2008-2010 California ISO Capital Projects Completed Projects as of May 31, 2010

Capital ID #	Year Approved	Project Description	Approved Project Budget	Final Cost	$ % Complt
		Requirements Projects			
21035	2009	Multi Stage Generation Modeling Requirements	$ 60,000	$ 45,000	75%
21038	2009	HR Program Success Factors Requirements	$ 4,770	$ 4,770	100%
21041	2009	Market Validation Software Tool Requirements	$ 29,000	$ 28,247	97%
21045	2009	A/S Procurement in HASP Requirements	$ 40,000	$ 18,810	47%
		Total Requirements Projects	$ 133,770	$ 96,827	
		2008-2010 Completed Projects			
12134	2008	2008 Misc. Hardware Software Purchases	$ 1,718,808	$ 1,512,664	
12143	2008	Network Apps	$ 725,000	$ 719,111	99%
12147	2008	NERC CIP Network Redesign	$ 1,900,000	$ 1,741,143	92%
12148	2008	Integration of Renewable Resources - IRRP- PIRP Enhancements	$ 290,000	$ 169,236	58%
12154	2009	Casewise Portal SW	$ 68,000	$ 65,000	96%
12160	2009	Standard Capacity Product- Design	$ 620,000	$ 609,790	98%
12161	2009	Success Factors Performance Planning & Goal Planning	$ 80,230	$ 87,684	109%
12175	2009	ADS LDAP Implementation	$ 90,032	$ 90,032	100%
12176	2009	eBusiness Workflow & SSO	$ 100,000	$ 74,250	74%
12600	2010	Late Payment Penalty	$ 60,000	$ 22,544	38%
12601	2010	SAT Environment Approval	$ 200,000	$ 200,000	100%
12602	2010	EMC Equipment Purchase	$ 1,756,629	$ 1,625,134	93%
14166	2009	NERC CIP/Alhambra Security Enhancements	$ 176,000	$ 139,342	79%
		Total Completed Projects as of May 2010	$ 7,784,699	$ 7,055,930	

