds of CO₂ emissions and saving millions of gallons of water lost to evaporation each year. In addition, the clean energy produced by the floating solar system will help DWP meet their RPS goals. Lastly, the LVN Reservoir is currently covered with over 96 million shade balls and as result the surrounding community is already accustomed to seeing the reservoir covered.

I **THEREFORE MOVE** that the City Council INSTRUCT DWP to REPORT on the feasibility of a floating solar system program with next steps of implementation, on the optimal system size, including how much energy can be created, the environmental offsets, and the economic impact it would have on the City.

I **FURTHER MOVE** that the City Council INSTRUCT DWP to REPORT on established floating solar companies and their qualifications.

I **FURTHER MOVE** that the City Council INSTRUCT DWP to REPORT on the reuse of the shade balls currently in use at the Lower Van Norman Reservoir.

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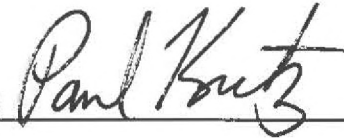
PRESENTED BY:



MITCHELL ENGLANDER

Councilmember, 12th District

SECONDED BY:



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