
Department of Water and Power City of Los Angeles



**Energy Cost Adjustment Factor Modification
August 2009**

SCOPE OF PROPOSAL

- Present a High Level Review of DWP's Proposed Energy Cost Adjustment Factor (ECAF) Action and Underlying Revenue Requirements
- Determine the Need and Propriety of the Magnitude and Timing of Proposed Rate Action, Based on DWP's Financial Requirements
- Present Options for Alternative ECAF Rate Designs
 - Restructuring of Tiered Electric Rates



POWER SYSTEM FINANCIAL REQUIREMENTS

- **Maintain Double-A Bond Ratings**
 - Target minimum debt service coverage of 2.25 times
- **Maintain City Transfer**
 - Prior year's net income must be equal to or greater than 8% of prior year's gross operating revenue
- **Maintain Appropriate Operating Cash Reserves**
 - Current Estimated Target is \$300 million
- **Maintain Appropriate Balance Between Debt and Equity Funding of Capital Improvement Program**
 - 60% debt & 40% equity (cash)



ECAF Cap Recommendations

Financial Advisor Comments

- The LADWP had a review of the Power System Financial Planning Criteria in May 2009 to ensure that AA Bond Ratings are maintained given the substantial borrowing in a Changed Financial Market. Major recommendations related to ECAF:
 - Future ratepayers may be faced with a massive liability if LADWP is exposed to extended periods of significant unanticipated power purchase or fuel cost increases.
 - As a result, the LADWP could no longer finance under collected ECAF expenses and would have no option but to increase rates.
 - The Cap on ECAF adjustments actually provides little benefit to ratepayers, but exposes the LADWP to great financial risks.
 - Removing the Cap on the ECAF would prevent a reduction in the LADWP's Bond rating.



ECAF Cap Recommendations

Industrial, Economic and Administrative Survey

- In February 2009, PA Consulting performed an Independent Strategic Assessment of the LADWP. The recently completed IEA Survey stated:
 - While the ECAF allows the LADWP a measure of security, the quarterly rate adjustment cap prevent the complete sharing of risks with customers.
 - A sharp increase in the natural gas price might compromise the LADWPs credit rating.
 - PA Consulting also indicated the LADWP should consider increased hedging, however the primary increases to the ECAF are driven by renewables.



ECAF Cap Recommendations

Recent Fitch Ratings Downgrades

- In May 2009, downgraded its rating on Imperial Irrigation District (IID) from AA- to A+:
 - IID was downgraded because they did not have adequate coverage of existing debt.
 - The current ECAF only recovers a portion of the Power Supply Costs while the remaining amount is embedded in the Base Rates.
 - IID is contemplating a restructure of the ECAF to capture their Full Supply Costs.
- Imperial Irrigation District
 - Situated in Imperial Valley, the IID delivers water to over 450,000 acres of farmland in southernmost Southern California. The district's electrical division, IID Energy, has become the sixth largest consumer-owned utility in the state and serves more than 145,000 residential, commercial and industrial customers. IID has a combined work force of more than 1,400 employees.



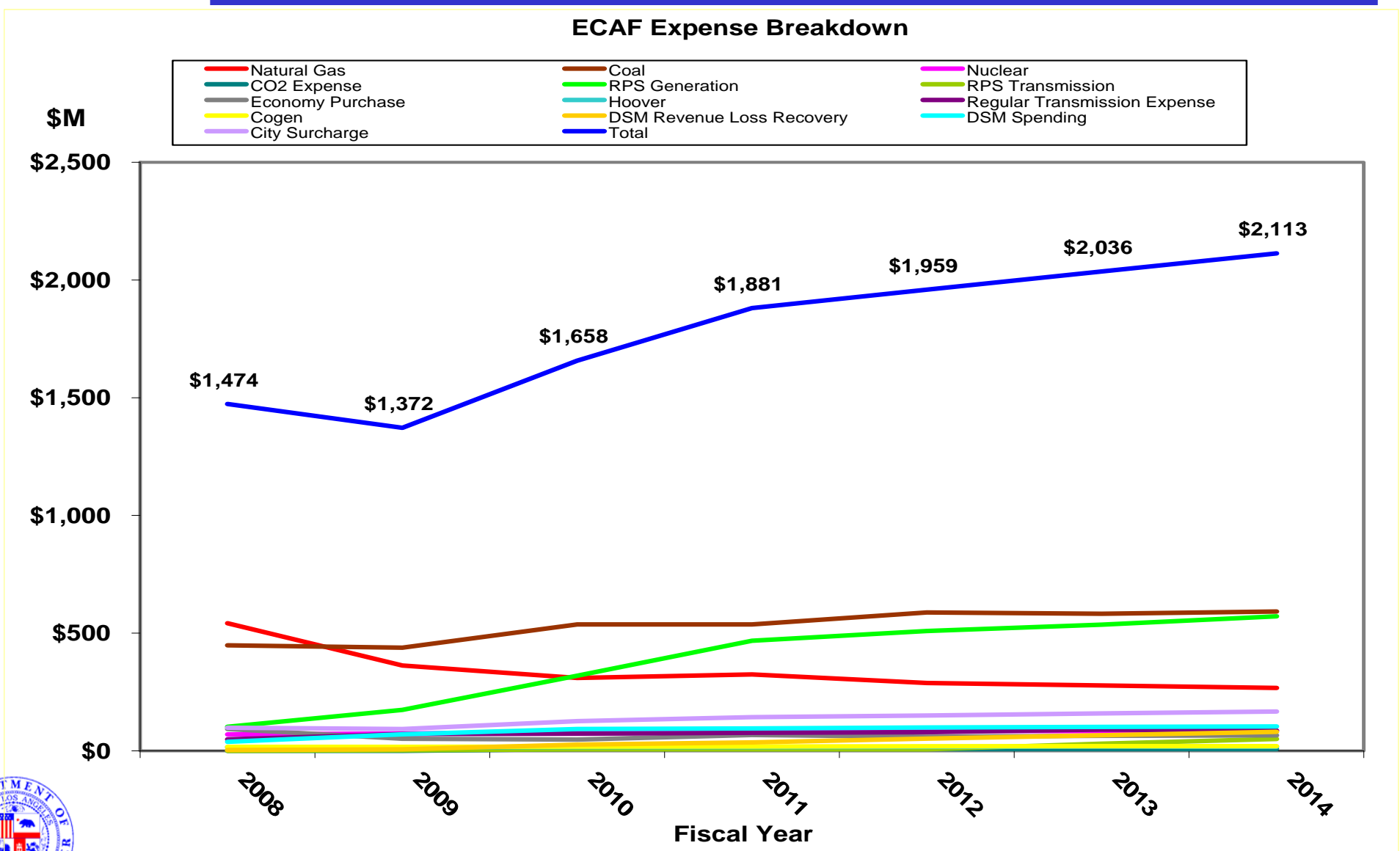
Power Financial Plan Summary - Recommended

