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# 2010 Budget and Grid Management Charge Rates

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September 2, 2009

**DRAFT**

Prepared by Department of Finance  
California Independent System Operator



# 2010 Budget and GMC Rates

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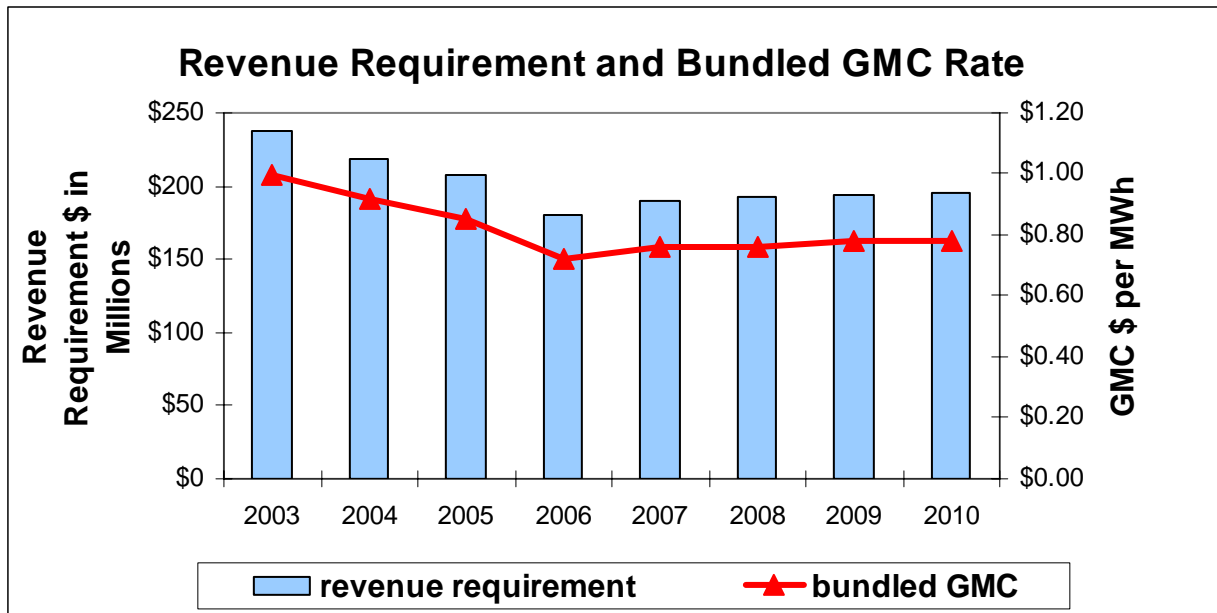
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# I. EXECUTIVE SUMMARY – 2010 REVENUE REQUIREMENT

The 2010 budget provides for a revenue requirement of \$195.1 million, representing an increase of \$2.1 million from 2009 and a less than 1.4% increase over the past 3 years. As further described, the increasing service levels achieved by the California Independent System Operator Corporation (the ISO) are being provided through effective management and redeployment of resources toward key corporate initiatives. We expect the bundled/composite grid management charge (GMC) to be \$0.78 per MWh, which is the same level as 2009.

The level of the revenue requirement is reduced substantially since 2003 and is central to the ISO commitment to maintain a grid management charge in the mid- to high 70 cent per MWh range for the next several years, consistent with the Five-Year Strategic Plan. On an inflation-adjusted basis, the 2010 revenue requirement is \$12.5 million under what the revenue requirement would be on an inflation-adjusted basis since 2007. This commitment to cost management is illustrated in the following chart:



The revenue requirement is recovered through the unbundled grid management charges. Each unbundled service offering has corresponding rates paid by users of that service. These rates are calculated by determining the costs associated with each of these services, and then dividing those figures by the forecasted billing determinant volume for each service. The result is a rate per unit of use. Section X of this document outlines the determination of GMC rates.

This budget package provides an overview of and detail about the ISO cost of service that for 2010 consists of the following:

- Operating and maintenance (O&M) budget
- Debt service costs (section VI)
- Project and capital funding (section VII)
- Other revenues and expense recoveries (section VIII)
- Revenue credit from operating reserve account (section IX)

The O&M budget is the largest of these components and is the primary focus of this report, which consists of the costs necessary for ongoing operations. The O&M budget increased 3.8% to \$162.7 million in 2010 over 2009 primarily from increases in staffing costs, which were offset by reductions in consulting, contracting and temporary staff.

The O&M budget is presented in three views:

- By process - such as support customers and stakeholders (section III)
- By resource - such as salaries (section IV) and
- By division - such as the Operations Division (section V)

Debt service costs are the principal and interest payments related of the ISO's 2008 bonds and a 25% debt service reserve collection. During June 2008, the ISO issued fixed rate bonds that will fund 2008 to 2010 capital expenditures and retire existing variable rate demand bonds. Debt service costs increased by \$1.7 million to \$61.0 million in 2010, which reflects the 2008 bond amortization and a 25% debt service reserve. During 2009, the ISO issued bonds to build a new headquarters facility. There will be no impact on the 2009 revenue requirement of this bond offering, as 2009 interest will be funded from bond proceeds during the building development stage.

The revenue requirement contains direct funding for capital and other projects in 2010 amounting to \$15 million. The source was an additional month's collection of the grid management charge arising from the implementation of the payment acceleration market software enhancement in November 2009. Direct funding avoids the additional costs of interest and the 25% debt service reserve. Total capital spending for 2010 is budgeted at \$33.0 million, primarily for systems development related to further market capabilities.

Other revenue and expense recoveries are various offsets to the revenue requirement from other revenue sources such as interest, scheduling coordinator (SC) application fees, Participating Intermittent Resource Program (PIRP) fees, training and the California-Oregon Intertie (COI) Path Operator fee.

The operating reserve credit is a reduction or offset to the ISO revenue requirement for 2010. In any year that the ISO operating reserve account is expected to exceed 15% of prospective year's O&M budget, such excess is to be used as a reduction in the revenue requirement for the coming year. For 2010, the ISO forecasts a credit from the operating reserve account of \$35.5 million. The operating reserve account is calculated separately for each grid management charge category.

## II. INTRODUCTION

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### Budget Guidance

Each year, division and departmental budget planners receive guidance on the expected overall budget outcome and the mechanics of how it will be prepared. Guidance provided for the developing the 2010 revenue requirement called for each ISO division to develop an O&M budget consistent with the Strategic Plan and limiting increases to less than 4%.

Company-wide, the O&M budget should result in a revenue requirement under the \$197 million threshold and a bundled grid management charge similar to 2009. In late July, ISO management met and refined the proposed budgets by reducing long-term contractor costs through efficiently having ISO staff absorb work or, in some cases, converting the positions to full-time employees. The budget achieves the above goals and funds ISO operations and initiatives as set forth in the Strategic Plan.

After the Board reviews the budget in early September, it will be posted to the ISO website for stakeholder review. It will be discussed with stakeholders in a budget workshop on October 1 (notes of that discussion and subsequent questions received from stakeholders will be posted on the ISO website).

### Future View

The ISO is actively engaged with California, regional and federal officials in shaping the transformation of the power industry to one where clean energy plays a critical role in meeting environmental goals, creates a diversified generation fuel mix and contributes to grid reliability — all the while keeping costs as low as possible.

Another important contribution to operating the power grid will be the commercialization of energy storage technologies. The ISO is working with storage developers to test devices, such as flywheels and batteries making sure they perform within expectations as well as identifying what changes the ISO needs to make to grid operating procedures and market tariffs.

Driving the shift of the power industry paradigm to one with a “clean” focus is a variety of policies and legislation proposed or enacted by elected and regulatory officials. The ISO plays a leading role in making sure policymakers are kept informed on benefits and challenges posed by proposed legislation, such as those calling for a 33% renewable portfolio standard. The ISO also is active in the work by the California Air Resources Board to implement greenhouse gas curbs mandated by Assembly Bill 32 (California Global Warming Solutions Act of 2006). In addition, the ISO is advising the State Water Resources Control Board on its proposed new rules mitigating the environmental impacts of using coastal water for the cooling of about 19 generation facilities.

Lastly, the ISO well understands how the economy is not only affecting its business (lower electricity volumes) but its customers as well. The economy will rebound at some time and when it does, the ISO is ready to address an expected spike in electricity use across all economic sectors. In addition, like most companies, the ISO is looking to keeping its costs contained while improving services, which is accomplished in part by making sure staffing levels and skill sets efficiently meet current and future needs, scrutinizing expenses and deftly managing investments and debt obligations.

## Components of 2010 Revenue Requirement

The proposed 2010 revenue requirement provides funding for ISO services and other requirements identified in the Strategic Plan. The revenue requirement of \$195.1 million compares to the 2009 revenue requirement of \$193.0 million, which is an increase of \$2.7 million, or 1.4%. A summary of the 2010 revenue requirement compared to 2009 is as follows:

Revenue Requirement (\$ in millions)	2010 Budget	2009 Budget	\$ Change	% Change
Operating & Maintenance Budget	\$162.7	\$156.7	\$6.0	3.8%
Expense recovery and other income	(8.1)	(6.1)	(2.0)	(32.8%)
Subtotal net Operating & Maintenance	154.6	150.6	4.0	2.6%
Debt Service including 25% reserve	61.0	59.4	1.6	2.7%
Capital Funding	15.0	-	15.0	-
Subtotal before revenue credit	230.6	210.0	20.6	9.8%
Revenue Credit	(35.5)	(17.0)	(18.5)	108.8%
<b>Total Revenue Requirement</b>	<b>\$195.1</b>	<b>\$193.0</b>	<b>\$2.1</b>	<b>1.1%</b>
<b>Transmission volume in GWh</b>	<b>250.0</b>	<b>248.6</b>	<b>1.4</b>	<b>0.6%</b>
<b>Pro-form Bundled GMC per MWh</b>	<b>\$0.780</b>	<b>\$0.776</b>	<b>\$0.004</b>	<b>0.5%</b>

## Aligning with the Strategic Plan

The ISO is continuing in 2010 the resolute focus begun in 2005 to contain or lower operating costs while improving services and maintaining the reliability of the California transmission grid. This includes, for instance, strengthening the ISO compliance efforts without adding costs.

The 2010 budget also represents another step taken in 2009 to align with the Strategic Plan, which plays a key role in how the ISO performs by providing the roadmap to achieve a number of organizational and operational objectives and goals. The Strategic Plan is driven by four major objectives: customer focus (external), operational excellence (processes), institutional sustainability (people and technology) and

reasonable cost (financials). Although represented separately, the four objectives are intricately tied together by design. For example, operational excellence is focused on the customer and a sustainable institution is required for operational excellence.

