

2004-2009 California ISO Capital Projects Completed Projects as of May 31, 2009

<i>Capital ID #</i>	<i>Year Approved</i>	<i>Project Description</i>	<i>Approved Project Budget</i>	<i>Final Cost</i>	<i>\$ % Complt</i>
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Requirements Projects

21024	2007	Scarcity Pricing/Convergence Bidding	\$ 291,500	\$ 316,265	108%
21027	2008	Payment Acceleration	\$ 5,850	\$ 5,850	100%
21029	2008	BPM Change Management Requirements	\$ 80,000	\$ 53,626	67%
21030	2008	Governance, Risk & Compliance Licenses	\$ 112,500	\$ 112,500	100%
21031	2008	Master File II Phase 2 Requirements	\$ 40,000	\$ 15,510	39%
21032	2008	IRRP - Requirements	\$ 80,000	\$ 85,695	107%
21033	2008	MPP - Requirements	\$ 100,000	\$ 100,180	100%
Total Requirements Projects			\$ 709,850	\$ 689,625	

2007-2009 Completed Projects

12112	2007	2007 Hardware/Software Purchase	\$ 550,000	\$ 542,917	99%
12117	2004	Enterprising Testing Infrastructure	\$ 4,072,000	\$ 4,046,458	99%
12120	2007	Oracle Identity Management	\$ 518,105	\$ 522,834	101%
12121	2007	Alhambra Computer Infrastructure Upgrade	\$ 1,056,750	\$ 621,221	59%
12128	2007	2007 Hardware Software Purchases	\$ 633,933	\$ 609,361	96%
12129	2008	Enterprise Data Repository	\$ 652,000	\$ 652,000	100%
12130	2008	SAS MM Framework	\$ 175,000	\$ 173,452	99%
12133	2008	Central Security Logging (Splunk)	\$ 100,000	\$ 100,080	100%
12134	2008	2008 Hardware/Software Purchase	\$ 3,776,811	\$ 3,598,341	95%
12137	2008	PROMOD IV & PowerBase Software	\$ 48,000	\$ 51,720	108%
12138	2008	EMC Equipment Purchase	\$ 2,700,000	\$ 2,733,348	101%
12141	2008	Governance, Risk & Compliance Tool	\$ 125,000	\$ 125,000	100%
12150	2008	Enhancement to Magma(Google Earth)	\$ 80,000	\$ 80,000	100%
12151	2008	MS Enterprise License Agreement	\$ 1,500,027	\$ 1,500,027	100%
13092	2008	RIMS	\$ 654,390	\$ 789,449	121%
13095	2007	Voltage Stability (VSA)	\$ 1,050,000	\$ 851,502	81%
13096	2007	Control Rooms Redesign	\$ 700,000	\$ 602,168	86%
13097	2008	MAPP 3	\$ 210,000	\$ 248,118	118%
13099	2008	Master File II Phase 1	\$ 540,818	\$ 540,818	100%
13150	2008	PI High Availability Software	\$ 145,000	\$ 121,189	84%
13151	2008	PKI/ABB Upgrade	\$ 70,000	\$ 59,340	85%
13154	2008	Alhambra Mapboard Replacement	\$ 900,700	\$ 898,158	100%
13156	2008	MAP Release 1 Hardware	\$ 1,450,000	\$ 1,443,079	100%
14152	2006	Breakroom Furniture	\$ 132,200	\$ 101,102	76%
14155	2007	Alhambra Infrastructure Upgrade	\$ 1,600,000	\$ 1,510,862	94%
14157	2007	2007 FacilitiesLH/Furniture Purchase	\$ 100,000	\$ 93,169	93%
14158	2007	Iron Point Project - Phase 1	\$ 2,000,000	\$ 1,905,437	95%
14159	2008	Field Data Acquisition Vehicle	\$ 70,000	\$ 74,991	107%
14160	2008	Fitness Room Equipment for Alhambra	\$ 9,000	\$ 8,942	99%
14162	2008	Fishbowl A/V Equipment	\$ 35,000	\$ 38,225	109%
Total Completed Project as of May 2009			\$ 26,066,338	\$ 25,047,722	