		Recommended Budget Case						
Base Revenue Inc %		0.0%	0.0%	6.6%	3.8%	3.8%		
Total Revenue Inc (\$M)		295	347	344	139	202		
FISCAL YEAR ENDING JUNE 30		June (Final)	Current*	FORECAST				
		2008	2009	2010	2011	2012	2013	2014
1. Retail Sales (GWh)		24,617	24,410	24,016	24,209	24,549	24,850	25,275
Adj. For DSM (GWh)			0	(150)	(440)	(708)	(961)	(1,246)
Adj. For Solar (GWh)		0	0	(6)	(16)	(30)	(48)	(71)
Net Retail Sales(GWh)		24,617	24,410	23,859	23,753	23,811	23,841	23,959
2. Operating Revenue:								
Base Rate		1,634	1,614	1,594	1,589	1,593	1,843	1,999
Base Rate Revenue Increases		0	(0)	0	0	248	145	156
Energy Cost Adjustment		827	1,028	1,303	1,670	1,759	1,730	1,758
Reliability Costs Adjustment		3	49	69	75	99	124	150
Street Lighting & Special Contract		38	31	29	34	35	35	35
Total Retail Revenue		2,502	2,722	2,995	3,368	3,735	3,878	4,098
Wholesale Sales (Gen. & Trans.)		105	77	54	57	62	63	63
Deferred Revenue		173	97	169	129	25	137	180
Others		2	4	24	38	51	65	64
Total Operating Revenue		2,782	2,900	3,242	3,591	3,873	4,143	4,405
3. Borrowing		654	550	616	951	993	835	736
4. Capital Expenditures		595	770	940	1,194	1,392	1,155	1,132
5. Operation & Maintenance Expenses		774	814	863	926	1,001	1,085	1,144
6. Public Benefits		15	18	38	39	41	42	43
Total Expenditures		1,384	1,602	1,841	2,159	2,434	2,282	2,319
7. Net Income		322	407	405	428	512	593	744
8. Transfer to City		182	223	232	259	287	310	331
Income after City Transfer		140	185	173	169	225	284	413
9. Financial Ratios:								
Debt Service Coverage (cur/cur)		3.1	2.89	2.26	2.26	2.44	2.30	2.37
Additional Bond Test (prev/max)		2.1	2.1	2.2	2.1	2.1	2.2	2.3
Capitalization Factor		52%	52.9%	54.3%	56.7%	58.7%	59.5%	59.4%
10. Average Rate (\$/MWh)								
Residential		\$107	\$118	\$131	\$147	\$163	\$168	\$177
Small Business (A-1)		\$119	\$131	\$144	\$161	\$179	\$186	\$197
Med. Business (A-2)		\$109	\$120	\$133	\$150	\$166	\$172	\$182
Large Business (A - 3)		\$93	\$104	\$117	\$134	\$148	\$153	\$160
System Average		\$102	\$112	\$126	\$142	\$158	\$164	\$172



Increased ECAF Expense

Energy Cost Adjustment Factor (ECAF) Expense



Increased ECAF Expense

ECAF Expense Breakdown

ECAF Expense Categorized (\$Millions)

FY	2008	2009	2010	2011	2012	2013	2014
Natural Gas	\$542	\$362	\$310	\$325	\$288	\$278	\$267
Coal	\$448	\$438	\$537	\$537	\$588	\$583	\$592
Nuclear	\$70	\$73	\$80	\$86	\$85	\$84	\$86
CO2 Expense	\$0	\$0	\$8	\$8	\$8	\$8	\$8
RPS Generation	\$102	\$174	\$319	\$468	\$509	\$536	\$571
RPS Transmission	\$0	\$2	\$6	\$6	\$6	\$30	\$50
Economy Purchase	\$93	\$51	\$48	\$67	\$60	\$64	\$66
Hoover	\$15	\$15	\$16	\$16	\$17	\$17	\$17
Regular Transmission Expense	\$48	\$71	\$73	\$76	\$79	\$90	\$86
Others	\$156	\$185	\$263	\$292	\$319	\$346	\$371
Total	\$1,474	\$1,372	\$1,658	\$1,881	\$1,959	\$2,036	\$2,113

Cost per MWh of ECAF Categories (\$/MWh)