2010 California ISO Capital Projects Active as of May 31, 2010

Capital ID #	Year Approved	Project Description	Approved Budgets	Forecast/ Actual	Project to Date 2010	$ % Complt	Issued Contracts Unbilled	Total Remaining BALANCE
12135	2008	SAS EBI Enhancements	$ 950,000	$ 950,000	$ 585,484	62%	$ 162,388	$ 202,128
12136	2008	PROBE -Development	$ 525,000	$ 525,000	$ 397,250	76%	$ 95,286	$ 32,464
12139	2008	iRecruitment & Standard Appraisal	$ 502,000	$ 492,319	$ 421,662	84%	$ 70,000	$ 10,338
12154	2009	Vusers for Load Runner	$ 65,000	$ 65,000	$ 40,084	62%		$ 24,916
12156	2009	EMS Hardware /Software Upgrade	$ 5,808,000	$ 5,808,000	$ 4,378,511	75%	$ 1,355,750	$ 73,739
12157	2009	Alhambra Control Room Consoles	$ 295,000	$ 295,000	$ 220,671	75%	$ 59,329	$ 15,000
12158	2009	5 and 15-Minute-Level Load Forecasting (ALFS Itron Upgrade)	$ 431,000	$ 431,000	$ 351,905	82%	$ 78,500	$ 595
12159	2009	MPP Phase 2	$ 300,000	$ 300,000	$ 291,733	97%	$ -	$ 8,267
12162	2009	Market System Enhancements	$ 1,712,668	$ 1,713,421	$ 810,013	47%	$ 698,238	$ 204,417
12163	2009	Market Validation Software Tool	$ 114,000	$ 114,000	$ 113,759	100%		$ 241
12164	2009	CRR 2009 Enhancements	$ 710,300	$ 710,300	$ 596,497	84%	$ 92,400	$ 21,403
12165	2009	OMS Core Application Phase 1	$ 630,000	$ 630,000	$ 269,668	43%		$ 360,332
12166	2009/2010	Multi Stage Generation Modeling	$ 4,475,000	$ 4,475,000	$ 1,598,117	36%	$ 1,786,925	$ 1,089,958
12167	2009	RIMS Phase 2	$ 300,000	$ 300,000	$ 272,097	91%		$ 27,903
12168	2009	Areva e-Terra v.2.5 upgrade	$ 865,000	$ 865,000	$ 386,391	45%	$ 402,000	$ 76,609
12169	2009	Credit Tracking System	$ 1,845,900	$ 1,845,900	$ 193,712	10%	$ 1,060,970	$ 591,218
12170	2009	eTariff Management System	$ 543,060	$ 543,060	$ 451,012	83%	$ 69,291	$ 22,757
12171	2009	MAP- Scarcity Pricing	$ 960,000	$ 960,000	$ 615,887	64%	$ 9,699	$ 334,413
12172	2009/2010	MAP- Convergence Bidding	$ 5,371,000	$ 5,371,000	$ 661,560	12%	$ 2,310,455	$ 2,398,986
12173	2009	Proxy Demand Response	$ 3,856,000	$ 3,856,000	$ 2,264,095	59%	$ 898,780	$ 693,126
12174	2009	A/S Procurement in HASP	$ 890,000	$ 890,000	$ 768,300	86%	$ 16,077	$ 105,624
12300	2010	Make Whole Payments	$ 68,000	$ 68,000	$ 4,203	6%		$ 63,797
12301	2010	EMS One Line Visualization Auto.	$ 169,000	$ 169,000	$ -	0%		$ 169,000
12400	2010	RIMS Phase 3	$ 255,000	$ 255,000	$ 78,703	31%		$ 176,297
12401	2010	Market Services Enhancements	$ 950,000	$ 950,000	$ -	0%		$ 950,000
12402	2010	Operations Enhancements	$ 1,000,000	$ 1,000,000	$ -	0%		$ 1,000,000
12403	2010	Exceptional Dispatch	$ 334,000	$ 334,000	$ -	0%		$ 334,000
12404	2010	Transmission Constraints IFM	$ 50,000	$ 50,000	$ -	0%		$ 50,000
12603	2010	Computer Direct Purchases 2010	$ 1,590,000	$ 1,590,000	$ 262,521	17%		$ 1,327,479
12604	2010	2010 Misc. Software Purchases	$ 500,000	$ 500,000	$ 278,174	56%		$ 221,826
12605	2010	Reporting Services Infrastructure	$ 672,380	$ 672,380	$ -	0%		$ 672,380
12606	2010	Range 3000 System	$ 17,650	$ 17,650	$ -	0%		$ 17,650
13155	2008	MAP Release 1 Design Phase	$ 900,000	$ 900,000	$ 718,448	80%	$ 22,500	$ 159,052
21028	2008	OMS Requirements	$ 330,000	$ 330,000	$ 300,729	91%		$ 29,271
21035	2009	Multi-Stage Generation Modeling O & M	$ 25,000	$ 25,000	$ -	0%		$ 25,000
21036	2009	Capabilities Maturity Program	$ 85,000	$ 85,000	$ 72,971	86%		$ 12,029
21042	2009	Operational Improvements	$ 54,300	$ 54,300	$ 26,620	49%		$ 27,680
21043	2010	eTariff Management System-Requirements	$ 80,000	$ 80,000	$ 37,096	46%		$ 42,904
21044	2010	RIMS Phase 3 Requirements	$ 54,000	$ 54,000	$ 45,690	85%		$ 8,310
21046	2010	Participating Load Refinements Reqmts	$ 100,000	$ 100,000	$ 25,991	26%		$ 74,009
21047	2010	Ex Post Price Correction Make Whole Payments Reqmts	$ 30,000	$ 30,000	$ 24,153	81%		$ 5,847
21048	2010	Non-Generator Resources in Ancillary Services Market Reqmts	$ 20,000	$ 20,000	$ 12,045	60%		$ 7,955
21049	2010	EMMS - Enterprise Model Management System	$ 104,000	$ 104,000	$ 3,479	3%		$ 100,521
21050	2010	Market Services Requirements	$ 100,000	$ 100,000	$ 73,374	73%		$ 26,626
21052	2010	Website Redesign	$ 145,000	$ 145,000	$ 40,055	28%	$ 105,000	$ (55)
21053	2010	Transmission Constraints Reports	$ 50,000	$ 50,000	$ 10,359	21%		$ 39,641
21054	2010	Standard Capacity Product II Reqmts	$ 40,000	$ 40,000	$ -	0%		$ 40,000
21055	2010	Tariff Compliance Framework	$ 788,696	$ 788,696	$ 35,873	5%		$ 752,823
21056	2010	Record Retention	$ 168,784	$ 168,784	$ 31,547	19%		$ 137,237
21057	2010	Smart Grid Requirements	$ 120,000	$ 120,000	$ -	0%		$ 120,000
21058	2010	Compliance Automation Reqmts	$ 45,000	$ 45,000	$ 9,667	21%		$ 35,333
21059	2010	VSA Enhancements Reqmt	$ 40,000	$ 40,000	$ -	0%		$ 40,000
21060	2010	Credit Policy Enhancements Reqmts	$ 75,000	$ 75,000	$ -	0%		$ 75,000
21061	2010	Multi-Day Unit Commitment Reqmts	$ 40,000	$ 40,000	$ -	0%		$ 40,000
		Total Active Projects	**$ 40,149,738**	**$ 40,140,811**	**$ 17,780,105**		**$ 9,293,587**	**$ 13,076,046**
14161	2008	Iron Point Building Total Cost	$ 160,000,000	$ 160,000,000	$ 98,047,380		$40,258,233	$ 21,694,387

