

**REVISED LEGISLATIVE DIGEST**  
(1/24/2018, Amended in Committee)

[Charter Amendment - Revenue Bonds for Public Utilities Commission Clean Power, Water, and Clean Water Facilities]

**Describing and setting forth a proposal to the voters at an election to be held on June 5, 2018, to amend the Charter of the City and County of San Francisco to authorize the Public Utilities Commission to issue revenue bonds for facilities needed to produce and deliver clean power when approved by ordinance receiving a two-thirds vote of the Board of Supervisors, and to clarify the scope of the Commission's bond authority with regard to the City's water and clean water utilities.**

Existing Law

Charter section 8B.124 allows the Public Utilities Commission (PUC), when approved by a 2/3 vote of the Board of Supervisors, to issue revenue bonds for water and/or clean water facilities under the jurisdiction of the PUC.

Amendments to Current Law

This amendment would allow the PUC to also issue revenue bonds for power facilities, when approved by a 2/3 vote of the Board of Supervisors. Bonds issued for power facilities would be subject to all of the other requirements of Section 8B.124 that currently apply to the PUC's water and clean water utility enterprises. PUC would be prohibited from financing construction of power plants that generate electricity using fossil fuels.

The Third Draft would amend the Charter to clarify that the PUC's authority to issue revenue bonds for water, clean water, and/or power facilities includes the authority to issue bonds for any lawful purpose of those three utilities.

Background Information

1. Under Charter sections 9.107(6) and (8) PUC already has the authority to issue revenue bonds for some power facilities, but this authority is limited to certain types of equipment.
2. Electricity customers are already required to pay the costs of equipment needed to serve them, but with the proposed authority PUC will be able to plan for and finance power infrastructure in a more efficient and cost-effective way. In some cases, PUC may be able to build one facility that can serve multiple locations instead of building duplicative facilities for

each customer. This can reduce the delays and disruptions caused by equipment installation and reduce costs.

3. The bond authority proposed here would allow the PUC to incorporate solar electricity, storage, electric vehicle chargers and other grid-connected assets that are important for sustainable and innovative electricity service.
4. Federal law provisions that became applicable to the City in July 2015 require PUC to own more of the equipment used to deliver electricity to customers than was previously required.
5. Revenue bonds issued under the proposed authority would be subject to the requirements already followed by the PUC's water and clean water programs. In addition to Board of Supervisors approval, PUC would need to satisfy the following requirements:
  - a. The PUC Commission must review and approve proposed revenue bonds.
  - b. Revenue bonds are subject to review by the Public Utilities Revenue Bond Oversight Committee, Administrative Code Sections 5A.30-5A.36.
  - c. The PUC is required to retain an independent engineer to certify that bond-financed projects meet cost and schedule standards, and that estimated net revenue will be sufficient to meet debt service coverage and other requirements.
  - d. The SF Planning Department must certify that bond-financed projects comply with the California Environmental Quality Act.
6. The PUC provides clean electricity that is primarily sourced from the City's Hetch Hetchy hydroelectric system. Currently, the PUC's provision of greenhouse-gas-free electricity reduces the City's carbon footprint by about 387 million pounds per year as compared to electricity provided by PG&E. The PUC explains that this number is based on the 955 million kilowatt hours of electricity used by City departments and municipal agencies, multiplied by PG&E's most recently released power emissions factor (2015) of 405 pounds of carbon dioxide per megawatt hour. PG&E voluntarily reports this number to the Climate Registry. The Climate Registry is a non-profit organization formed in 2007 as the successor to the California Climate Action Registry, pursuant to State statute, to develop a central database for the uniform and verifiable reporting of GHG emissions.
7. This clean energy has other environmental and health benefits. According to the San Francisco Department of Public Health's San Francisco Indicator Project, "Motor vehicle emissions, power plants, and refineries are the predominant sources of fine particulate air pollution (PM2.5). Several large-scale studies demonstrate that increased exposure to PM2.5 is associated with detrimental cardiovascular outcomes, including increased risk of death from ischemic heart disease, higher blood pressure, and coronary artery calcification." (<http://www.sfindicatorproject.org/objectives/standards/55>) The California Air Resources Board links PM2.5 emissions to premature death, hospitalization for worsening of cardiovascular disease, hospitalization for respiratory disease, and asthma-related emergency

room visits and increased symptoms, increased inhaler usage.

(<https://ww2.arb.ca.gov/resources/common-air-pollutants>) Hetch Hetchy Power saves around 364,500,000 pounds of CO2 per year (as compared with PG&E's 2015 emissions), and around 13,500 pounds of PM2.5 and 42,000 pounds of nitrogen oxide per year (as compared with California average emissions.)

8. The PUC conducted an environmental justice analysis in 2017 in Bayview Hunters Point which highlighted some of the health impacts that the southeast part of the City continues to disproportionately experience. The findings specifically highlighted the poor air quality and resulting poor respiratory indicators in that community. Motor vehicle emissions, power plants, and refineries are the predominant sources of particulate air pollution PM2.5. Significant exposure to PM2.5 is associated with detrimental cardiovascular outcomes, hospitalization for respiratory disease, and asthma related emergency room visits and symptoms. In addition, the southeast part of the City has higher percentages of cancer risk. Many of the new power facilities PUC would finance using the authority in this measure would be located in the southeast section of the City, where new developments are located. These include neighborhood developments such as Treasure Island, Hunters Point Shipyard, Pier 70 and Mission Rock.

9. The 2017 environmental justice analysis included a recommendation that the PUC should expand its electric charging station network by installing stations in the southeast part of City, which would improve air quality by reducing vehicle emissions. As an illustration, if the 407,656 passenger cars in San Francisco were electric (instead of traditional gas-burning vehicles), and charged using PUC clean electricity, fine particulate matter emissions would decrease by 45,000 pounds per year, nitrogen oxide emissions would decrease by 7,500,000 pounds per year, and carbon dioxide emissions would decrease by 3,970,000,000 pounds per year. PUC could use the bonding authority in this measure to install more electric vehicle charging stations.

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