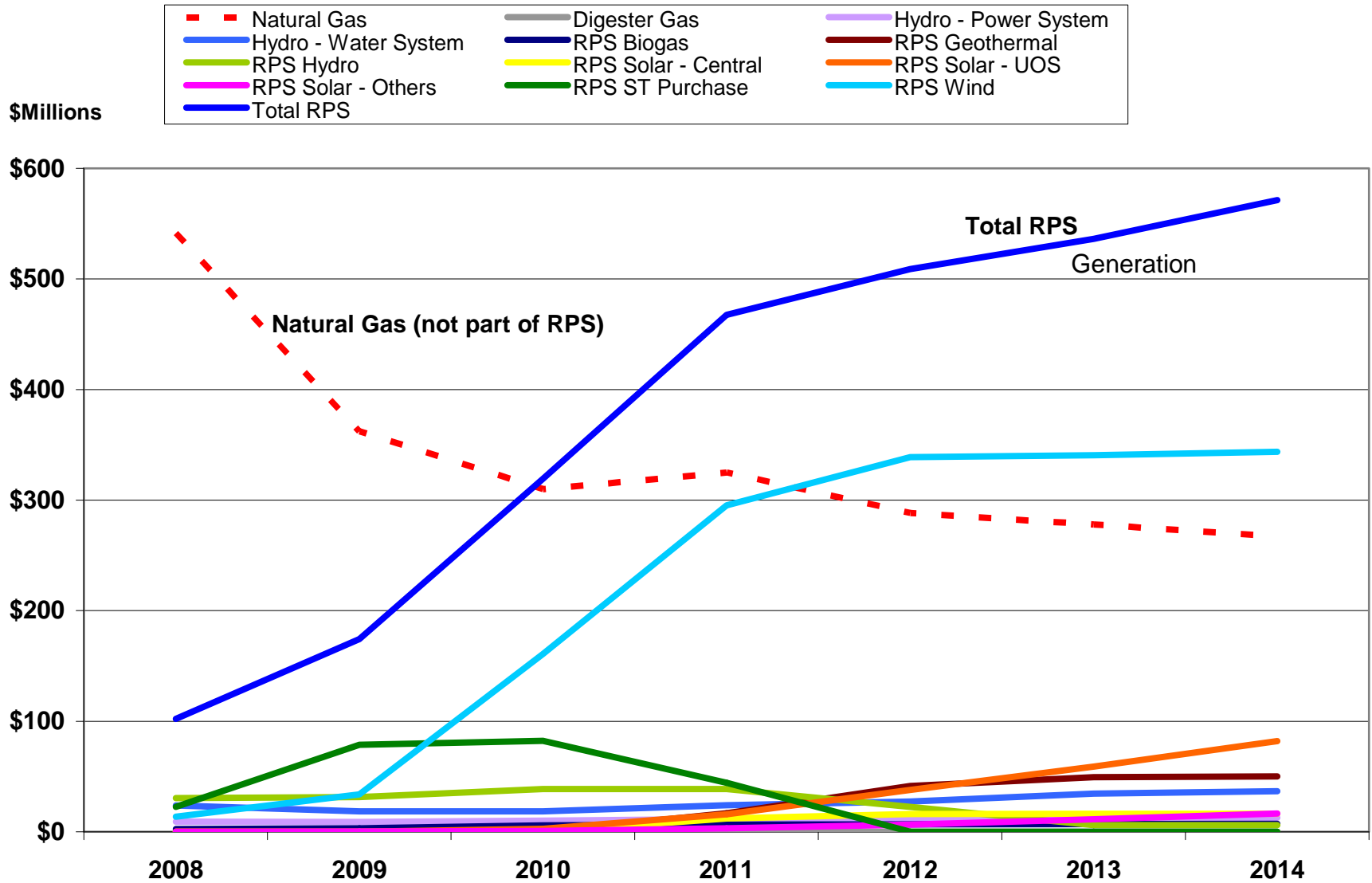
FY	2008	2009	2010	2011	2012	2013	2014
Natural Gas	\$61.4	\$45.4	\$56.8	\$56.8	\$59.5	\$57.6	\$56.7
Coal - Navajo, Fuel Only	\$16.4	\$15.1	\$16.0	\$18.6	\$19.6	\$20.5	\$21.5
Coal - IPP	\$46.2	\$47.6	\$54.2	\$63.8	\$63.9	\$63.4	\$64.7
Nuclear (LADWP), Fuel Only	\$5.1	\$5.6	\$10.6	\$13.3	\$11.5	\$10.0	\$10.0
Nuclear (SCPPA)	\$58.0	\$54.4	\$52.6	\$53.5	\$54.8	\$56.4	\$57.8
CO2 Expense	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
RPS Generation Expense	\$65.0	\$67.8	\$75.1	\$92.9	\$99.1	\$103.1	\$103.7
RPS Transmission Expense	\$0.0	\$0.9	\$1.5	\$1.2	\$1.2	\$5.8	\$9.1
Economy Purchase	\$56.7	\$34.1	\$36.7	\$47.8	\$49.9	\$51.1	\$52.0
Hoover	\$25.3	\$26.2	\$27.3	\$27.9	\$29.2	\$29.9	\$28.8
Average	\$51.5	\$48.5	\$61.0	\$68.8	\$70.5	\$72.5	\$74.0



* Does not include State or Federal CO₂ tax or expense

Increased ECAF Expense Renewable Portfolio Standard (RPS)

Natural Gas Expense Displaced by RPS Expense



Increased ECAF Expense

Renewable Portfolio Standard (RPS)

RPS Generation Expense (\$M)							
Expenses (\$M)	2008	2009	2010	2011	2012	2013	2014
Hydro - Power System	\$9	\$9	\$10	\$11	\$12	\$13	\$13
Hydro - Water System	\$24	\$18	\$18	\$24	\$27	\$34	\$37
RPS Biogas	\$2	\$3	\$6	\$7	\$7	\$7	\$7
RPS Geothermal	\$0	\$0	\$0	\$17	\$42	\$49	\$50
RPS Hydro	\$31	\$31	\$39	\$39	\$22	\$6	\$6
RPS Solar - Central	\$0	\$0	\$0	\$12	\$16	\$16	\$16
RPS Solar - UOS	\$0	\$0	\$3	\$16	\$38	\$59	\$82
RPS Solar - Others	\$0	\$0	\$1	\$3	\$6	\$11	\$17
RPS ST Purchase	\$23	\$78	\$82	\$44	\$0	\$0	\$0
RPS Wind	\$14	\$34	\$161	\$295	\$339	\$340	\$344
Total	\$102	\$174	\$319	\$468	\$509	\$536	\$571

RPS Generation Expense in \$/MWh							
\$/MWh	2008	2009	2010	2011	2012	2013	2014
Hydro - Power System	\$38.4	\$46.8	\$54.8	\$55.4	\$44.3	\$48.3	\$49.0
Hydro - Water System	\$103.5	\$105.1	\$89.4	\$95.6	\$80.9	\$95.3	\$97.6
RPS Biogas	\$58.4	\$58.7	\$60.4	\$62.5	\$62.5	\$62.4	\$63.2
RPS Geothermal	\$0.0	\$0.0	\$0.0	\$103.0	\$103.9	\$105.4	\$106.9
RPS Hydro	\$75.7	\$77.9	\$78.8	\$78.8	\$81.3	\$102.5	\$102.9
RPS Solar - Central	\$0.0	\$0.0	\$0.0	\$129.6	\$134.3	\$135.5	\$136.7
RPS Solar - UOS	\$0.0	\$0.0	\$267.6	\$319.4	\$262.0	\$217.4	\$195.4
RPS ST Purchase	\$76.7	\$74.8	\$59.4	\$69.9	\$0.0	\$0.0	\$0.0
RPS Wind	\$64.9	\$63.1	\$93.4	\$104.4	\$105.8	\$106.5	\$105.7
Average*	\$72.0	\$72.5	\$78.1	\$97.1	\$104.9	\$110.6	\$112.8