2011-2012 Proposed Capital and Project Listing

Alignment
(Customer, Stakeholder, External)

Integration of Renewable Resources Program - IRRP
Demand Response Program
Rules to Encourage Dispatchability of Wind and Solar Resources
Day Ahead Scheduling of Intermittent Resoruces

Operational Excellence
(Process)

Computer Direct Purchases - Hardware and Software
2010 Facilities Furniture Purchase- Annual Request 2011
Implement Network Application Tools - Dynamic Stability
Engineering Analysis Tools
Phasor Measurement Infrastructure & Wide Area Monitoring
Operational Improvements to Market Systems
Load Aggregation Point Granularity
Procedure to Apply Resource Adequacy (RA) to Must Offer Obvligation(MOO) for a Subset of Hours
Enhancements to Standard RA Capacity Product
Bid Cost Recovery for Units Running over Multiple Operating Days
Outage Management System - Multi Year Projects
CRR 2011 Enhancements
Energy Management System (EMS) Grid Operations Training Simulator (GOTS)
EMS System Enhancements, Automatic Generation Control (AGC) Tuning Tool,
Operational Meter Analysis & Reporting (OMAR) New Features, Corrections, and Automation
Operational Tools - Netting Checker, Existing Transmission Contracts, Risk Predictor, Load Shedding
AS for Non Generation Resources
FERC Mandated year Three (Nine Items)
Dynamic Transfers
Reliability Demand Response Product.

Institutional Sustainability
(People / Technology)

Capabilities Maturity - Performance Reporting
Data Warehouse Design and Implementation
Oracle Identity Management Enhancements
Microsoft Communication server (Jabber replacement)
Control Area Scheduler (CAS) Application Upgrade & Hosting Option
Program Office Capital Labor
Data Archive Tool

Reasonable Cost
(Financial)

Financial Systems Enhancements

Total Proposed Capital and Projects for 2011 Estimated $ 25M