2009 California ISO Capital Projects Active Projects as of May 31, 2009

Capital ID #	Year Approved	Project Description	Approved Budgets	Forecast/ Actual	Year to Date 2009	% Compl't	Issued Contracts Unbilled	Total Remaining BALANCE
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Iron Point Building

14161	2008	Iron Point Building Design Phase 2	\$ 15,800,000	\$15,800,000	\$ 8,896,305	56%		
Total Iron Point			\$15,800,000	\$15,800,000	\$8,896,305			

Compliance/Regulatory Projects

12146	2008	RIMS Enhancements	\$ 200,000	\$ 200,000	\$ 177,206	89%		\$ 22,794
12147	2008	NERC CIP Network Redesign	\$ 1,900,000	\$ 1,900,000	\$ 1,325,978	70%	\$ 9,899	\$ 564,124
12155	2009	CCA Documentation Centralization	\$ 85,000	\$ 85,000	\$ -	0%		\$ 85,000
13153	2008	Implement CRR market, release 2	\$ 1,450,000	\$ 1,450,000	\$ 1,437,541	99%		\$ 12,459
13155	2008	MAP Release 1 Design Phase	\$ 900,000	\$ 900,000	\$ -	0%		\$ 900,000
14166	2009	NERC CIP/Alhambra Security	\$ 176,000	\$ 176,000	\$ 22,968.46	13%	\$ 65,317	\$ 87,715
Total Compliance/Regulatory Projects			\$ 4,711,000	\$ 4,711,000	\$ 2,963,693		\$ 75,216	\$ 1,672,091

Essential Projects/Corporate Infrastructure

12134	2008	2008 Hardware/Software Purchases	\$ 34,026	\$ 32,306	\$ 23,280	68%	\$ 5,000	\$ 4,026
12140	2008	BPM Change Management	\$ 327,330	\$ 327,330	\$ 327,330	100%		\$ -
12142	2008	eCurrent Web Site Design	\$ 261,973	\$ 261,973	\$ 92,561	35%		\$ 169,412
12149	2008	MPP Technology Implementation	\$ 250,000	\$ 250,000	\$ 155,814	62%	\$ 94,186	\$ -
12153	2009	2009 Hardware Purchase	\$ 2,264,000	\$ 2,264,000	\$ 419,132	19%		\$ 1,844,868
12154	2009	2009 Software Purchases	\$ 713,000	\$ 713,000	\$ 371,480	52%		\$ 341,520
12156	2009	Upgrade EMS Hardware & Software	\$ 5,566,000	\$ 5,748,000	\$ -	0%	\$ 5,748,000	\$ -
21037	2009	SQL Reporting Pilot	\$ 65,000	\$ 65,000	\$ -	0%		\$ 65,000
14164	2009	2009 Facilities/Furniture Purchase/ LH	\$ 250,000	\$ 250,000	\$ 32,402	13%		\$ 217,598
Total Essential Projects/Corporate Infrastructure			\$ 9,731,329	\$ 9,911,609	\$ 1,421,999		\$ 5,847,186	\$ 2,642,423