* excludes existing digester gas



LADWP Proposal

Increased Cap on Energy Cost Adjustment Factor (ECAAF)

- To ensure the Power System maintains its “AA” Bond Ratings LADWP is proposing to increase the cap of the ECAAF based on the following criteria:
 - Under collection / Over collection greater than \$200M
 - Increase/Decrease quarterly cap by 2¢/kWh
 - Under collection / Over collection greater than \$400M
 - Increase/Decrease quarterly cap by 2¢/kWh
- Total annual increases (base rates and pass through charges) to the LADWP customers will be limited to less than 10% unless any or all of the following unfavorable Financial Conditions exist:
 - Debt Service Coverage less than 2.25X
 - Cash Target less than \$300 million
 - Capitalization Factor exceeds 60%
- The Board of Water and Power Commissioners will adjust the Cap as authorized in the current Electric Rate Ordinance



LADWP Restructured Residential Rate Proposal for Increased Energy Cost Adjustment Factor (ECAF)

- The modification to increase the ECAF cap will accomplish the following:
 - Provide the Revenue to meet the Power System Financial Planning Criteria
 - Support Financial Stability
- This Alternative Rate Proposal will Restructure Residential Tiered Rates to accomplish the following:
 - Encourage Conservation
 - Minimize Rate Impact on Customers (TIER 1) who Conserve Energy
 - Reduce Demand on Power System



LADWP Alternative Proposal for Increased Energy Cost Adjustment Factor (ECAAF)

- This Alternative Rate Proposal will Restructure Residential Tiered Rates as follows:
 - Modify 1st, 2nd and 3rd Tiers to increase price signals between each Tier
 - Lower the 1st Tier price to reward customers who conserve energy
 - Increase the 2nd and 3rd Tier rate to encourage customers with high energy use to reduce demand or switch to the time-of-use rate and shift demand
 - Add a 2nd and 3rd Tier price signal during the Winter Season to encourage conservation year-round



LADWP Alternative Proposal for Increased Energy Cost Adjustment Factor (ECAF) Tiered Rates – Summer Rates

Rate A - Standard Service (High Season, June through September)

(as of July 1, 2009 per existing rate ordinance)

Energy Charge - per kWh	Base Rate	ECAF	Total (1)
Tier 1 - per Zone Allocation	\$ 0.07020	\$ 0.04890	\$ 0.11910
Tier 2 - per Zone Allocation	\$ 0.08520	\$ 0.04890	\$ 0.13410
Tier 3 - per Zone Allocation	\$ 0.10820	\$ 0.04890	\$ 0.15710

(as of July 1, 2010 without additional ECA increase and without rate restructuring)

Energy Charge - per kWh	Base Rate	ECAF	Total (1)	Increased Amount
Tier 1 - per Zone Allocation	\$ 0.07020	\$ 0.05290	\$ 0.12310	0.0040
Tier 2 - per Zone Allocation	\$ 0.08520	\$ 0.05290	\$ 0.13810	0.0040
Tier 3 - per Zone Allocation	\$ 0.10820	\$ 0.05290	\$ 0.16110	0.0040

(as of July 1, 2010 with Rate Restructure and with additional ECAF increase)

Energy Charge - per kWh	Base Rate	ECAF	Total (1)	Increased Amount
Tier 1 - per Zone Allocation	\$ 0.05841	\$ 0.06690	\$ 0.12531	0.0062
Tier 2 - per Zone Allocation	\$ 0.11050	\$ 0.06690	\$ 0.17740	0.0433
Tier 3 - per Zone Allocation	\$ 0.17521	\$ 0.06690	\$ 0.24211	0.0850

(1) Total does not include ESA and RCA



LADWP Alternative Proposal for Increased Energy Cost Adjustment Factor (ECAF) Tiered Rates – Winter Rates

Rate A - Standard Service (Low Season, October through May)

(as of October 1, 2009 per existing rate ordinance)

Energy Charge - per kWh	Base Rate	ECAF	Total (1)
Tier 1 - per Zone Allocation	\$ 0.07020	\$ 0.04990	\$ 0.12010
Tier 2 - per Zone Allocation	\$ 0.07020	\$ 0.04990	\$ 0.12010
Tier 3 - per Zone Allocation	\$ 0.07020	\$ 0.04990	\$ 0.12010

(as of October 1, 2010 without additional ECA increase and without rate restructuring)

Energy Charge - per kWh	Base Rate	ECAF	Total (1)	Increased Amount
Tier 1 - per Zone Allocation	\$ 0.07020	\$ 0.05390	\$ 0.12410	0.0040
Tier 2 - per Zone Allocation	\$ 0.07020	\$ 0.05390	\$ 0.12410	0.0040
Tier 3 - per Zone Allocation	\$ 0.07020	\$ 0.05390	\$ 0.12410	0.0040

