

California ISO Projects Completed July 2018 through June 2019

<i>Capital ID #</i>	<i>Year Approved</i>	<i>Project Description</i>	<i>Approved Project Budget</i>	<i>Final Cost</i>	<i>% Completed to Budget</i>
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Capital Projects

12213	2014	CUI -- WebSDK Enhancements	\$ 470,968	\$ 406,470	86%
12223	2015	EMMS 3C	\$ 1,684,764	\$ 1,667,605	99%
12230	2016	ETCC Replacement	\$ 729,097	\$ 638,517	88%
12234	2017	CRR Upgrade	\$ 202,000	\$ 202,000	100%
12235	2017	ARC Phase 3	\$ 161,898	\$ 142,387	88%
12236	2018	Settlements Performance Improvements	\$ 77,491	\$ 77,491	100%
12237	2018	CMRI & OASIS Performance Improvements	\$ 116,934	\$ 118,296	101%
12238	2018	CRR Auction Efficiency 1A	\$ 433,038	\$ 429,473	99%
12240	2018	CRR Auction Efficiency 1B	\$ 475,831	\$ 479,278	101%
12374	2016/2017	Operations Enhancements 2016/2017	\$ 20,431	\$ 24,746	121%
12393	2017	Technology System Improvements	\$ 23,458	\$ 23,458	100%
12396	2017	Commitment cost Enhancements Phase 3	\$ 1,511,359	\$ 1,479,353	98%
12398	2017	Green House Gas Enhancements for EIM	\$ 306,796	\$ 263,690	86%
12412	2017	Energy Storage& Distribution Energy Resources Phase 2 (ESDER)	\$ 338,608	\$ 233,145	69%
12413	2017	BAL-002 NERC Standards	\$ 16,804	\$ 13,803	82%
12414	2017	Operations System Improvements (OSI)	\$ 132,357	\$ 132,357	100%
12419	2018	Integration Services	\$ 44,000	\$ 44,000	100%
12420	2018	CTA with BPA 2018	\$ 181,598	\$ 166,483	92%
12421	2018	EIM Enhancements 2018	\$ 256,486	\$ 255,449	100%
12425	2018	EIM SMUD Sub-BAA	\$ 147,061	\$ 144,539	98%
12426	2018	Imbalance Conformance Enhancements	\$ 21,395	\$ 18,010	84%

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12429	2019	EIM Resource Sufficiency Enhancements	\$ 205,818	\$ 115,082	56%
12513	2017	Campus Ops 2017	\$ 500,000	\$ 495,400	99%
12645	2018	HF Radios (Business Continuity)	\$ 38,510	\$ 38,510	100%
12639/ 12640	2017	2017 Hardware and Software Purchases	\$ 4,829,605	\$ 4,829,605	100%
12648	2018	My CIM Tool and License	\$ 104,832	\$ 104,832	100%
13268	2017	EIM Winter 2017	\$ 356,585	\$ 356,585	100%
27		Total Completed Capital Projects	\$ 13,387,723	\$ 12,900,562	96%

Requirements and Other Projects

21269	2016/2017	OE 2016/2017 Non Capital	1,919,911	\$ 1,903,678.14	99%
21276	2016/2017	MSE 2016/2017 Non Cap	459,287	\$ 449,001.80	98%
21293	2016	Frequency Response Analysis Tool	30,000	\$ 10,354.14	35%
21305	2017	Technology System Improvements 2017	1,547,092	\$ 1,531,424.68	99%
21313	2017	Weather & Geospatial Data Sourcing	8,774	\$ 8,773.76	100%
21329	2017	Iron Point Lobby Redesign	402,800	\$ 127,800.00	32%
21330	2017	CBT Development	400,000	\$ 394,061.62	99%
21333	2017	Commitment Costs & Default Energy Bid Requirements	54,425	\$ 50,125.25	92%
21334	2017	Resolution Settlements Disputes	300,000	\$ 296,592.00	99%
21335	2017	RIMS Enhancements	43,680	\$ 43,680.00	100%
21338	2017/2018	Model Synchronization & Activation	55,600	\$ 55,600.00	100%
21340	2017	Operations System Improvements Non Capital	1,075,795	\$ 1,047,004.95	97%
21342	2018	EMNA Functional Enhancements	17,640	\$ 17,640.00	100%

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21343	2018	ADS UI Replacement	59,863	\$ 59,863.00	100%
21349	2018	Review RMR & CPM	79,731	\$ 79,730.80	100%
21350	2018	CRR Auction Efficiency 1B	63,411	\$ 63,411.02	100%
21351	2018	Imbalance Conformance Enhancements	15,525	\$ 15,525.00	100%
21354	2018	Energy Storage & Distributed Energy Resources Phase 3	64,579	\$ 64,578.50	100%
21359	2018	ETCC Phase 1 For OATI	12,214	\$ 12,214.00	100%
21364	2018	EIM SMUD Sub-BAA	38,654	\$ 38,654.00	100%
21365	2018	HANA NON Capital	7,409	\$ 7,409.10	100%
21374	2018	LMPM Enhancements	6,345	\$ 6,345.00	100%
21375	2018	EIM 2019	27,366	\$ 27,366.00	100%
21376	2019	EIM Resource Sufficiency Enhancements	14,623	\$ 14,622.50	100%

24	Total Requirements and Other Projects	\$ 6,704,723	\$ 6,325,455	94%
51	Grand Total Completed Projects	\$ 20,092,446	\$ 19,226,017	96%