PSA Listing PS12M Magnolia Power Project Adopted Budget FY19-20 Budget

PSA ITEMS	PSA Vendor Name	PSA Amount	PSA Purpose	PSA Fund	PSA Cost Center	PSA Account- Subaccount	PSA Project	PSA Regulatory
Item # 2	TBD		NERC reliability standards (best practice)	483	PS12M	62085_0000	P000000	54800
Item # 3	TBD	45,000	Provide protection relay engineering services for the test shop to support the MPP relay maintenance requirements	483	PS12M	62085_0000	P000000	55300
Item # 4	RKI Engineering	27,000	Zero Liquid Discharge System (ZLD) and Programmable Logic Controller (PLC) programming and troubleshooting support	483	PS12M	62085_0000	P000000	54850
Item # 5	TBD		Carbon Monoxide (CO) and Selective Catalytic Reduction (SCR) catalyst annual testing to accurately predict remaining catalyst life and the associated maintenance and replacement schedule	483	PS12M	62085_0000	P000000	54800
Item # 6	TBD	37,375	Air emissions testing services to meet environmental requirements for annual testing of MPP, as required by the South Coast Air Management District	483	PS12M	62085_0000	P000000	54900
Item # 7	TBD	60,000	Engineering Computer Aided Design (CAD) support to properly capture documentation of power plant process changes (red-lined drawings)	483	PS12M	62085_0000	P000000	54900
Item # 8	TBD	60,000	Power plant systems support	483	PS12M	62085_0000	P000000	55600
Item # 9	TBD	50,000	To provide temporary continuity in the essential power plant controls engineering function, until the new Controls Engineering position is filled	483	PS12M	62085_0000	P000000	54800
Item # 10	TBD	100,000	Engineering support for unplanned plant maintenance issues, such as equipment malfunctions and failures, integration of regulatory or insurance safety audit findings and recommendations, and to address other reliability issues to be identified	483	PS12M	62085_0000	P000000	54800
Item # 11	Trimark Associates	5,000	To meet generation reporting requirements for Western Renewable Energy Generation Information System (WREGIS)	483	PS12M	62085_0000	P000000	54800
Item # 12	OATI	36,000	Services and support for wholesale energy transaction management	483	PS12M	62316_0000	P000000	55600
Item # 13	OSIsoft	18,000	Plant Data Historian Software (PI) license	483	PS12M	62316_0000	P000000	55600
Item # 14	TBD	140,000	Boiler and cooling tower chemicals, as needed to maintain water chemistry in MPP within acceptable operating limits	483	PS12M	62381_0000	P000000	54800
Item # 15	TBD	300,000	Water treatment chemicals, as needed to maintain process chemistry in the Zero Liquid Discharge System (ZLD)	483	PS12M	62380_0000	P000000	54850
Item # 16	TBD	10,500	MPP-specific environmental training	483	PS12M	62775_0000	P000000	54900
Item # 17	TBD		Operations training on Martech and MPP-specific equipment	483	PS12M	62775_0000	P000000	54800
Item # 18	TBD	15,000	Daily verification of Continuous Emissions Monitoring System (CEMS) data	483	PS12M	63240_0000	P000000	54800
Item # 19	TBD	100,000	Provide environmental compliance support for MPP storm water, air quality, and waste management activities	483	PS12M	63240_0000	P000000	54800
Item # 20	RKI Engineering	25,000	Human Machine Interface (HMI), Programmable Logic Controller (PLC), and Continuous Emissions Monitoring System (CEMS) support	483	PS12M	63240_0000	P000000	54800
Item # 21	TBD	15,000	Greenhouse gas emissions report verification services	483	PS12M	63240_0000	P000000	54800
Item # 22	TBD	75,000	Environmental regulatory compliance and permitting support	483	PS12M	63240_0000	P000000	54800
Item # 23	TBD	50,000	Legal support for environmental compliance	483	PS12M	63240_0000	P000000	54800
Item # 24	PureTec	275,000	Demineralized water production	483	PS12M	63295_0000	P000000	54800
Item # 25	TBD	50,000	Professional consultations to address reliability requirements and process improvements within the Zero Liquid Discharge System (ZLD)	483	PS12M	70070_0000	P000000	99929
Item # 26	TBD	75,000	Plant engineering support for capital improvement projects	483	PS12M	70070_0000	P000000	99929
Item # 27	TBD	100,000	Identify and implement software, hardware, or operational measures as needed to optimize operations. Project includes a \$100k PSA	483	PS12M	70070_0000	P000000	99929
Item # 28	TBD	45,000	To represent MPP's interests regarding So. Cal Gas Curtailments	483	PS12M	62085_0000	P000000	54800
Item # 29	ESC Engineering		Arc Flash Mitigation Support - to support implementation of recommendations from Arc Flash Study	483	PS12M	62085_0000	P000000	54800
Item # 30	TBD	160,000	Permitting and engineering for stormwater improvements	483	PS12M	70070_0000	P000000	99929
Totals		\$1,873,875						