Each objective is complemented with sub-objectives to further flesh out the ISO strategy, which are in turn supported by action initiatives. Then the objectives and initiatives are tied to a well-defined series business processes: It is the Strategic Plan that drives how the ISO intends to achieve its business and operational goals while the budget explains how the corporation funds and allocates its resources to support its business plans.

In keeping with the objectives, ISO management and staff crafted a 2010 budget that supports the Strategic Plan with the right mix of talent, skills and financial resources to be successful. This accomplished in part by the following:

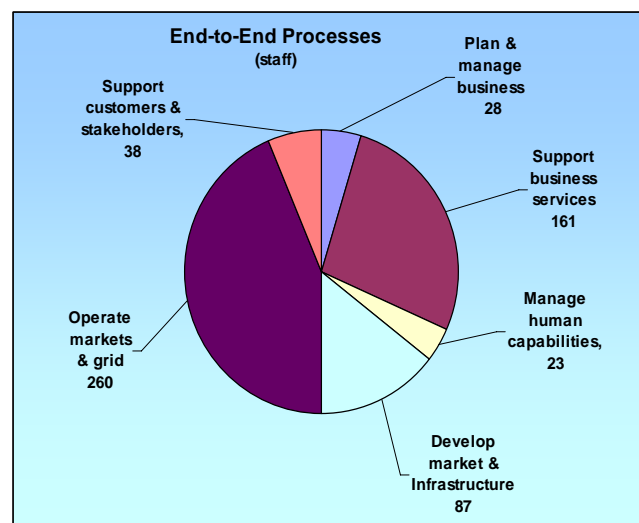
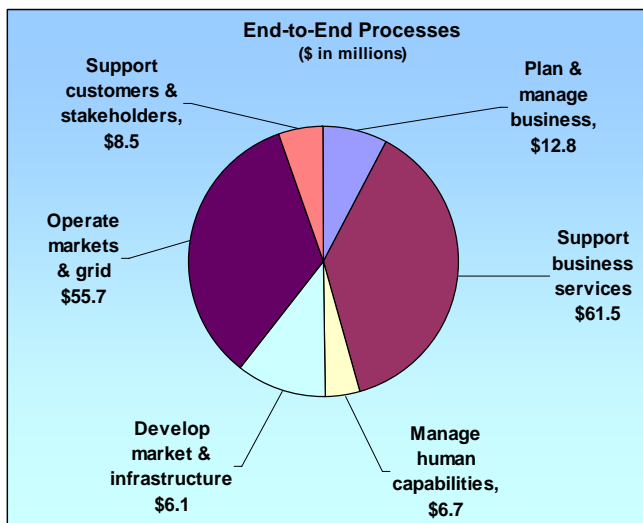
- Executing initiatives defined in the Strategic Plan:
  - Implement value-added market enhancements including convergence bidding, scarcity pricing software, wholesale demand response, and maintain and enhance Market Initiatives Roadmap, as well as improving market-monitoring capabilities associated with design enhancements.
  - Support development and implementation of state environmental regulatory policies, including: implement renewable resource integration projects to ensure maximum delivery of renewable energy and support the state policy reducing green house gas emissions.
  - Establish a collaborative framework for transmission planning.
  - Establish a compliance monitoring framework.
  - Leverage and integrate advanced analysis tools and new control room technologies.
  - Institute actions to achieve an efficient cash clearing timeframe.
  - Construct new facility and manage the talent pool.
  - Customer focus by improving customer issue resolution process, continuing to transform stakeholder process and expanding the customer portal.
- Continuing focus on cost control:
  - 2010 bundled grid management charge is consistent with the target established in 2005 (maintain bundled grid management charge in the mid-to-high 70 cent/MWh range) and the revenue requirement is below the \$197 million threshold for a new rate case.
  - Fund new priorities by redirecting resources and achieving efficiencies.



### III. PROCESS VIEW

In the fall of 2009, we are initiating activity based costing. This is one of the initiatives in the Strategic Plan to improve the management of key end-to-end processes and resource utilization. They can be aggregated into six high level processes to which we have allocated the O&M budget. These activities are:

- Support customers and stakeholders – client, account and stakeholder processes, government affairs and communications
- Develop markets and infrastructure – regulatory, market, policy and product design and transmission planning, grid asset reviews and interconnection studies
- Operate markets and grid – manage and operate the markets including modeling, setup and settlements
- Manage human capabilities – employee lifecycle, training and organizational development
- Support business services – general, information technology, financial, legal and compliance support services
- Plan and manage business – strategic planning, governance, budgeting and project management



#### Support Customers and Stakeholders

Support Customers and Stakeholders, amounting to \$8.5 million and 38 staff, is made up of elements of one division, External Affairs and comprises the objective of customer focus (external). This is the highest objective of the organization supported by all of the other objectives.

## Vision and Goals

The ISO is committed to provide the highest quality of service to its customers, market participants and stakeholders. We recognize the need to adopt a cross-organizational customer focus that will exceed customer expectations.

## Customer Issue Resolution

An important duty the ISO performs is taking in, tracking and shepherding customer issues to resolution in a timely and efficient way. To this end, the ISO will continue to build upon an effort begun in 2009 to expand the customer resolution process and move from performance measures of timeliness to measures of quality of service. The ISO plans to further improve customer service by implementing a corporate-wide customer relationship management system in 2009. In addition, work is underway to continue transforming the stakeholder process to better meet customer needs and expand our customer web portal to streamline access to market information and issue resolution updates.

## Integration of Non-Traditional Resources

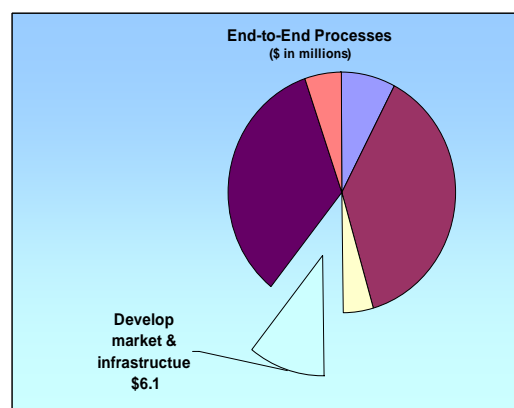
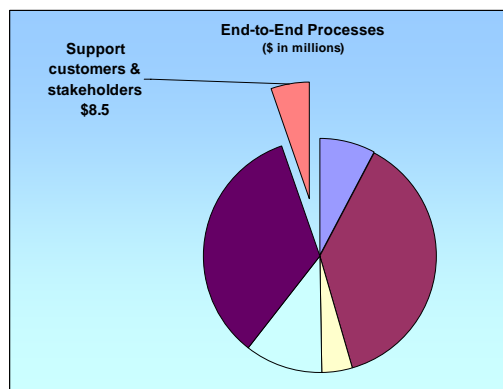
The California ISO is a leader among the nation's organized markets in building a market design flexible enough to accommodate non-traditional resources, such as renewable resources and demand response, while at the same time keeping costs reasonable and maintaining grid reliability.

In addition, the ISO is committed to advancing state and federal market and environmental policies and is actively gathering data, performing studies and rendering recommendations on issues policymakers are grappling with.

Besides supporting renewable portfolio standards, the ISO is informing the process begun by state water officials to implement rules to mitigate negative effects caused by once-through cooling systems in coastal power plants. The ISO is eager to work across multiple interest groups, especially with our neighbors and regional agencies, in shaping policies and rules that are consistent with maintaining grid reliability and efficient markets.

## Develop Markets and Infrastructure

Develop Markets and Develop Infrastructure are two processes that along with the processes of operating the market and grid, comprise the objective of operational excellence (process).



## Develop Markets

Develop markets, amounting to \$6.1 million and 29 staff, is comprised of components of five divisions: CEO, Market Infrastructure and Development, Operations, General Counsel and External Affairs. This activity amounts to the ISO is very busy designing and implementing value-added enhancements to the wholesale market design that will improve our abilities to review and analyze the efficiency and quality of market results. Another part of the activity is to continue work in creating a framework that will accommodate demand response participation in the ISO market.

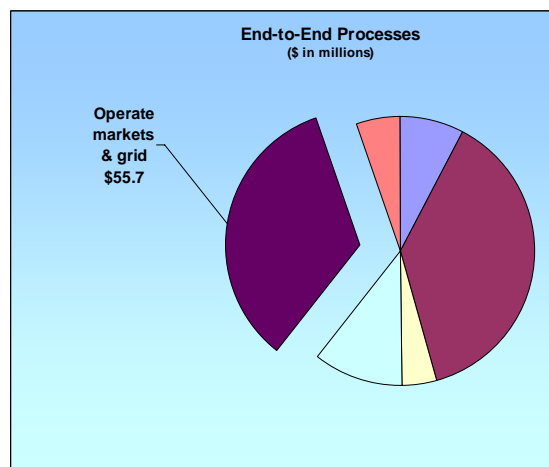
## Develop Infrastructure

Develop infrastructure, amounting to \$11.4 million and 58 staff, is comprised of three divisions: Chief Executive Officer, Market Infrastructure and Development and Operations. The ISO has a proactive approach to transmission planning that goes behind the technical analysis to also facilitate building needed projects. But while internal training and careful management of the process have provided an important platform for success in addressing future challenges, the hurdles the ISO faces increase in parallel with the extra work created by the enhanced planning process, compliance requirements and meeting other regulatory and policy goals, and participating in joint regional planning groups, such as the Renewable Energy Transmission Initiative.

Reforming the ISO interconnection process in 2008, is now producing a queue populated with highly viable projects and contains the costs by studying geographically similar proposals simultaneously. Over the past 10 years, the ISO has approved nearly 500 transmission projects worth about \$8.5 billion.

## Operate Markets and Grid

There are four end-to-end processes that make up operate markets and grid: Manage Market Setup and Execution, Manage Market and Reliability Data and Modeling, Operate Real Time Market and Grid, and Manage Operations Support and Settlements, and is comprised of components of five divisions. Along with the processes of developing markets and infrastructure, these processes comprise the objective of operational excellence (process). These processes account for the greatest level of effort as it represents each of the core ISO functions.



## Manage Market and Reliability Data and Modeling

Manage Market and Reliability Data and Modeling, amounting to \$11.5 million and 57 staff, is comprised of elements of four divisions: Market Infrastructure and Development, Corporate Services, Operations and External Relations. The ISO diligently checks and rechecks its network modeling policies and protocols to reduce as much as possible

non-market energy dispatches, assure models reflect all grid constraints and produce timely and accurate prices results. Another important activity is improving the visibility and transparency of our business while keeping monitoring and reporting duties secure. Also, our activity includes taking all steps necessary and possible to safeguard our cyber infrastructure.