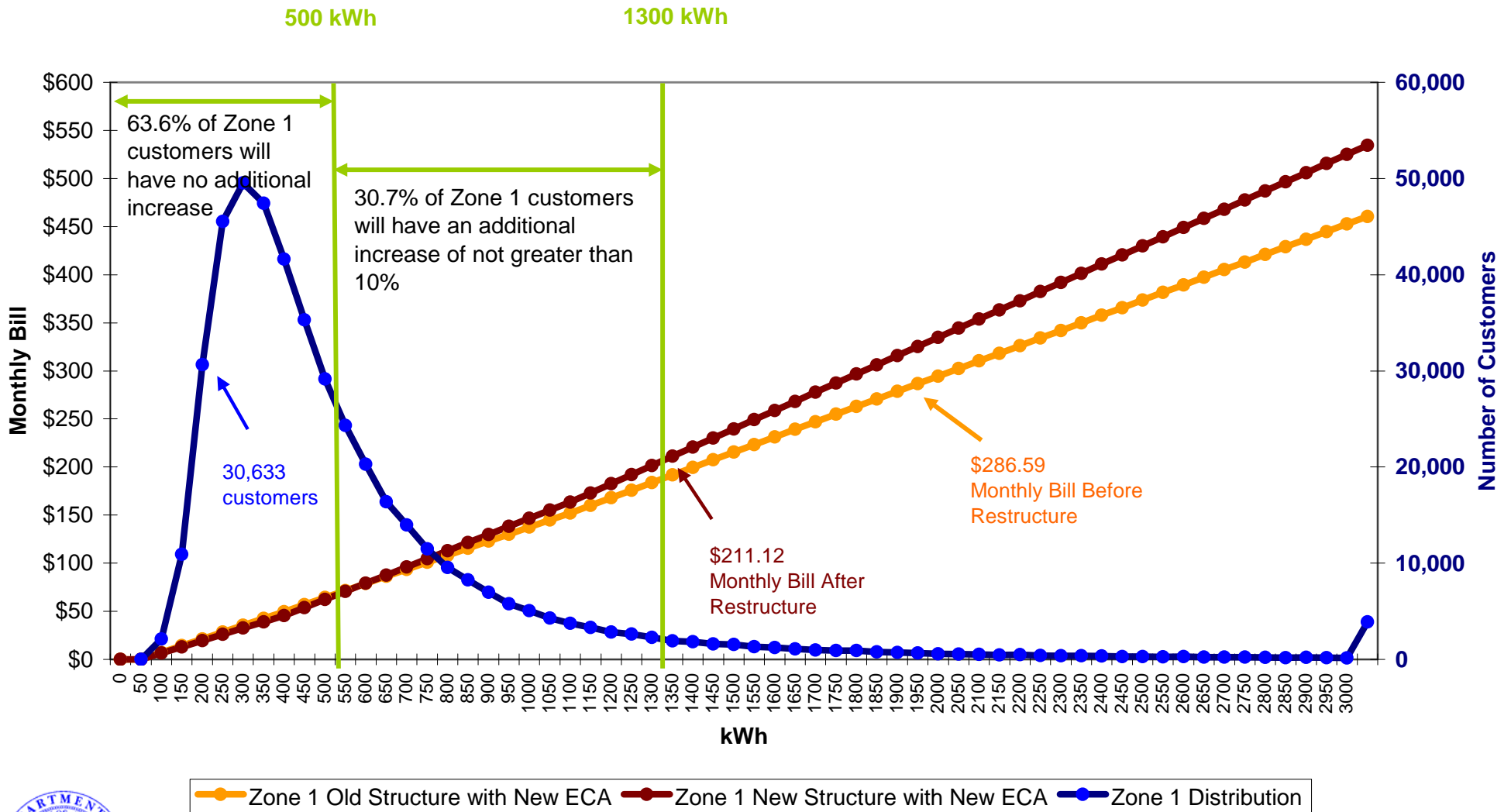
(as of October 1, 2010 with Rate Restructure and with additional ECAF increase)

Energy Charge - per kWh	Base Rate	ECAF	Total (1)	Increased Amount
Tier 1 - per Zone Allocation	\$ 0.05841	\$ 0.06790	\$ 0.12631	0.0062
Tier 2 - per Zone Allocation	\$ 0.09080	\$ 0.06790	\$ 0.15870	0.0386
Tier 3 - per Zone Allocation	\$ 0.09080	\$ 0.06790	\$ 0.15870	0.0386

