
CITY OF TEMPE
REQUEST FOR COUNCIL ACTION

Council Meeting Date: 08/18/2016
Agenda Item: 5C3

ACTION: Adopt a resolution authorizing the Mayor to execute a 50-year contract with the Arizona Power Authority for the delivery of Tempe's allocation of Schedule D-1 Hoover Dam hydro power energy resources. *(This item relates to agenda item 5B15) (Resolution No. R2016.81)*

FISCAL IMPACT: Tempe will pay the Arizona Power Authority annually for Tempe's allocation of Hoover Dam hydro power resources. The Salt River Project will provide power bill crediting for Tempe's use of this resource in-lieu of other energy supplies. The estimated cost to Tempe for delivery of Hoover power is \$83,390 in years one through five, and \$60,700 in years six through ten, for a total ten-year cost estimate of \$144,090. The estimated power bill credit from Salt River Project is \$104,668 in years one through five, and \$100,476 in years six through ten, for a total ten-year bill credit estimate of \$205,144. The net benefit to Tempe over the first ten years of this contract is estimated at \$61,054 (\$21,278 in years one through five, and \$39,776 in years six through ten).

RECOMMENDATION: Adopt Resolution No. R2016.81.

BACKGROUND INFORMATION: On December 27, 2013, the U.S. Department of Energy, Western Area Power Administration (WAPA) published a notice in the Federal Register with an announcement of the Boulder Canyon Project (BCP) post-2017 resource pool marketing criteria and call for applications from entities interested in an allocation of Federal power from the BCP (Hoover Dam hydro power). Tempe applied for an allocation of BCP Schedule D power through the WAPA allocation process to provide a new renewable energy source for the benefit of designated Tempe water production facilities. On December 18, 2014, notice was published in the Federal Register regarding the notice of final power allocation through the WAPA process. The City of Tempe received an allocation of 241 kW of contingent capacity and 526,155 kWh of firm energy from the WAPA through the Boulder City Marketing Area process. The term of the Contract is for 50 years (2017-2067). The power allocation is administered by a State agency, the Arizona Power Authority (APA), which contracts directly with the WAPA for Hoover Dam hydro power. Other valley cities including Phoenix, Scottsdale, Chandler, Peoria, Glendale, and Avondale have also received Hoover power allocations from WAPA.

Tempe must contract with the APA for a period of 50 years in order to receive the Hoover Power Allocation from WAPA. Over the first ten years of the contract term the Tempe Public Works Department – Water Utilities Division will pay an average annual cost of \$14,409 for Hoover power based on current operational cost at the dam. These costs include a one-time payment of approximately \$16,847 for repayable capital investments in the Hoover Dam hydro-generation facility to be paid in five annual installments of \$3,626 beginning in 2018.

The City's utility consultant provided analysis and estimates for annual costs and savings over the first ten years. See attached pro forma. Because the up-front capital costs will be charged during the first five years of the contract, the average annual cost to Tempe will decrease from \$16,678/year in years one through five, to \$12,140/year in years five through ten and, after accounting for SRP bill crediting estimates, the benefit to Tempe will increase from approximately \$4,256/year in years one through five, to \$7,955/year in years five through ten.

Tempe's Hoover power allocation will be delivered by the Salt River Project (SRP) from the Mead Substation near Hoover Dam to the Pinnacle Peak Substation in the north valley then to the local electric grid for delivery to the Tempe J.G. Martinez Water Treatment Plant or the South Tempe Water Treatment Plant.

The addition of the Hoover Dam hydropower will bring the city 0.5% closer to Council's adopted renewable energy goal of 20% by 2025 and as a result will bring the total city operations powered by renewable energy up to 6.5%. The hydropower would reduce carbon emissions by 281 metric tons per year, the equivalent of the removal of 59 cars from the road each year or the energy used in 30 homes each year.

ATTACHMENTS: Resolution, Arizona Power Authority Power Sales Contract, SRP Retail Rates Summary, and Hoover Power Bill Crediting Spreadsheet

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