### **Manage Market Setup and Execution**

Manage Market Setup and Execution, amounting to \$9.0 million and 37 staff, is comprised of elements of one division: Operations. A difficult ISO responsibility is to manage transmission and generation outages, especially those that are unplanned, as it takes expertise honed in split-second decision-making situations to ensure continuous flow of power to all customers.

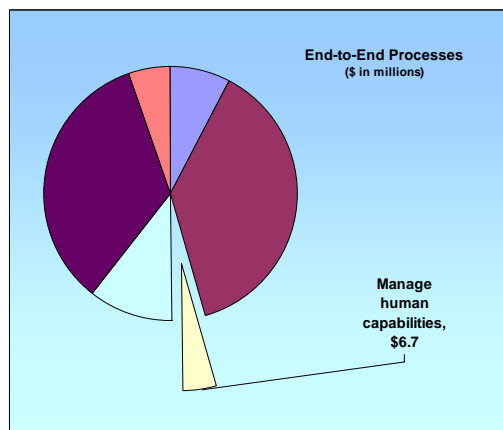
Managing the market includes dutiful execution of the day ahead market and interchange scheduling to make sure all local capacity requirements are met and the power is delivered in the least cost possible by avoiding congested areas.

### **Operate Real Time Market and Grid**

Operate Real Time Market and Grid, amounting to \$20.8 million and 88 staff, is comprised of elements of two divisions: Corporate Services and Operations. This is the fundamental process of the Company.

### **Manage Operations Support and Settlements**

Manage Operations Support and Settlements, amounting to \$14.4 million and 78 staff, is comprised of elements of four divisions: Chief Executive Officer, Corporate Services and Operations. Improving market efficiency provides benefits to the ISO and its customers, but also any benefits we gain from finding the most cost effective way of doing business does trickle down to ratepayers who carry the business costs of their distribution utilities. This effort is visible in the work by the ISO and stakeholders to redo the timeline for payments and settlements. The result lowers the financial risk of participating in the wholesale market that in turn lowers the cost of doing business with the ISO. The lower cost then translate into less overhead for ISO customers who can pass the savings to ratepayers.



### **Manage Human Capabilities**

Manage Human Capabilities along with Support Business Services comprises the objective of institutional sustainability (people, technology) amounting to \$6.7 million and 23 staff, and is comprised of elements of three divisions: Chief Executive Officer, Corporate Services and General Counsel.

The ISO relies on its highly educated and motivated workforce. And to keep this workforce at its peak of expertise, the ISO is developing a talent pool to leverage the expert technical knowledge and leadership skills needed to enhance customer service and create efficiencies that will reduce costs. Expanding employee educational opportunities includes creating a leadership certification program that will provide highly capable professionals with hands-on working knowledge of our core business areas.

Creating a work environment that supports and nurtures the ISO goals is the focus of a major construction project to build a new ISO headquarters. The facility will meet compliance needs, physical security rules (ISO, state and federal) and operational requirements.

## Support Business Services

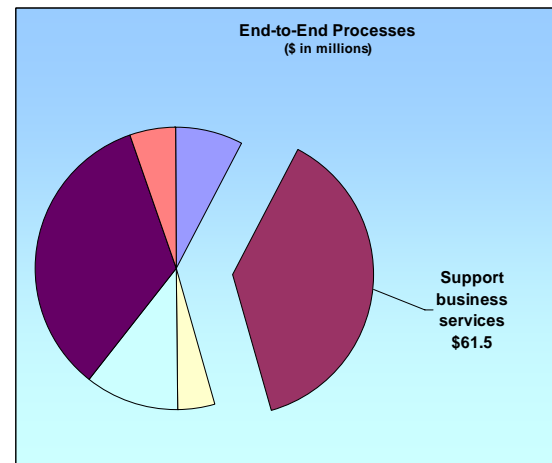
Support Business Services amounting to \$61.5 million and 161 staff, is comprised of elements of three divisions: Corporate Services, Operations and General Counsel. Along with Manage Human Capabilities, it comprises the objective of institutional sustainability (people, technology). This activity accounts for the second highest level of support as it encompasses all functions essential to running the business.

To improve upon the ISO's ability to effectively carry out its business duties requires well-defined, measured and controlled processes, disciplined business decision making, maintaining quality assurance and efficient implementations. This activity is supported by the phased-in implementation of activity-based accounting, which will lead to a fuller understanding of the end-to-end cost of processes and projects. The ISO is also taking strong moves to further mature its information technology program and services, and vendor management capabilities.

Other activities designed to enhance the ISO organizational effectiveness include expanding our enterprise risk management initiative to a repeatable level whereby policies for managing the program and procedures are defined and measurable and controls information that readily show strength and weaknesses, opportunities and challenges in meeting objectives.

## Compliance

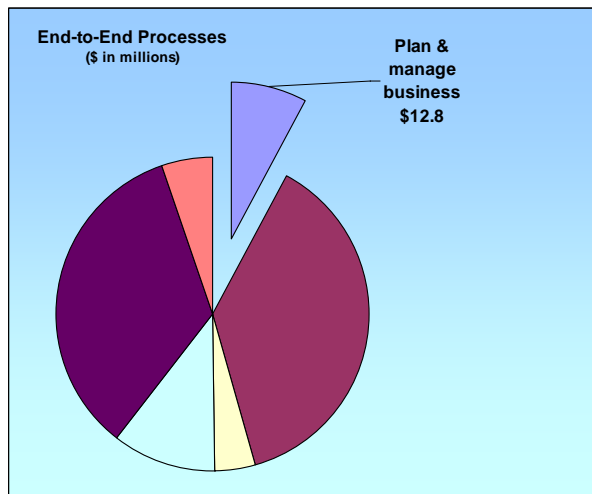
The ISO remains vigilant and proactive in maintaining a responsive and effective compliance culture and we take very seriously any violation of applicable operating or regulatory standards no matter how minor. While we are pleased with our better than average record posted in 2008, the ISO acted to better manage our program by



establishing a compliance department under the auspices of the general counsel, who now serves as the ISO chief compliance officer.

Compliance is a high priority for the corporation but it is likely the extensive efforts will require contracting and staff resources in 2010 and beyond.

## Plan and Manage Business



Plan and Manage Business is made up of two activities, Plan and Manage Business and Projects and comprises the objective Reasonable Cost (financial), which assures the other objectives include a measure of cost. Plan and Manage Business amounting to \$12.8 million and 28 staff is comprised of three divisions: Chief Executive Officer, Corporate Services and General Counsel. Projects amounting to \$8.5 million and 40 staff is comprised of two divisions: Market Infrastructure and Corporate Services.

Every process, project or policy the ISO considers is measured against the balance sheet, which is why the ISO is proactively pursuing an approach that manages its finances guided by a simple concept that requires containing costs while delivering more value in the services we perform and the market we manage without undermining grid reliability or compliance efforts.

The effort to align the strategic planning process more closely with budget planning will reveal how ISO resources are used and provide a clearer picture of costs associated with business and operational activities. This in turn enables management to better assess the value of corporate projects and processes and determine whether they are under or over resourced. However, the ISO is also scrutinizing day-to-day expenses, such as cutting out unneeded travel, lessening reliance on outside contractors and motivating employees to be cost conscious, all in an effort to ensure the most effective use of budgeted monies.

The highest level of the ISO is actively involved with defining, creating and nurturing a culture of cost-consciousness as well as enhancing services while not adding costs.

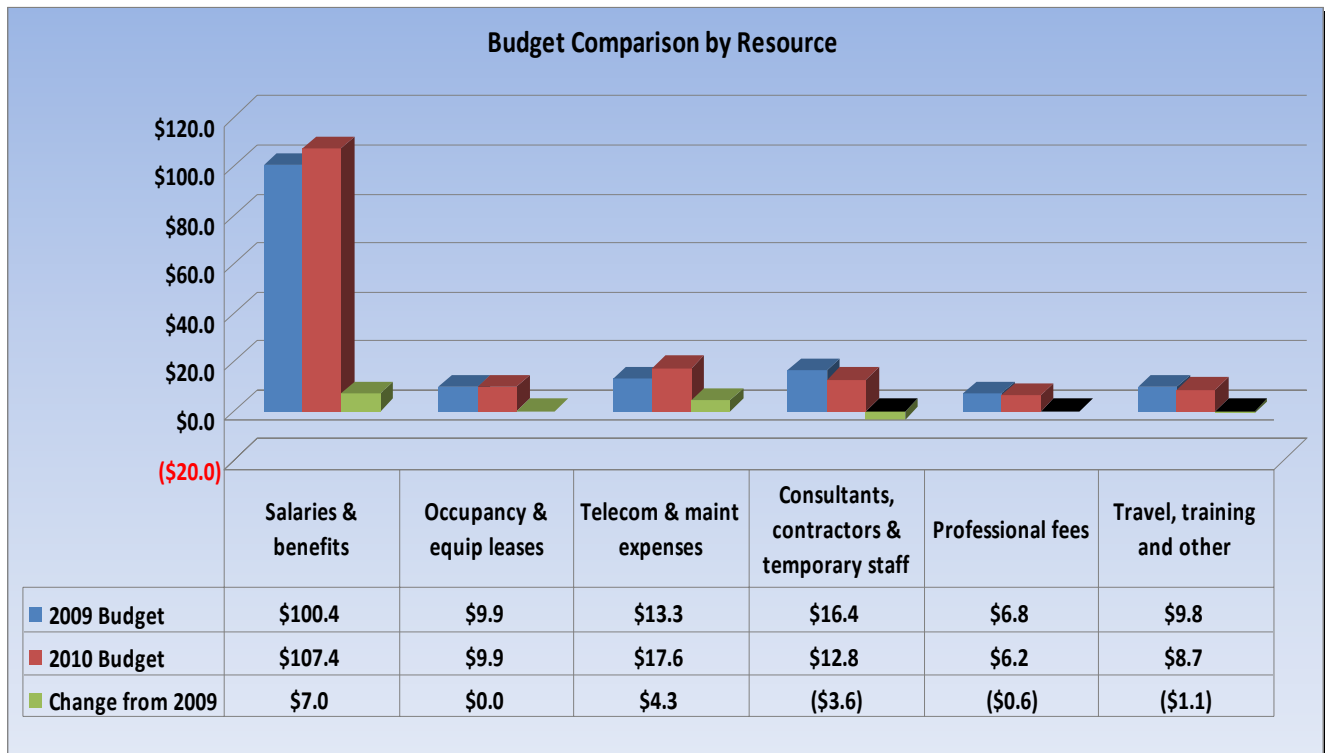
Meanwhile, stakeholders also participate in ISO governance by engaging in new policy and tariff stakeholder processes where costs and reliability issues are balanced.