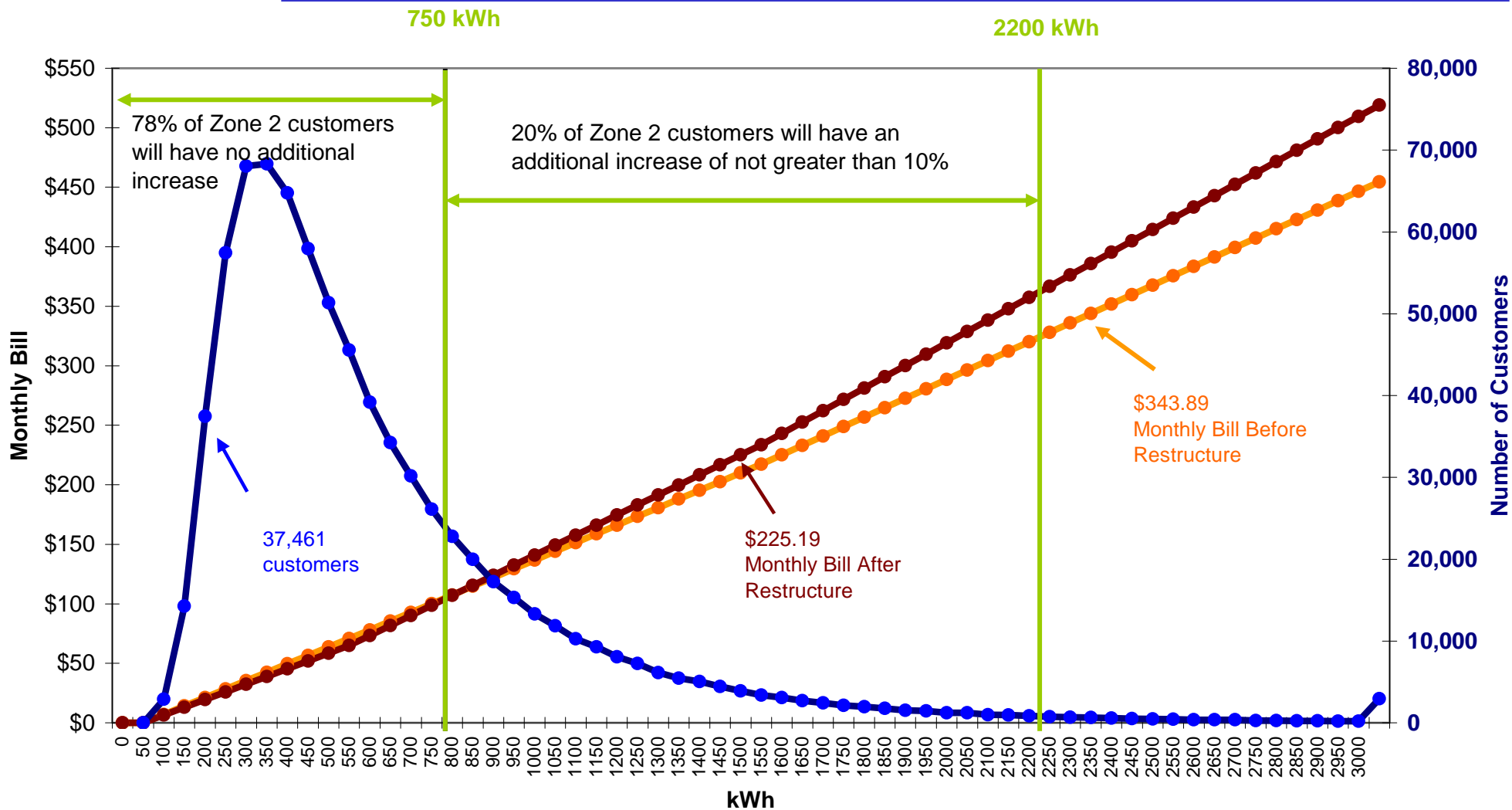
(1) Total does not include ESA and RCA



Monthly Bill Impact Restructure Tier Rate for Zone 1 Residential Class



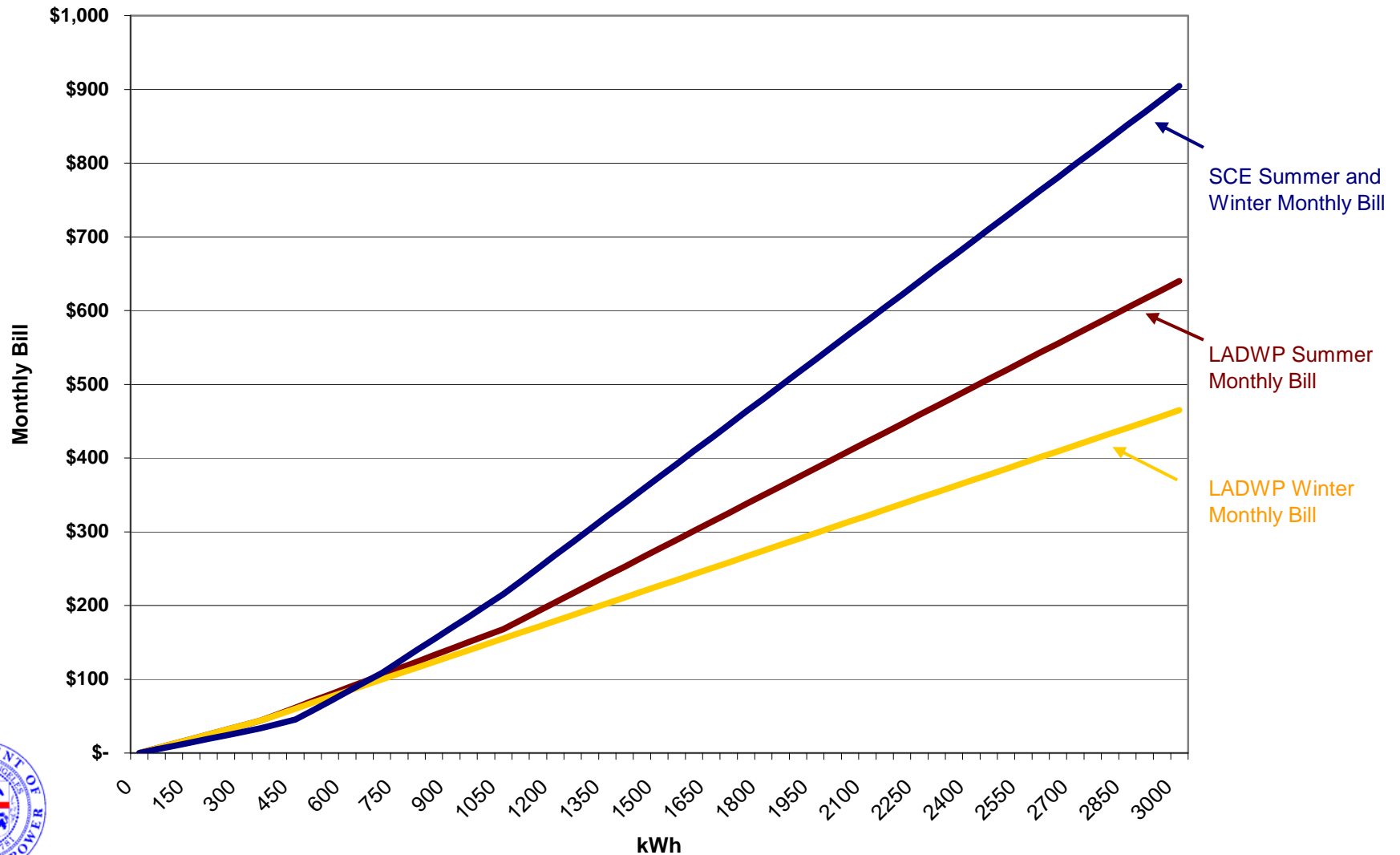
Monthly Bill Impact Restructure Tier Rate for Zone 2 Residential Class



● Zone 2 Old Structure with New ECA
 ● Zone 2 New Structure with New ECA
 ● Zone 2 Distribution

