2013 Budget and Grid Management Charge Rates

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PRELIMINARY

Prepared by Department of Financial Planning
California Independent System Operator Corporation

2013 Budget and GMC Rates

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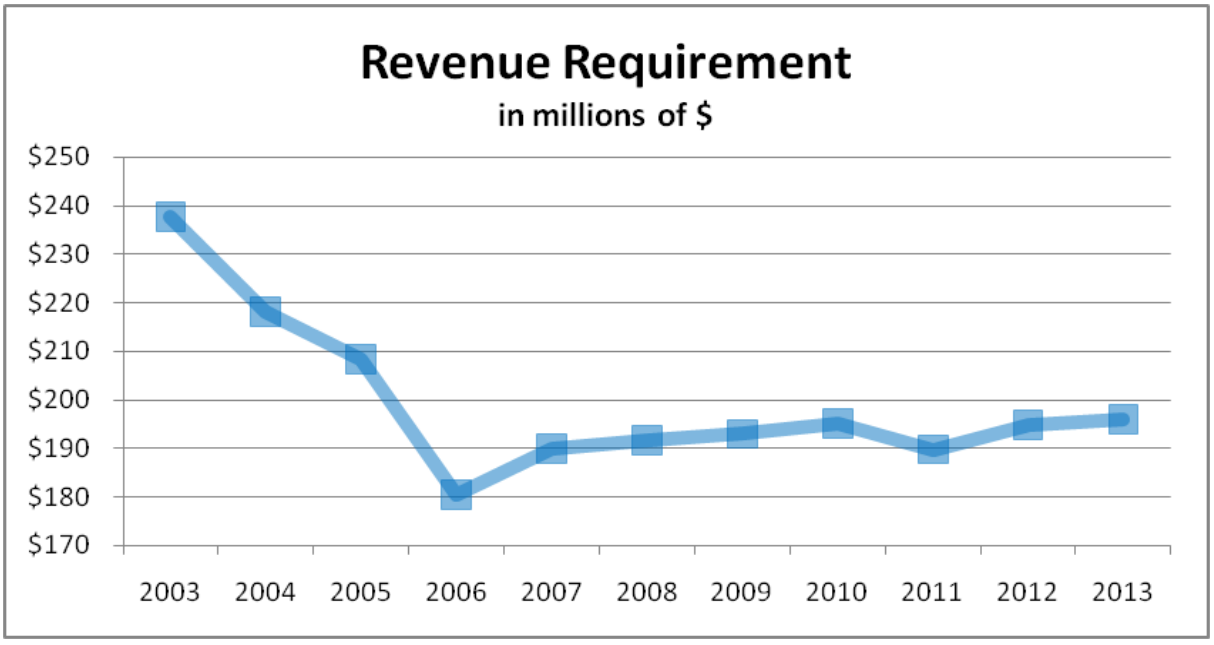
I. 2013 Revenue Requirement

The 2013 proposed budget provides for a revenue requirement of $196.0 million, $1.2 million higher than 2012. As further described in this document, the California Independent System Operator Corporation is increasing service levels through the effective management and allocation of resources toward key corporate initiatives as outlined in the five-year strategic plan.

The ISO has been able to substantially reduce its revenue requirement since 2003 and has kept it in a tight range since 2006. While holding the revenue requirement growth rate over the last five years to less than 1.6 percent, transmission volumes have declined at a 1.5 percent rate during the same period.



The ISO projects that transmission volume will increase 1 percent from 2012 to 244.8 TWh, but it remains down 1.5 percent over the last five years. The growth in the transmission volume combined with a lower growth in the revenue requirement resulted in a flat grid management charge (GMC), as noted below.

The GMC is $0.801 per MWh, $0.003 lower than 2012.

Components of 2013 Revenue Requirement

A summary of the 2013 proposed revenue requirement compared to 2012 is as follows:

Revenue Requirement ($ in millions)	2013 Budget	2012 Budget	$ Change	% Change
Operating & Maintenance (O&M) Budget	$162.9	$163.0	$(0.1)	0.1%
Miscellaneous revenue	(7.9)	(8.4)	0.5	(6.0)%
Subtotal net O&M	155.0	154.6	0.4	0.3%
Debt Service including 25% reserve	42.5	46.3	(3.8)	(8.2)%
Cash funded capital	21.0	17.0	4.0	23.5%
Subtotal before revenue credit	218.5	217.9	0.6	0.3%
Revenue credit	(22.5)	(23.1)	0.6	(2.6)%
Total Revenue Requirement	**$196.0**	**$194.8**	**$1.2**	**0.6%**
Transmission volume in TWh	**244.8**	**242.4**	**2.4**	**1.0%**
Pro-forma Bundled GMC per MWh	**$0.801**	**$0.804**	**$(0.003)**	**(0.4)%**

The ISO recovers its revenue requirement through the unbundled GMC. Each unbundled service has corresponding rates paid by users of that service. Determining the rates follows this formula of calculating 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.

II. Budget Overview

This budget package provides an overview of and detail about the 2013 cost of service that consists of the following:

- operating and maintenance (O&M) budget (sections III thru V)
- debt service costs (section VI)
- capital and project funding (section VII)
- other revenues and expense recoveries (section VIII)
- revenue credit from operating reserve account (section IX).