Not only is the ISO vigilant in containing costs, it also places a high emphasis on managing our monies in a smart and prudent manner.

The new buildings will be available with only a small marginal increase to the grid management charge of about 1.6 cents per megawatt per year for 30 years. This is the wholesale impact. At the retail level, the impact would amount to about a penny on a 750 kilowatt monthly bill. The ISO is also exploring how some of its projects can qualify for stimulus funding under the American Recovery and Reinvestment Act and, most importantly, it is the budget process that drives the ISO to consider revenue requirement needs, which is translated into fees charged to scheduling coordinators and other market participants.

## IV. ISO RESOURCE UTILIZATION

This section deals with the resources consumed by the ISO in its O&M budget to accomplish its strategic plan. The major resource components are as follows:



### Staffing

The ISO manages the transmission networks of the state's three investor-owned utilities as well as some of municipal-owned utilities (statewide serving 30 million Californians), but it does not own transmission or generation assets itself. To operate the grid, the ISO depends on its highly educated employees, which makes staff a critically important resource with salaries and benefits comprising 66% of the O&M budget.

The company staffing plan is built upon the “employer of choice” premise to attract and retain the best and brightest individuals in the industry. The ISO subscribes to an “evergreen” recruiting strategy, which includes continually looking for potential employees and at times will revise the organizational structure to accommodate such individuals. The Company also periodically makes organizational changes to align resources to focus on the important matters identified in the Strategic Plan, and to reflect end-to-end business processes.

The staffing level in 2010 is planned to be 569 staff or 6 under the budgeted 2009 staffing level. Gross departmental figures will exceed actual staff on board because of vacancies. The budget reflects a vacancy factor of 2.5% of staff, or about 22 positions.



<b>Projected Staffing Levels</b>	<b>2010 Budget</b>	<b>2009 Budget</b>	<b>Change</b>
CEO	43	41	2
Market and Infrastructure Development	80	76	4
Corporate Services	182	196	(14)
Operations	217	220	(3)
General Counsel	33	31	2
External Affairs	42	40	2
<b>Gross headcount</b>	<b>597</b>	<b>604</b>	<b>(7)</b>
Less Project Office staff included in capital	(6)	(6)	-
Less vacancy factor	(22)	(23)	(1)
<b>Net headcount</b>	<b>569</b>	<b>575</b>	<b>(8)</b>

### **Staffing Related to Capital and Other New Priorities**

As in past years, the costs of ISO staff dedicated full-time to capital projects have been removed from the O&M budget, and will be charged to capital projects, which are funded separately. The capitalized staff amounted to six full-time staff in the Program Office Department of the Corporate Services Division. Other ISO staff, engaged to a lesser extent on capital projects is budgeted in their respective cost centers, but will be capitalized for the financial statements prepared in accordance with generally accepted accounting principles.

### **Compensation Structure**

The 2010 compensation budget includes funding for staff base salaries, employee benefits and payroll taxes, other compensation elements such as overtime and incentive compensation, and other related costs such as relocation and tuition reimbursement. The budget also includes funds for 2010 salary adjustments for merit, and equity/market adjustments. These costs have been budgeted for each position. The total compensation package provided to ISO employees also includes incentive compensation with payouts in the subsequent year based on individual and corporate performance.

ISO employee benefits are budgeted at 35% of salary costs to fund the benefits summarized in the table below. The increase related to increases in the actuarial costs of the Retiree Medical Plan and increases in the ISO matching payments for longer term employees in the 401(k) Plan. Management will enter into contracts, the costs of which are primarily dependent on employee population levels and participation, with selected vendors to ensure these benefits are available to eligible employees.

The 35% burden is broken down as follows:

<b>Benefit Obligation</b>	<b>ISO Cost Components</b>	<b>Rate</b>
Health and Welfare plans Medical, Dental and Vision	Medical, dental and vision; life, accidental death and long-term disability insurance; state unemployment insurance; and worker's compensation	12%
Retirement Benefit Plans	Retirement Savings Benefit Plan 401(k); Federal social security and Medicare; executive retirement plans; and Retiree Medical Benefit Plan	22%
Other obligations	Administration related costs	1%
<b>Total Burden</b>		<b>35%</b>

## Occupancy and Equipment Leases

Occupancy and equipment leases held steady in 2010 from 2009 at \$9.9 million. Facility costs increased \$400,000 in 2010 over 2009 related primarily rental terms. Equipment leases in 2010 decreased by \$400,000 from 2009 due to lease expirations.

## Telecom and Maintenance Costs

Telecom and hardware and software maintenance costs increased \$4.3 million for the 2010 budget amounting to \$17.6 million compared to \$13.3 million in 2009. The increase of 32.5% relates primarily to the additional maintenance costs for the new market systems.

## Consultants, Contractors and Temporary Staff

Consulting, contracting and temporary staff costs were reduced by \$3.6 million in 2010 to \$12.8 million from \$16.4 million in 2009. The decrease of 22.0% was primarily in the Corporate Services and Operations divisions. Consulting and contracting makes up approximately 7.5% of the 2010 budget down from 10.0% in the 2009 budget.

The ISO evaluates on an ongoing basis how to fulfill its responsibilities in a manner that is cost effective while providing the highest service quality, whether this is through hiring full-time employees or through the use of outside resources (contractors, consultants, or temporary staff). At times, the company may "in-source" work that was previously performed by contractors when the work is of an ongoing nature and can be performed at lower overall cost and with the same or better service quality.

## Professional Fees

Professional fees decreased \$600,000 to \$6.2 million in 2010 from \$6.8 million in 2009. The decrease of 8.8% resulted from lower professional fees primarily legal.

## Training, Travel and Other Costs

Training, travel and other costs decreased \$1.1 million or 11.2% to \$8.7 million in 2010 from \$9.8 million in 2009 primarily related to reductions in recruiting and relocation costs and travel and training totaling \$1.3 million offset by a \$200,000 increase for insurance premiums.

## Reconciliation with 2009 O&M Budget

The O&M budget increased by \$6.0 million or 3.8% to \$162.7 million in 2010 compared to \$156.7 million in 2009. A reconciliation of the change follows (\$ in millions):

<b>2009 Operations and Maintenance Budget</b>	<b>\$156.7</b>
<b>Increases in the budget</b>	
Hardware and software maintenance	3.8
3.5% merit increase for staffing	3.1
Decrease in vacancy factor	1.8
Additional overtime for shift workers	1.5
Increase in burden to 35%	1.1
Incentive compensation to reflect increased payroll costs	0.9
Wide area network costs	0.5
Facility rental costs	0.4
Other increases	0.5
<b>Net increases in the budget</b>	<b>13.6</b>
<b>Decreases in the budget</b>	
Consulting, contracting and temporary staff	(3.6)
Reduced staffing and overtime	(1.4)
Training, travel and conferences	(0.9)
Professional fees	(0.6)
Relocation and recruiting	(0.5)
Equipment leases	(0.4)
Other decreases	(0.2)
<b>Net decreases in the budget</b>	<b>(7.6)</b>
<b>2010 Operations and Maintenance Budget</b>	<b>\$162.7</b>

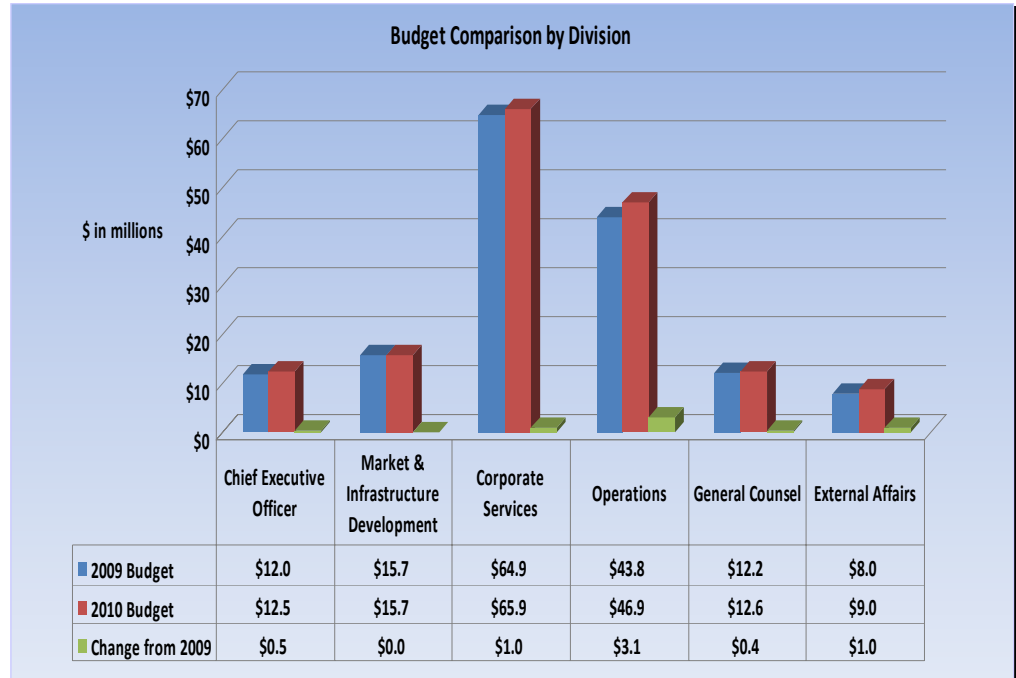
## V. ISO DIVISIONAL BUDGET OVERVIEWS

Each corporate division provides a description of their department, functions, staffing, and proposed budget. The divisions are presented in the following order:

- Chief Executive Officer (includes Department of Market Monitoring, Human Resources and Organizational Effectiveness)
- Market and Infrastructure Planning
- Corporate Services
- Operations
- General Counsel
- External Affairs

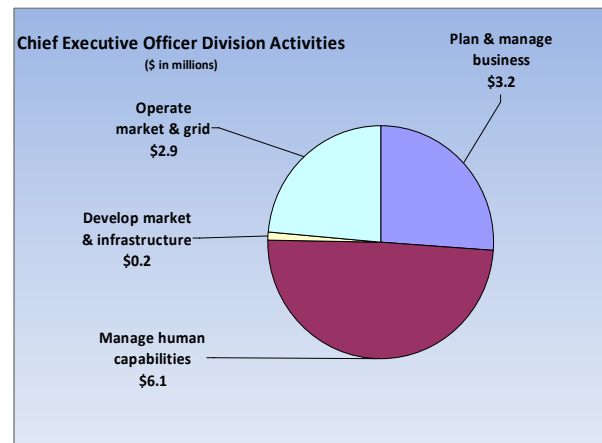
The 2010 proposed budget of \$162.7 million compares with the 2009 budget of \$156.7 million, which is an increase of \$6.0 million or 3.8%. Operations accounted for 52% of the increase while Corporate Services and External Affairs

made up 17% each and the Chief Executive Officer and General Counsel accounted for 8% and 6% respectively. Staffing decreased by 6 to 569 from 575.