Rate Comparison LADWP versus SCE

LADWP Proposed Residential Tier Rate vs. SCE's



FINANCIAL IMPACTS OF NO ACTION

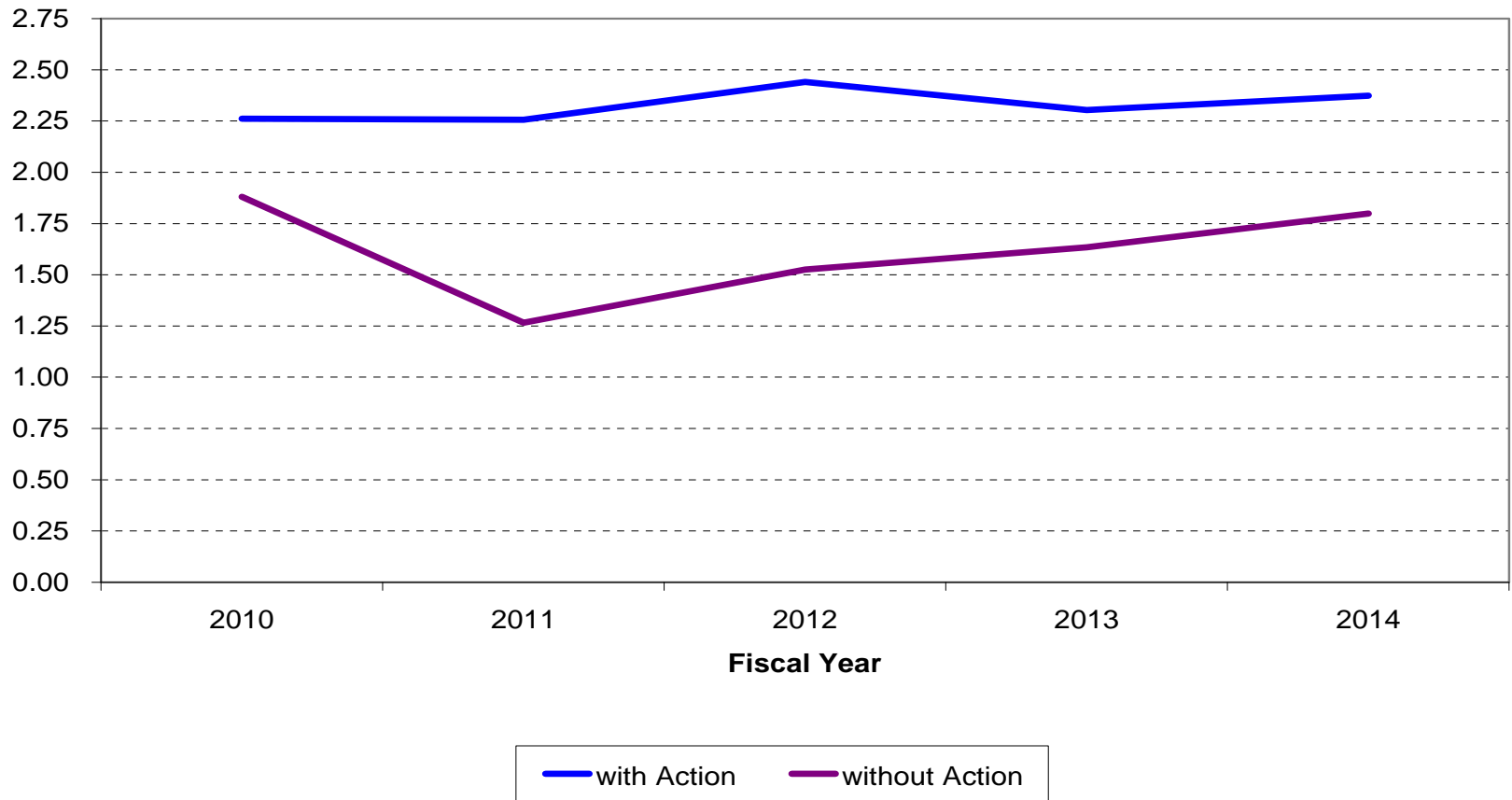
- Evaluated 5-Year Financial Impacts of Alternative Scenarios if cap increase is not adjusted:
 - Lower Debt Service Coverage
 - Lose AA Bond Rating at a Cost of \$41M per year in incremental Debt Service (\$205M over the next 5 years). This does not include impact of issuing additional fixed debt through SCPPA (for renewable projects) and IPA.
- Other Alternatives – Cut Capital Programs
 - Scale Back Infrastructure Improvements (PRP, IRP)
 - Scale Back RPS Goals
- Massive ECAF Under Collection



Debt Service Coverage Ratio

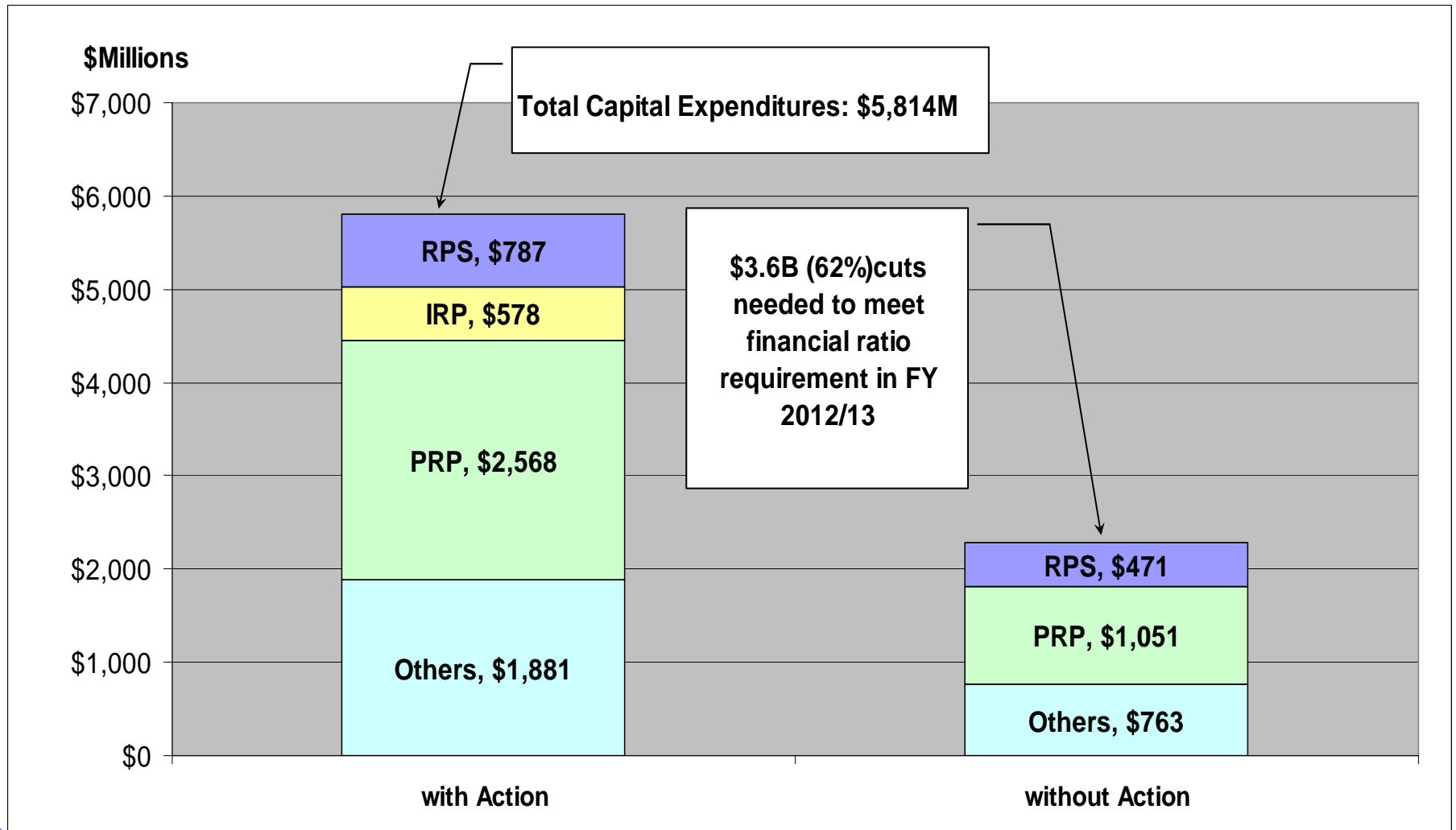
Financial Ratio with and without ECAF Action