Strategic Initiatives

12135	2008	SAS EBI Enhancements	\$ 950,000	\$ 950,000	\$ 445,975	47%	\$ 210,958	\$ 293,067
12136	2008	PROBE -Development	\$ 500,000	\$ 500,000	\$ 265,370	53%	\$ 99,630	\$ 135,000
12139	2008	iRecruitment & Standard Appraisal	\$ 400,000	\$ 400,000	\$ 356,074	89%		\$ 43,926
12143	2008	Network Apps	\$ 725,000	\$ 725,000	\$ -	0%	\$ 719,112	\$ 5,888
12144	2008	Payment Acceleration - Capital	\$ 1,830,000	\$ 1,830,000	\$ 278,166	15%		\$ 1,551,834
12145	2008	Demand Response Lab	\$ 26,700	\$ 26,700	\$ 11,643	44%	\$ 1,700	\$ 13,357
12148	2009	Integration of Renewable Resources - IRRP-PIRP Enhancements	\$ 383,000	\$ 383,000	\$ 104,480	27%		\$ 278,520
12152	2008	Activity Based Costing	\$ 375,000	\$ 375,000	\$ 35,653	10%		\$ 339,347
21025	2008	Financial Capability Roadmap Requirements(ABC)	\$ 330,000	\$ 294,317	\$ 294,317	89%		\$ -
21026	2008	Demand Response System Integration	\$ 433,300	\$ 433,300	\$ 337,432	78%	\$ 14,755	\$ 81,113
21028	2008	OMS Requirements	\$ 330,000	\$ 330,000	\$ 145,040	44%		\$ 184,960
21036	2009	Capabilities Maturity Program	\$ 85,000	\$ 85,000	\$ 24,176	28%		\$ 60,824
Total Strategic Initiatives			\$ 6,368,000	\$ 6,332,317	\$ 2,298,325		\$ 1,046,155	\$ 2,987,837

Future Market System Enhancements

12157	2009	Alhambra Control Room Console	\$ 255,000	\$ 255,000	\$ -	0%		\$ 255,000
12157	2009	Portal Enhancements	\$ 300,000	\$ 300,000	\$ -	0%		\$ 300,000
13152	2008	E-Terra v2.3	\$ 561,600	\$ 561,600	\$ 224,888	40%		\$ 336,713
13099	2008	Master File II Phase 2	\$ 943,672	\$ 943,672	\$ 647,182	69%		\$ 296,490
21035	2009	Multi Stage Generation Modeling - Require.	\$ 60,000	\$ 60,000	\$ 42,120	70%		\$ 17,880
Total Future Market system Enhancements			\$ 2,120,272	\$ 2,120,272	\$ 914,190		\$ -	\$ 1,206,082

Compliance/Regulatory Projects	\$ 4,711,000	\$ 4,711,000	\$ 2,963,693.42	\$ 75,216	\$ 1,672,091
Essential Projects/Corporate Infrastr	\$ 9,731,329	\$ 9,911,609	\$ 1,421,999.43	\$ 5,847,186	\$ 2,642,423
Strategic Initiatives	\$ 6,368,000	\$ 6,332,317	\$ 2,298,324.97	\$ 1,046,155	\$ 2,987,837
Future Market System Enhancement	\$ 2,120,272	\$ 2,120,272	\$ 914,189.83	\$ -	\$ 1,206,082
Iron Point Project Phase 2 Design	\$ 15,800,000	\$ 15,800,000	\$ 8,896,305	\$ -	\$ -
Total Budgeted Capital Projects	\$ 38,730,601	\$ 38,875,198	\$ 16,494,513	\$ 6,968,557	\$ 8,508,434

Project ID	2010-2011 Potential Capital Projects	Priority Identified in 2009
417	Automation of new Resource Adequacy Requirements	2
489	CAP Application Corrections and Automation of Manual Workarounds	1
483	Capabilities Maturity - Performance Reporting	1
478	CRM Software Feasibility Study	1
470	CRR Outage Revenue Adequacy Project	1
462	Data Archive Tool	3
482	Data Warehouse Design and Implementation	1
277	EMS Data Engineering PDS system	2
140	EMS Grid Operations Training Simulator (GOTS)	1
141	EMS System Enhancements, AGC Tuning Tool, Resource Monitor	1
473	GE – MARS Program	1
459	HPOV Test Console	3
370	Implement Network Application Tools - Dynamic Stability	1
432	LMP Contour Graphics	2
430	Market Validation Software Tool for Market Validation Group	1
TBD	Microsoft Communication server (Jabber replacement)	New
427	MQS Enhancements to Automate Manual Workarounds	1
TBD	New Reporting Platform (Actuate replacement)	New
452	Oracle Configuration Management and Data Vault	2
455	Oracle Financial Systems Enhancements	1
408	Oracle Identity Management Enhancements	1
465	Performance Based Management Toolkit	3
215	Physical Security Systems Modification and Enhancement (Marsh Recommendations)	3
333	Portal Enhancements for Content Access and Security	1
468	Probe Enhancements to DMM's Simulation Tool for LMP Analysis	1
453	Remedy Licensing	3
TBD	Single-Sign On (ESS Suite, API Outsource, Remedy, MQC)	New
TBD	Success Factors	New
479	TRAIN Enhancements and Modifications	1
332	Website Content Management System	1
486	WREGIS Reporting Automation	3