### Chief Executive Officer Division (including Human Resources, Department of Market Monitoring and Organizational Effectiveness)

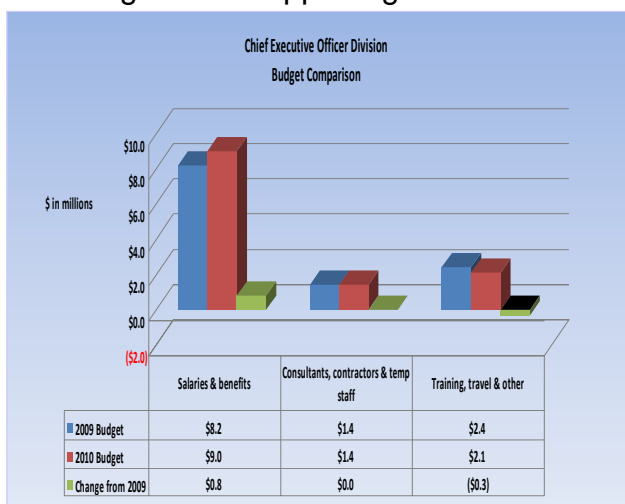
The division comprises the office of the Chief Executive Officer and two other departments. The office of the Chief Executive Officer includes Organizational Effectiveness, which develops, and implements programs designed to improve and facilitate the achievement of the organization's objectives, and is responsible for strategic planning, business process and quality, enterprise risk management and business continuity. Organizational Effectiveness leads and delivers innovative and sustainable enterprise



programs designed to optimize and preserve corporate performance; identifies, assesses, monitors, reports and manages risk and opportunity, with the objective of maturing its enterprise risk management capabilities over the next few years; and facilitates effective strategic leadership, decision-making, governance, and business continuity through a variety of activities and specific projects.

The Department of Market Monitoring mandate is to provide independent oversight and analysis of the ISO markets for the protection of consumers and market participants by the identification and reporting of market design flaws, potential market rule violations, and market power abuses. To carry out this mandate the department is staffed with a highly skilled group of monitoring analysts with advanced degrees in engineering and economics. The department analyses and recommendations are provided in regular quarterly and annual reports on market issues and performance as well as in periodic ad-hoc reports.

The Human Resources Department develops and implements effective “people” strategies and supporting initiatives that enable ISO to achieve business objectives through the attraction and retention of highly qualified and skilled talent.

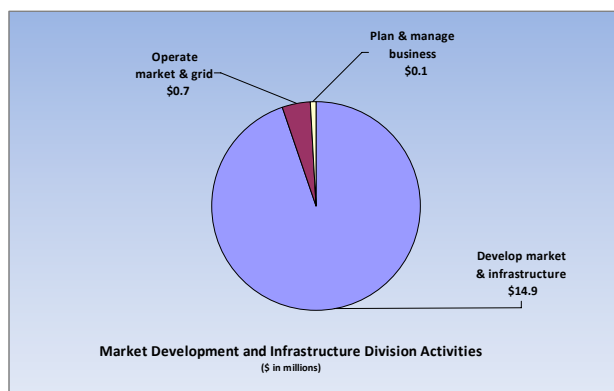


### Discussion of Proposed Budget

The 2010 proposed budget of \$12.5 million compares with the 2009 budget of \$12.0 million, which is an increase of \$500,000 or 3.7%. Staffing increases of 2 to 43 from 41 and other personnel cost increases aggregating \$1.0 million are offset by decreases in relocation and recruitment costs of \$500,000 million due to anticipated fewer open positions.

## Market and Infrastructure Development

The division is responsible for developing a forward-looking, coordinated transmission plan that provides for full compliance obligations, incorporates infrastructure planning initiatives that facilitate a robust market, support the Resource Adequacy program, generator interconnection studies and renewable integration analysis. Other responsibilities include assessing the feasibility of all long-term congestion revenue rights, performing annual congestion studies as required by federal regulations, performing seasonal

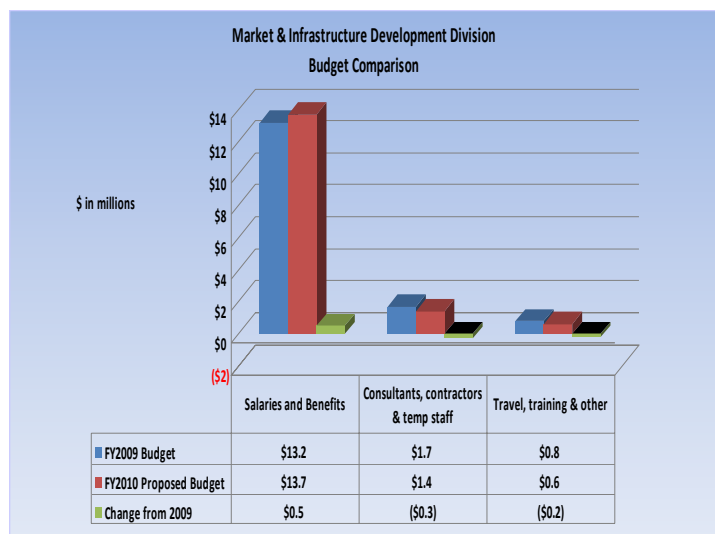


operating studies, maintaining operating procedures, supporting real time operations and coordinating with surrounding control area operators on engineering issues.

The Market and Product Development Department is responsible for the design of proposed market rules including those mandated for enhancement, such as convergence bidding, scarcity pricing, expanded functionality for demand response participation in ISO markets, real-time dispatch and pricing rules for constrained generation and decremental bidding rules. On-going responsibilities include development of policy positions on regulatory issues and responsibility for over 700 ISO regulatory contracts, including negotiation, drafting and administration. This department provides subject matter expertise and regulatory support on state initiatives such as greenhouse gases, state regulatory proceedings on a series of resource adequacy and demand response topics, locational capacity requirements, loss of load studies for planning reserves and import allocations, and provides technical support to Market Services on congestion revenue rights and to Market Operations on full network modeling capabilities.

The Department of Regional Market Initiatives is responsible for regional coordination, including the conceptual development and promulgation of regional regulatory and market related policy initiatives from inception through implementation. This includes consideration, interaction, coordination and cooperation with ISO stakeholders and

market participants, including external balancing authorities, other regional entities, and state and federal regulatory agencies.



### Discussion of Proposed Budget

The 2010 proposed budget of \$15.7 million is unchanged from the 2009 budget. Staffing increases of 4 to 80 from 76 and other personnel cost increases \$500,000 are offset by decreases in consulting costs of \$300,000 and travel and training of \$200,000.

## Corporate Services

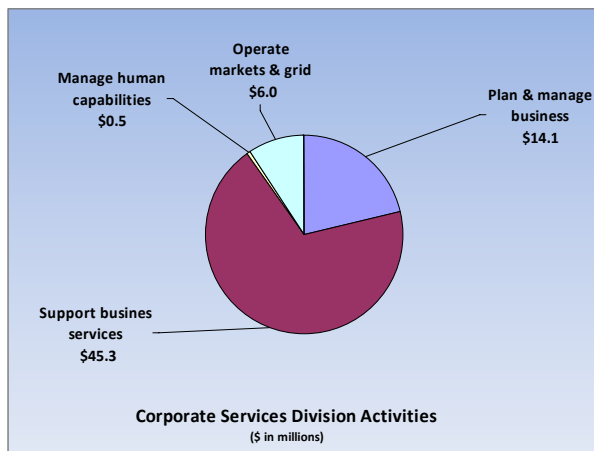
Corporate Services encompasses Information Technology, Accounting, Treasury and Credit, Facilities and Procurement and Vendor Management.

Information Technology is the largest function within Corporate Services playing a central role in providing reliable, low-cost, efficient infrastructure, processes, and systems to the ISO enterprise. These activities are critical to the ISO's ability to provide world-class services and innovation through technology that will result in the delivery of

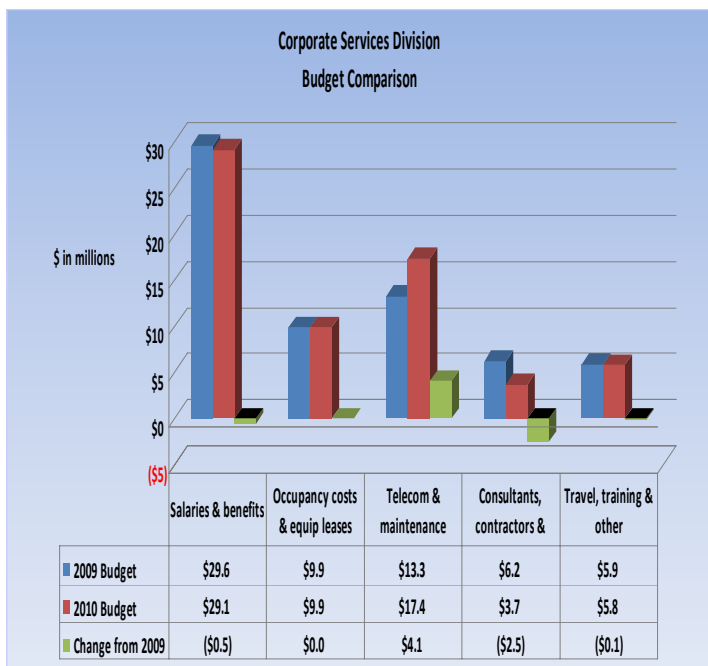
exceptional system availability and new functionality in accordance with the Strategic Plan.

The Accounting Department is responsible for implementing internal control policies, general accounting and financial reporting, and payables and receivables. The Treasury and Credit Department is responsible for credit management, investments, debt, financial administration of capital projects and financial planning, budgeting and rates. The Facilities Department manages a highly reliable building infrastructure that supports a safe, efficient and comfortable work environment.