Debt Service Ratio



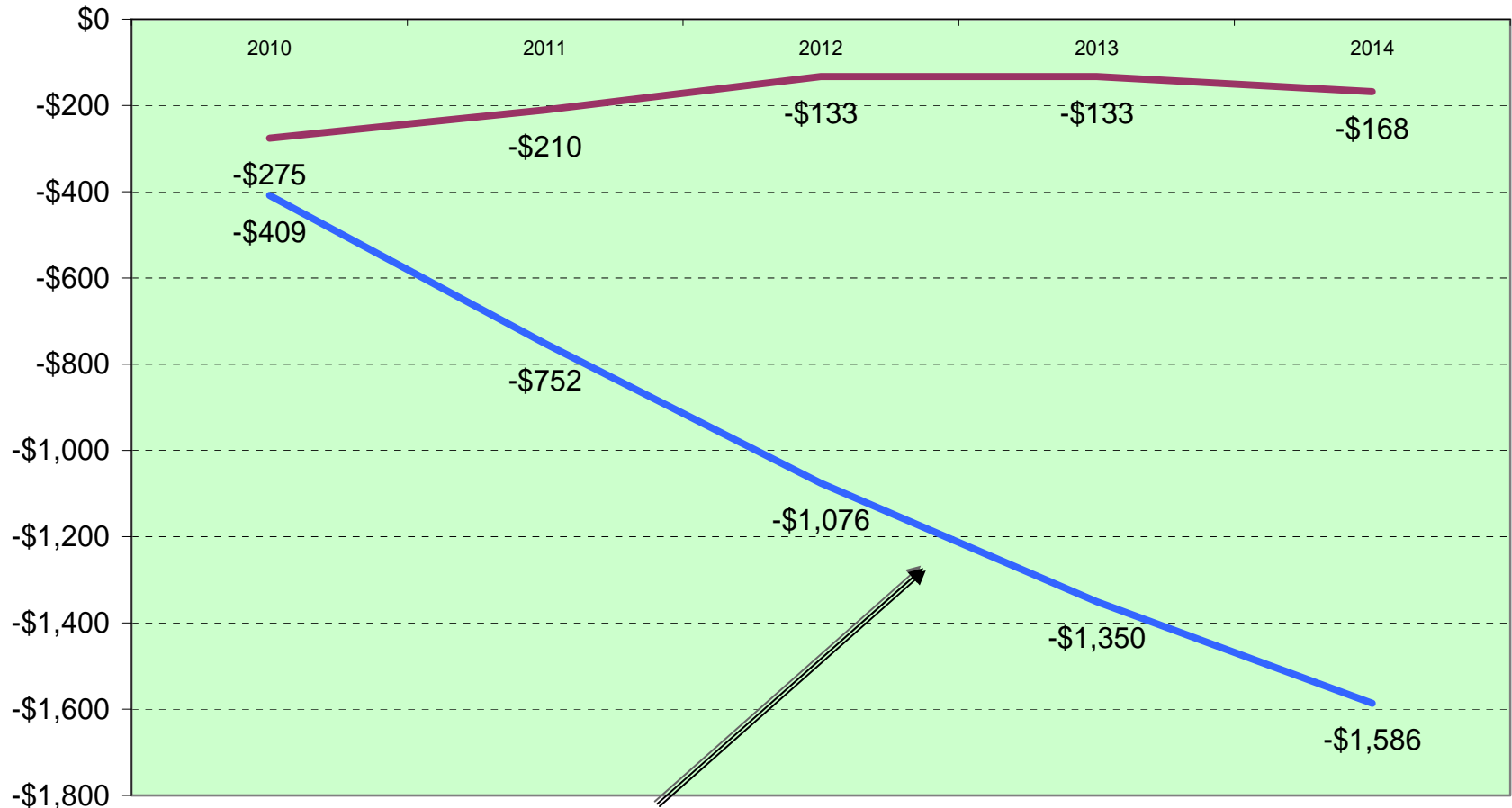
“To meet coverage requirements in FY 2012/13 and forward, LADWP would have to cut capital spending in FY 2009/10 through FY 2011/12 by a total of \$3.6 billion. With no action, debt service coverage ratios are less than 2.25 times in the FY 2009/10 through FY 2011/12.”

Five-Year Capital Expenditures



ECA Undercollection

\$Millions



Rating agencies will surely downgrade the LADWP if the ECAF cap is not increased and the under collection continues to increase as shown.

— with Action — without Action



RECOMMENDATIONS

- Consider adopting the proposed ECAF Cap increase to ensure that the Power System's can meet near-term Financial Requirements to avoid potential downgrade of Bond Ratings:
 - Debt Service Coverage greater than 2.25 times
 - Minimum Cash Target of \$300 million
 - Capitalization Factor less than 60%
- Support the Alternative Revenue Neutral Electric Rate Restructure of the Residential Tiered Rates to Accomplish the following:
 - Encourage Conservation
 - Minimize Rate Impact on Customers (TIER 1) who Conserve Energy
 - Reduce Demand on Power System