2010 Estimated Capital & Projects Budget

\$ 32,500,000

California Independent System Operator
 Summary of Expected Completion Costs vs. Revised September 2008 Budget
 5/31/2009 Final
 (In Thousands) *

Project	Revised Budget Sept. 2008 (a)**	Actual Costs Through 2008 (b)	Actual Costs Through 2009 (c)	Final Invoices still Due (d)	Cost of Project at Completion (e)=(c+d)	Increase (Decrease) from Budget (f)=(e-a)
Market Redesign						
	\$ 70,439	\$ 68,676	\$ 71,496	\$ -	\$ 71,496	\$ 1,057
1	Automatic Mitigation Procedures/Phase 1A	773	773	773	-	773
2	Real Time Markets/Phase 1B	16,297	16,297	16,297	-	16,297
3	Integrated Forward Markets/Real -Time Market (IFM/RTM)	39,622	38,279	40,679	-	40,679
4	Congestion Revenue Rights (CRR)	4,855	4,855	4,855	-	4,855
4A	Market Quality System (MQS)	5,687	5,267	5,687	-	5,687
11A	Hardware & Software Purchases	3,205	3,205	3,205	-	3,205
Technology Upgrade						
	\$ 73,771	\$ 73,440	\$ 74,148	\$ -	\$ 74,148	\$ 377
5	Scheduling Infrastructure Business Rules (SIBR)	11,745	11,407	11,745	-	11,745
6	Settlements and Market Clearing (SaMC)	20,545	20,608	20,978	-	20,978
6	Master File (MFRD)	2,528	2,528	2,528	-	2,528
9	Post Transactional Repository (PTR) - CMRI	2,563	2,563	2,563	-	2,563
10	Legacy Systems	7,303	7,228	7,228	-	7,228
10A	State Estimator/Full Network Model	1,170	1,170	1,170	-	1,170
11	Technology Infrastructure/ Portal	2,946	2,946	2,946	-	2,946
11B	Hardware & Software Purchases	7,881	7,900	7,900	-	7,900
12A	System Integration/Enterprise Architecture	16,018	16,018	16,018	-	16,018
12B	Technology Architecture	1,073	1,073	1,073	-	1,073
Common Projects ***						
	\$ 53,291	\$ 53,790	\$ 53,833	\$ -	\$ 53,833	\$ 542
13	Training/Readiness Projects	10,391	10,369	10,369	-	10,369
14A	Project Management	17,390	17,323	17,323	-	17,323
14B	Testing/Market Simulation	25,510	26,098	26,141	-	26,141
Contingency						
	\$ 2,000	\$ -	\$ -	\$ -	\$ 24	\$ (1,976)
15	Program Contingency	2,000	-	-	-	24
Total MRTU Project						
	\$ 199,500	\$ 195,906	\$ 199,477	\$ -	\$ 199,500	\$ 0

* Columns and rows may not total due to rounding.

** Project costs are comprised primarily of direct third party costs for: Consultant Labor, Vendor Costs, Travel & Meals Expenses, Training, Hardware, Software & Maintenance costs. Employee Labor, Backfill costs and Interest are excluded. Project costs do not equal capitalized cost for Fixed Assets pursuant to Generally Accepted Accounting Principles (GAAP).

*** Common Projects Allocation to Systems will be: 47.9% to Market Redesign; 52.1% to Technology Upgrade Projects