Procurement and Vendor Management Department supports cost containment policies by purchasing goods and services through competitive vendor selection and cost management.



The division's goals are set around the objective “Organizational Excellence” that focuses on continuous improvement to processes, systems and innovative resource management. This approach results in higher productivity and effective cost controls.



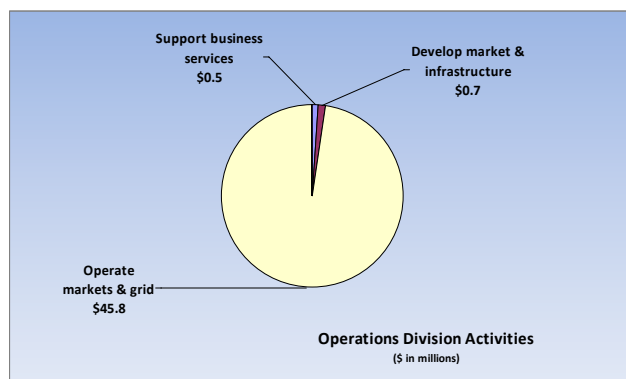
### Discussion of Proposed Budget

The 2010 proposed budget of \$65.9 million compares to the 2009 budget of \$64.9 million, which is an increase of \$1.0 million, or 1.5%. The increase was attributable to additional hardware and software maintenance costs related to the new market amounting to \$3.8 million offset by reduced consulting, contracting and temporary staff of \$2.5 million, a net decrease in personnel costs of \$500,000 and a reduction in other costs of \$200,000. Staffing decreased by 14 to 182 from 196.

## Operations

The division’s main mission is the reliable operation of the power grid, markets and operations support and comprise the Real-Time Grid Operations, Market Services, Operations Support and Renewable Integration departments.

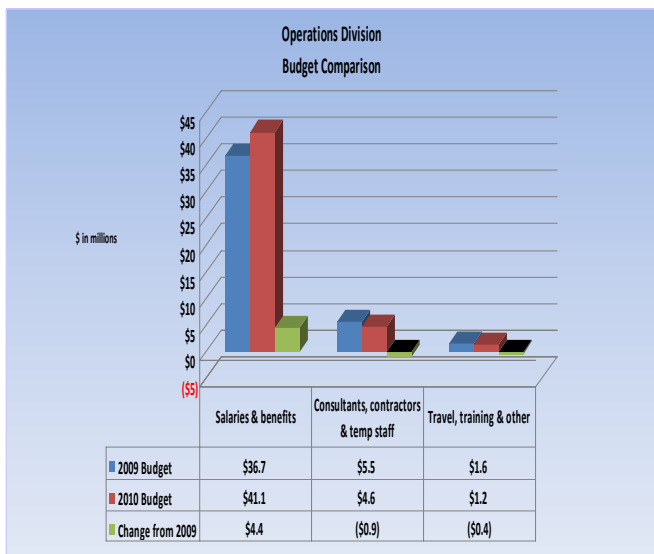
The power system is undergoing numerous changes including an increasing number of renewable and intermittent resources connecting to the grid, increasing levels of imports and exports, and emphasis on the development of demand resources. In addition, new applicable reliability standards may impact how the ISO reliably operates the grid. Through the use of advanced tools, the division will proactively manage the changing profile and characteristics of the power system. Development of a state-of-the-art control center (as part of the headquarters construction project) staffed by industry leading professionals will enable the ISO to provide a transparent view into the status of the real time grid and market. The new control center will use advanced technology and tools enabling the operators to proactively manage grid conditions and solve potential reliability problems well in advance of real time. Combined with the use of well-defined and efficient business and operating processes and controls, the Operations Division manages grid reliability in a transparent and consistent manner that minimizes the cost of delivering energy to California consumers.



The Operations Division is becoming a center of excellence in both grid and market operations by further developing a professional staff that is highly skilled in the use and application of the advanced technologies and tools necessary to reliably operate the grid and facilitate efficient markets in complex environments. The Division strives to operate forward and real time markets in a transparent, consistent, and efficient manner.

Market Services supports the implementation of market enhancements that facilitate transparent, consistent, and efficient operations and will reduce the settlement timeline

to achieve efficient market outcomes. The division further develops and implements cross-training, market based training, forward analysis simulation training and individual career progression programs in order to empower our people to operate in a more complex, technical and challenging operating environment.



### Discussion of Proposed Budget

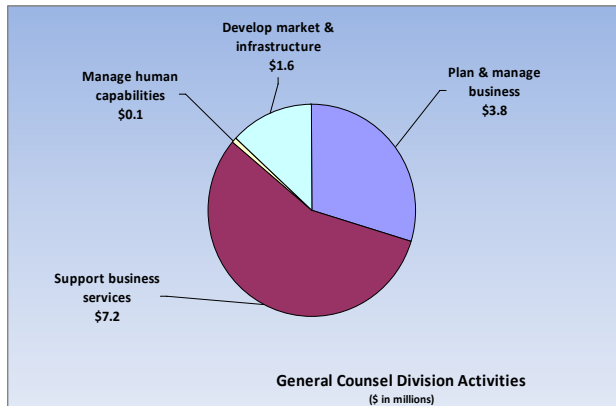
The 2010 proposed budget of \$46.9 million compares with the 2009 budget of \$43.8 million, which is an increase of \$3.1 million or 7.1%. Staffing decreased

by 3 in 2010 to 217 from 220 in 2009. The budget increase reflects personnel costs of \$2.9 million and an adjustment to reflect overtime for dispatch personnel of \$1.5 million mitigated by decreases in consulting of \$900,000 and training, travel and other costs of



\$400,000. Staffing increases of 4 to 80 from 76 and other personnel cost increases \$500,000

## General Counsel



The General Counsel Division goal is to be a highly skilled, highly ethical team of professionals universally sought after by other ISO divisions and departments for its sound judgment and ability to solve problems and add value in the legal and other areas of the company's business.

The Corporate Counsel Department is responsible for negotiating and drafting regulatory contracts, key vendor contracts and other agreements, as well as providing

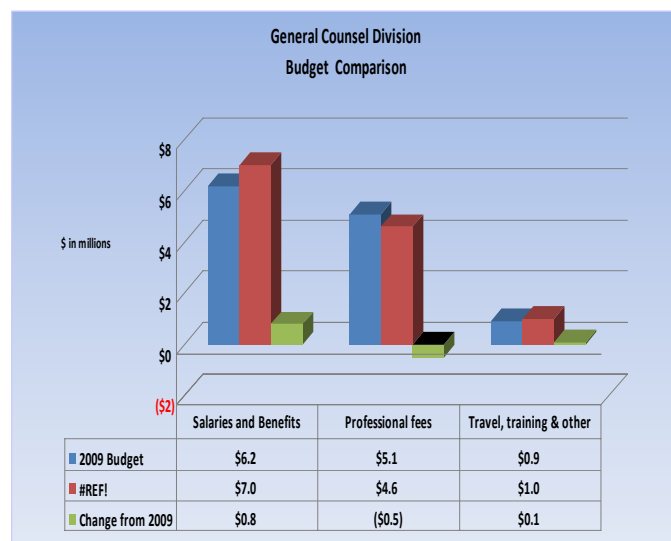
counseling on contracts, corporate, employment, intellectual property, finance, tax, governance, and other general legal matters including conflicts and ethics advice. The Regulatory Counsel Department has oversight over legal and regulatory functions (including tariff amendments), regulatory matters, and litigation. The Tariff Compliance Department is primarily responsible for interpretations, maintenance and compliance.

The Assistant Corporate Secretary coordinates Board related matters including communications, setting meeting agendas, and reviewing and coordinating the submission of Board documents. The Paralegal and Office Administration Department is responsible for providing paralegal, administrative assistant and technical assistant support to the Legal Department.

Mandatory Standards Compliance is a new department implemented in 2008. This department assesses and ensures business unit readiness for the new and revised standards regulators impose. The Internal Audit Department is responsible for the development and implementation of the annual audit schedule, auditor's plan and various internal audits.

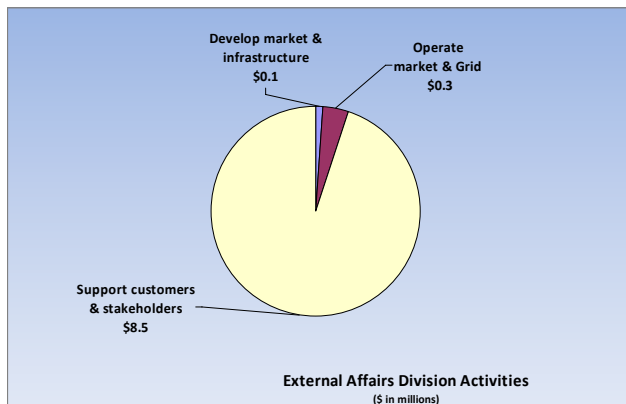
### Discussion of Proposed Budget

The 2010 proposed budget of \$12.6 million compares with the 2009 budget of \$12.2 million, an increase of \$400,000 or 3.3%. Increases in personnel costs amounted to \$800,000. Staff was increased by of 2 to 33 from the 2009 level of 31 to cover the growth in audit and compliance work and to



optimize the balance between outside counsel and internal resources. Outside counsel decreased \$500,000 while training, travel and other costs increased by \$100,000.

## External Affairs



The External Affairs Division strives for excellence by building high quality collaborative relationships with a wide variety of stakeholders, regulators and consumer groups providing timely and accurate information for public dissemination, fostering value added customer service, anticipating issues and addressing them in a timely manner, and advancing objectives benefiting consumers and the electric industry. Achieving these objectives requires collaboration across

the ISO to achieve timely resolution of customer issues, improving communication with stakeholders and effectively representing the ISO before state agencies, regional organizations and federal energy regulators.

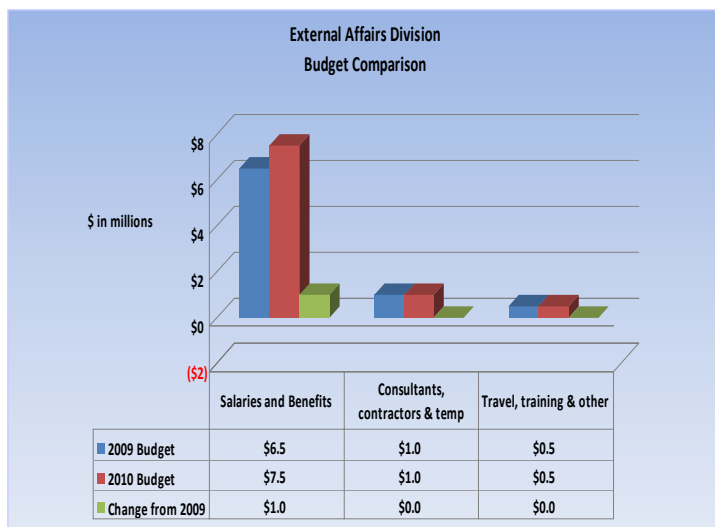
The Communications and Public Relations Department is responsible for internal and external communications, including all web communications, and employee and media relations. The department also issues stakeholder communications and develops new information products and services that add value to customer and stakeholder businesses.

