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MEMORANDUM

TO: Erika Bierschbach, Vice President Energy and Market Operations

FROM: Matthew Russell, Director (Interim) Environmental Health and Safety Services

DATE: September 9, 2019

SUBJECT: Water use by Austin Energy's generation facilities

The Austin Energy Resource, Generation and Climate Protection Plan to 2027 dated October 2, 2017 and developed pursuant to Austin City Council Resolution No. 20170817-061 committed Austin Energy to the following action related to impacts of conventional generation:

- **Conduct an analysis of the use of water by Austin Energy's generation facilities and its impact on the community.**

Table 1 on the following page includes water diversion and consumption estimates in 2018 by Austin Energy generation facility.

Austin Energy participated in a multi-year effort led by Austin Water to study the City's supply and demand of water at present and in the future accounting for the impact of climate change. As part of that analysis the City compiled current and projected water use estimates for all sectors including power plants, and assessed those demands relative to the availability of water to the community. This effort led to the adoption of the Water Forward Plan by City Council in November 2018 and available to the public [here](#).

Table 1. Austin Energy Water Use Calendar Year 2018	Decker Creek Power Station	Fayette Power Project (AE only)	Sand Hill Energy Center	South Texas Project (AE only)	Facility Totals
Water diverted from Colorado River (1,000 gallons)	449,606	2,652,389	0	2,355,089	5,457,084
Consumption due to Forced Evaporation (1,000 gallons)	225,000	1,336,018	0	1,963,621	3,524,638
Consumption of Potable Water (1,000 gallons)	92,089	1,759	15,938	4,379	114,165
Reclaimed or Recycled Water (1,000 gallons)	0	119,564	407,230	27,584	554,378
Consumption with Reclaimed Water (1,000 gallons)	317,089	1,457,341	423,168	1,995,584	4,193,181
Consumption without Reclaimed Water (1,000 gallons)	317,089	1,337,777	15,938	1,968,000	3,638,803
Percent of Use that is Reclaimed/Recycled Water (%)	0%	8%	96%	1%	13%
Generation (MWh)	939,200	4,127,400	1,869,000	3,460,100	10,395,700
Water Usage Rate (gal/KWh)	0.34	0.32	0.01	0.57	0.35
Water Diversion Rate (gal/KWh)	0.48	0.64	0.00	0.68	0.52