The Government Affairs Department is responsible for overseeing interactions between the state legislature and governor's office regarding matters that could impact ISO, building and maintaining relationships with key regulatory agencies (including the California Public Utilities Commission, the California Energy Commission, and the California Air Resources Board), and overseeing any federal legislative and regulatory matters that could impact ISO.

The Customer Services and Industry Affairs Department is the primary business interface between ISO and its clients and stakeholders.

### Discussion of Proposed Budget

The 2010 proposed budget of \$9.0 million compares with the 2009 budget of \$8.0 million, which is an increase of \$1.0 million or 12.5% resulting from an increase in staff of 2 to 42 from 40 and other personnel costs.



## VI. DEBT SERVICE

Debt service budgeted for inclusion in the 2009 revenue requirement includes principal and interest on the ISO's outstanding Series 2008 bonds. These bonds will be retired in full by February 2014, bear interest at 5% and are summarized in the following table:

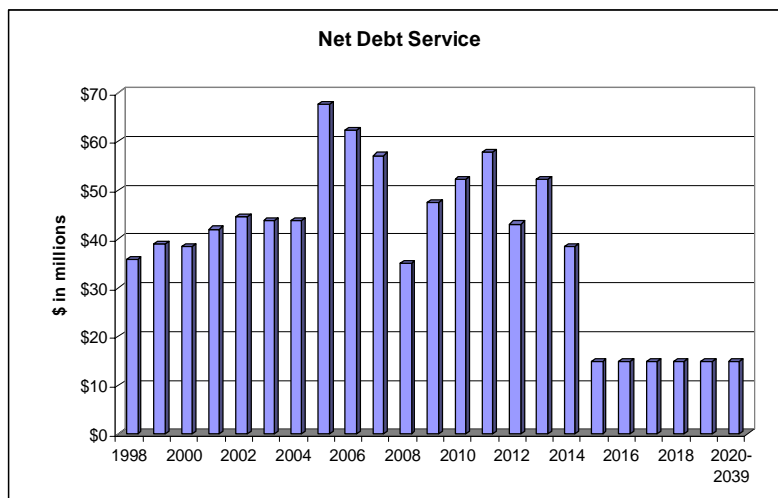
Amortization schedule for 2008 bonds (\$ in millions)	Principle	Interest	Total
2010	\$39.1	\$8.3	\$47.4
2011	42.3	6.5	48.8
2012	25.1	4.3	29.4
2013	36.0	3.1	39.1
2014	23.5	1.3	14.8
<b>Total</b>	<b>\$166.0</b>	<b>\$23.5</b>	<b>\$189.5</b>

The collection for the bonds in the revenue requirement occurs the year before the bond payments are made. Principle payments occur in February and interest is paid semiannually in February and August.

Debt Service (\$ in millions)	2010 Budget	2009 Budget	Change
Principle payments on 2008 bonds	\$42.3	\$39.1	\$3.2
Interest payments	6.5	8.3	(1.8)
<b>Subtotal</b>	<b>48.8</b>	<b>47.4</b>	<b>1.4</b>
25% Debt Service Reserve	12.2	11.9	0.3
<b>Total</b>	<b>\$61.0</b>	<b>\$59.3</b>	<b>\$1.7</b>

### 2009 Facility Bond Offering

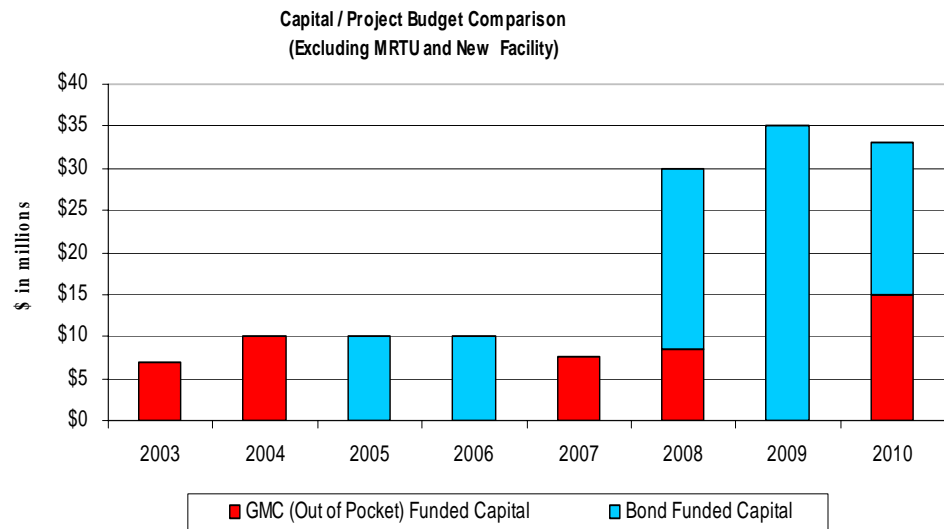
In 2009, the ISO issued debt to finance a new facility in Folsom on land owned by the



ISO. The 2010 revenue requirement excludes debt service costs related to this offering, as interest carrying costs would be funded from the proceeds of the offering (as capitalized interest). The structure of the bonds is a fixed rate debt at rates from 4.5% to 6.25% with a term of 30 years. Debt service on the bonds would ultimately replace the lease payments the ISO makes on its current facilities.

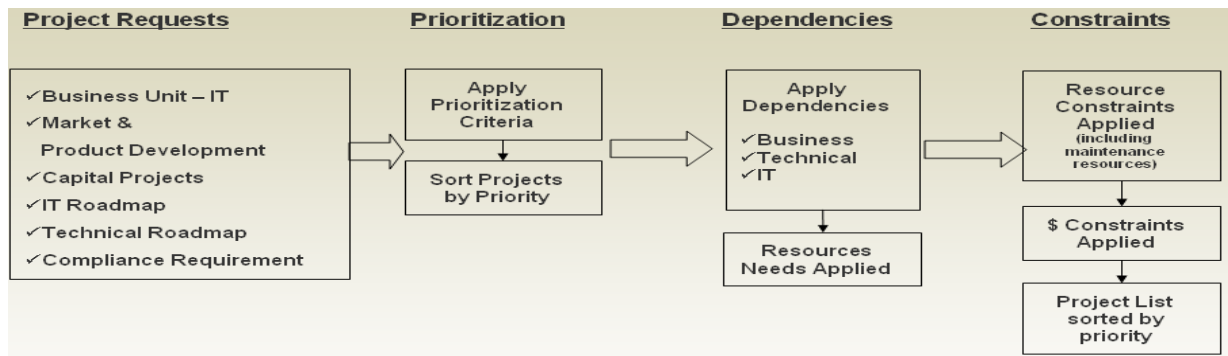
## VII. CAPITAL PROJECT BUDGET

The planned 2010 capital budget of up to \$33.0 million will fund projects as detailed on the following pages. Of that amount, \$15.0 million will be funded out of operating funds and the remaining \$18.0 million will come from the 2008 bond proceeds. Additional assessment of capital spending needs will continue over the coming months. The current project list excludes the ISO facility of \$160.0 million, which will be funded separately from the 2009 bonds.



### Capital / Project Budget Development Process

The 2010 capital budgeting process will be conducted from July to November 2009. Throughout the year, the Program Office collaborates with the internal business units and maintains a list of project needs. These projects are ranked and assessed against a list of corporate strategic objectives from the Strategic Plan and cross-referenced to the enterprise risk inventory. Additional reviews will be conducted in October and November to further refine the project list using criteria applied to each project to result in prioritized list. An overview of the process and the criteria applied follows:



Ranking Criteria for Capital Projects		
Criteria	Strategic Objective	Weight
<b>Benefits</b>		
Improving operations efficiency	Excellence in grid operations	10
Improving market efficiency	Robust and transparent electricity markets	10
Promote infrastructure development	Infrastructure guided by price transparency	10
Stakeholder priority	Superior customer service	10
Regulatory requirement	Alignment with state and federal priorities	10
Internal employee satisfaction	Organizational effectiveness – people strategies	5
ISO process improvement	Organizational effectiveness – maturity in capabilities	5
System qualities	Organizational effectiveness - maturity in capabilities	7
<b>Feasibility</b>		
Requires market participant development efforts		7
Impact on systems and resources		7
Project implementation costs		10
Operations and maintenance costs		7
Executive discretion		10

## Capital Project List

This list of projects put forward is consistent with the proposed funding level, and provides an indication of the projects to be initiated during 2010. All projects that are identified for 2010 will be subject to additional review before funding is approved, including further consideration of project need, a cost-benefit analysis and completion of a project plan. Specifically, the Corporate Management Committee, made up of the chief executive officer, chief financial officer, general counsel and director of organizational effectiveness, reviews and approves all projects considered for funding in 2010. Priorities may change during 2010 as a result of developments during 2009.

Proposed Capital Projects for 2010	Amount
<b>Customer Focus (External)</b>	
Integration of renewable resources program	Medium
Demand response program	Large
Rules to encourage the ability to dispatch wind and solar resources	Medium
Day ahead scheduling of intermittent resources	Small
<b>Total</b>	<b>4,000,000</b>

<b>Proposed Capital Projects for 2010</b>	<b>Amount</b>
<b>Operational Excellence (Process)</b>	
Computer purchases - hardware and software	Large
Facilities - furniture purchases	Small
Implement network application tools - dynamic stability	Medium
Engineering analysis tools	Small
Phasor measurement infrastructure and wide area monitoring	Medium
Resource interconnection management system, release 3	Small
Operational improvements to market systems	Large
Convergence bidding and demand response products	Large
Load aggregation point granularity	Medium
Procedure to apply resource adequacy must offer obligation for a subset of hours	Small
Enhancements to standard resource adequacy capacity product	Small
Bid cost recovery for units running over multiple operating days	Large
Outage management system – multi-year projects	Large
Congestion revenue rights enhancements	Small
Energy management system: grid operations training simulator	Small
Energy management system enhancements: automatic generation control tuning tool and resource monitor	Small
Operational meter analysis and reporting application: new features, corrections and automation	Small
Operational tools: netting checker, existing transmission contracts, risk predictor and load shedding	Small
<b>Total</b>	<b>22,00,000</b>
<b>Institutional Sustainability (People/Technology)</b>	
Customer relationship management system	Medium
Capabilities maturity program - performance reporting	Small
Data warehouse design and implementation	Medium
Oracle identity management enhancements	Small
New reporting platform to replace Actuate	Medium
Microsoft communication server to replace Jabber	Small
Control area scheduler: application upgrade and hosting option	Small
Compliance application production system: integration into settlement and market clearing system	Small
Web based tariff: eTariff	Small
Program office capitalized labor	Medium
Data archive tool	Small
<b>Total</b>	<b>6,000,000</b>

<b>Proposed Capital Projects for 2010</b>	<b>Amount</b>
<b>Reasonable Cost (Financial)</b>	
Financial systems enhancements	Medium
<b>Total</b>	<b>1,000,000</b>
<b>Total Proposed Capital Projects for 2010</b>	<b>\$33,000,000</b>

Note: The actual projects completed during 2010 will vary, including the potential addition of projects not on this list, the deferral of projects on this list to future years, or the elimination of projects on this list if no longer necessary.

## VIII. MISCELLANEOUS REVENUE AND EXPENSE RECOVERIES

Miscellaneous revenue and expense recovery for 2010 is budgeted at \$8.1 million, a \$2.0 million increase over 2009 primarily to reflect earnings on the investment portfolio. The details of this category are as follows:

Miscellaneous Revenue and Expense Recovery (\$ in millions)	2010 Budget	2009 Budget	Change
Scheduling Coordinator application and training fees, metered sub-system deviation fees, station power and wind forecasting and other fees	\$0.5	\$0.5	\$ -
Interest earnings	3.8	2.3	1.5
Large generation interconnection fees	1.8	1.3	0.5
California-Oregon Intertie path operator fees	2.0	2.0	-
<b>Total</b>	<b>\$8.1</b>	<b>\$6.1</b>	<b>\$2.0</b>



## **IX. RESERVE CREDIT FROM 2009**

The operating reserve credit is a reduction or offset to the ISO revenue requirement for 2010. In any year that the ISO's operating reserve account is expected to exceed 15% of the prospective year's O&M budget, the excess goes toward reducing the revenue requirement for the coming year. For 2010, the ISO forecasts a credit from the operating reserve account of \$35.5 million. The principle changes were the reduction of interest on generator fines arising from a Federal Energy Regulatory Commission order in the 2001 energy crisis refund case and collection of an extra month's grid management charges arising from the implementation of the payment acceleration market software enhancement in November 2009. The collection of an extra month's grid management charge will allow the expenditure for capital projects without the associated borrowing costs and 25% interest reserve. The reserve credit is calculated separately for each grid management charge category. A summary follows:

<b>Reserve Credit from prior year (\$ in millions)</b>	<b>2010 Budget</b>	<b>2009 Budget</b>	<b>Change</b>
Increase in 15% reserve for O&M budget	\$(0.9)	\$(0.6)	\$(0.3)
25% debt service collection from 2009	12.2	11.9	0.3
Collection of additional months grid management charges from implementation of payment acceleration	15.4	-	15.4
Reduction in interest owed on generator fines arising from FERC ruling in 2001 refund case and true-up of actual to forecast revenues and expenses	8.8	5.7	3.1
<b>Total</b>	<b>\$35.5</b>	<b>\$17.0</b>	<b>\$18.5</b>

## **X. UNBUNDLED GRID MANAGEMENT CHARGE CALCULATIONS**

The ISO recovers its costs through separate grid management charges to market participants. Service categories and billing determinants are listed on the following page.

### **Rate Calculation**

The rate for each service category is calculated as follows:

$$\frac{\text{Costs Allocated to Service Category}}{\text{Billing Determinant Volume}} = \text{Grid Management Charge Rate}$$

### **Components of Grid Management Charge**

The numerator for the above equation has been determined by summing ISO costs for each service category, such as the following:

- Operating and maintenance costs
- Debt service costs
- Cash funded capital / project expenditures
- Miscellaneous revenues and expense recoveries
- Operating reserve account credit

## Billing Determinants

The billing determinants for the rate structure are as follows:

<b>GMC Rate Structure</b>			
<b>Function</b>	<b>Rate Name</b>	<b>Bill Determinant</b>	<b>Charge Code</b>
Core Reliability Services (CRS)	CRS-demand (peak)	Monthly non-coincident peak (NCP) hour ending (HE) 7 – HE 22	4501
	CRS-demand (off-peak)	Monthly NCP all other hours	4502
	CRS-energy export	MWh of exports, excluding exports on transmission ownership rights (TOR)	4503
Energy Transmission Services (ETS)	ETS-net energy	MWh of metered control area load, excluding load on TORs	4505
	ETS-uninstructed deviations	MWh of uninstructed imbalance energy (UIE) netted over the settlement interval (except UIE associated with Participating Intermittent Resource Program PIRP)	4506
CRS/ETS	TOR	Metered control area load MWh on TORs	4508
Forward Scheduling (FS)	FS	Count of hourly schedules (including awarded RUC schedules)	4511
	FS-inter-Scheduling Coordinator (SC) trades	Count of hourly trades (including trades of Integrated Forward Market uplift obligations)	4512
	FS-PG&E-PGAB inter-SC trades	Count of hourly trades for PG&E-PGAB	4513
Market Usage (MU)	Purchases and sales of ancillary services (AS)	Day ahead and hour ahead scheduling process and real time MWh	4534
	Instructed energy (IE) (real time)	MWh of IE	4535
	Net uninstructed deviations, (Real Time)	MWh of UIE netted over the settlement interval (except UIE associated with PIRP)	4536
	Forward energy	MWh of net energy purchases or sales in day ahead market	4537
ETS/MU	Monthly netted deviations – PIRP	MWh of UIE netted over the month for PIRP	4546
Settlements, Metering, and Client Relations (SMCR)	SMCR	Monthly customer charge	4575

## Component Rates

The rates that result from the budget are as follows:

### Net Revenue Requirement by Service Category (\$ in millions)

Charge Code	Service component	2010 Budget	2009 Budget	\$ Change	% Change
4501	CRS – demand (peak)	\$36.1	\$32.0	\$4.1	12.8%
4502	CRS – demand (off-peak)	1.0	0.9	0.1	11.1%
4503	CRS – energy exports	9.2	8.2	1.0	12.2%
4505	ETS – net energy	72.4	72.5	(0.1)	(0.1)%
4506	ETS - deviations	12.1	12.8	(0.7)	(5.5)%
4508	CRS / ETS - TOR	1.0	0.9	0.1	11.1%
4511-13	Forward Scheduling	20.2	16.2	4.0	24.7%
4534-38	MU – AS and real time energy	28.5	29.4	(0.9)	(3.1)%
4537	MU – forward energy	12.8	18.2	(5.4)	(29.7)%
4575	SMCR	1.8	1.8	-	-
<b>Total</b>		<b>\$195.1</b>	<b>\$192.9</b>	<b>\$(0.9)</b>	<b>(0.5)%</b>

### Billing Determinant Volume Forecast (in thousands of Units)

Charge Code	Service component	2010 Budget	2009 Budget	Unit Change	% Change
4501	CRS – demand (peak) - MW months	449.6	454.8	(5.2)	(1.1)%
4502	CRS – demand (off-peak) – MW months	15.1	19.7	(4.6)	(23.4)%
4503	CRS – energy exports – MW of exports	8,076.0	12,078.0	(4,002.0)	(33.1)%
4505	ETS – net energy – MW of load	238,711.4	244,749.7	(6,038.3)	(2.5)%
4506	ETS – deviations – MW of net uninstructed energy	11,102.7	12,517.9	(1,415.2)	(11.3)%
4508	CRS / ETS – TOR – MWh of exports	4,075.0	3,898.4	176.6	4.5%
4511-13	FS – number of hourly schedules and awarded AS bids	9,891.4	14,797.5	(4,906.1)	(33.2)%
4534-38	MU – AS and real time energy – MWh of awarded AS, IE and net UE	75,927.0	49,471.5	26,455.5	53.5%
4537	MU – Forward energy – MWh of net purchases and sales in day ahead market	89,063.6	42,156.6	46,907.0	111.3%
4575	SMCR – Customer months	1.8	1.8	-	-

### Grid Management Charge (Rate per Unit)

Charge Code	Service component	2010 Budget	2009 Budget	\$ Change	% Change
4501	CRS – demand (peak)	\$80.18	\$70.28	\$9.90	14.1%
4502	CRS – demand (off-peak)	68.47	46.38	22.09	47.6%
4503	CRS – energy export	1.14	0.68	0.46	67.6%
4505	ETS – net energy	0.30	0.30	-	-
4506	ETS - deviations	1.09	1.02	0.07	6.9%
4508	CRS / ETS - TOR	0.25	0.23	0.02	8.7%
4511-13	FS	2.04	1.10	0.94	85.5%
4534-38	MU – AS and real time energy	0.37	0.59	(0.22)	(37.3)%
4537	MU – forward energy	0.14	0.43	(0.29)	(67.4)%
4575	SMCR	1,000.00	1,000.00	-	-

The following table provides comments on the changes in grid management charge rates from the current year to the next. The overall rate change is attributable to three components:

- Changes in the overall ISO revenue requirement
- Other cost impacts, including changes in O&M budget, debt service, other expense recoveries and operating reserve attributed to each grid management charge service category
- Changes in the billing determinant volume estimates

### Grid Management Charge (Rate per Unit)

Charge Code	Service component	Change in Rate	Comments on Change
4501	CRS – demand (peak)	\$9.90	90% due to change in costs related to under collection in prior years and 10% due to volume decrease
4502	CRS – demand (off-peak)	22.09	75% due to reduced volumes in 2010 and 25% related to under collection of prior year charges
4503	CRS – energy export	0.46	82% due to reduced volumes in 2010 and 18% related to under collection of prior year charges
4505	ETS – net energy	-	No change from 2009
4506	ETS - Deviations	0.07	Due primarily to reduced volumes in 2010
4508	CRS / ETS - TOR	0.02	Due primarily to under collection in prior years
4511-13	FS	0.94	75% due to reduced volumes in 2010 and 25% related to under collection of prior year charges
4534-38	MU - AS and real time energy	(0.22)	Due primarily to increased volumes in 2010
4537	MU – forward energy	(0.29)	56% due to increased volumes in 2010 and 44% related to over collection of prior year charges
4575	SMCR	-	No change from 2009