The O&M budget, the primary focus of this report, is the largest of these components and consists of the costs incurred for ongoing operations. The O&M budget of $162.9 million in 2013 is $141,000 less than 2012. The O&M budget presentation is in three views as noted below:

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

Debt service costs are the principal and interest payments related to the ISO series 2008A and series 2009A bonds, and a 25 percent debt service reserve collection. The ISO issued in June 2008 fixed rate bonds that funded 2008 to 2010 capital expenditures and retired the existing variable rate demand bonds. During 2009, the ISO issued bonds to build a new headquarters facility in Folsom, California. Bond proceeds funded debt service during the building's development stage in 2009 through part of 2011. Total debt service to be collected in the 2013 revenue requirement decreased by $3.8 million to $42.5 million in 2013.

The ISO fully occupied its new headquarters and campus in mid-January 2011; its completion came in ahead of schedule and under budget. The building budget was $160.0 million and the final costs came in $14.7 million lower. To date, the ISO has received 11 different design and project awards as well as the top Platinum rating from the U.S. Green Building Council as part of its Leadership in Energy and Environmental Design (LEED) certification program. Designed to be as green as possible, the ISO headquarters is one of just 260 LEED Platinum certified facilities worldwide.

Capital and project requirements for 2013 are budgeted for approximately $19.5 million. Cash funded capital included in the revenue requirement is $21.0 million and any excess after the utilization of any remaining bond funds will be carried over to fund future years' capital requirements. Collecting capital as a component of the revenue requirement avoids additional costs of tax-exempt debt financing, including debt issuance costs, interest expense and the 25 percent debt service reserve. Total capital spending for 2013 is budgeted primarily for systems development related to expanding market capabilities and integrating renewable resources.

Other revenues and expense recoveries are offsets to the revenue requirement; such transactions include interest income, billings for large generator interconnection studies, forecast fees collected from intermittent resources and path operator fees for the California-Oregon Intertie.

In any year that the ISO operating reserve account exceeds 15 percent of the prospective year's O&M budget, the excess reduces the revenue requirement for the coming year. For 2013, the ISO forecasts a credit from the operating reserve account of $22.5 million.

A new rate design went into effect in 2012 that provides for three volumetric charges (and five transaction fees), as follows:

- market services charge, which makes up 27 percent of the revenue requirement;
- systems operations charge, which comprises 69 percent of the revenue requirement;
- congestion revenue rights (CRR) services charge, which makes up 4 percent of the revenue requirement.

The market services charge applies to MWh and MW of awarded supply and demand in the ISO markets. The systems operations charge applies to MWh of metered supply and demand in the ISO controlled grid. The CRR services charge applies to MWh of congestion.

Budget Guidance

The ISO held a budget kick off meeting with stakeholders in June 2012, seeking input on the budget goals. The feedback reinforced the Company's vision for the 2013 budget development. Guidance provided for developing the 2013 revenue requirement called for each ISO division to develop an O&M budget consistent with the five-year strategic plan that collectively does not increase the overall O&M budget.

The overall ISO budget results in a revenue requirement under the $199 million threshold that triggers a review filing with federal regulators. The budget achieves the goals outlined above and funds ISO operations and initiatives as set forth in the company's five-year strategic plan.

After the Board of Governors reviews the budget in September, the ISO posts it to its website for stakeholder review. Comments are also welcome in a workshop set for October 10, 2012 (notes of that discussion and subsequent stakeholder questions will be posted on the ISO website). The Board will consider approving the final budget in its December meeting.

Strategic Outlook

The ISO coordinates and advises state, regional and federal officials in shaping the policies to meet energy and environmental goals while enhancing and maintaining

reliability. Clean energy is already meeting policy goals with over 9,000 MW of renewable resources now connected to the ISO grid, including 4,600 MW of wind. Here is the ISO view of how demand, resources, and transmission will develop over the next decade, consistent with California's Clean Energy Future:

Demand:

- Smart grid technologies, as well as electric rate design reform will provide additional opportunities for customers to install behind-the-meter devices and technologies that can present price signals but still allow users to respond, as they deem appropriate.

- Demand response will play a major role in meeting peak power needs and managing intermittency of renewable resources. Price-driven demand response will be eligible to participate in the wholesale market, including ancillary service markets needed to support renewable integration.

Resources:

- Renewable energy will remain first in California's supply-side loading order.

- Regional coordination expands to help green the grid, to increase sharing of resources in the West and to strengthen and enhance reliability.

Transmission:

- ISO planning and state permitting processes are coordinated to ensure that transmission infrastructure is available to achieve renewable resource goals.

- Advanced transmission technologies, improved dispatch algorithms and enhanced system visibility leading to more efficient use of the grid.

- Transmission owners will remain obligated to maintain safety and reliability, and upgrade network facilities.

The ISO will maintain flexibility as a strategy for dealing with uncertainty in where, when and how much renewable resources are approved, sited and built. For instance, the ISO interconnection study queue continues to signal that solar resources growth will outpace wind expansion by 2020, which means the ISO must increase grid flexibility and market operations to foresee and accommodate evolving infrastructure development patterns.

Aligning with the Five-Year Strategic Plan

The ISO is continuing in 2013 the focus begun in 2005 to contain or lower operating costs while improving services and enhancing the reliability of the California

transmission grid. This includes, for instance, strengthening compliance efforts without adding costs. It also includes performing the increased responsibilities and necessary planning to integrate the thousands of megawatts needed to meet the 33 percent Renewable Portfolio Standards.

The 2013 budget aligns with the five-year strategic plan, which is the ISO's primary roadmap to achieve organizational and operational objectives and goals. The five-year strategic plan focuses on four strategies, as outlined below:

1. Facilitate California's transition to a smarter, cleaner, more reliable, and secure energy future — the ISO will provide independent analysis and perspective on what upgrades the grid needs, and when and where it needs them. This includes developing new market mechanisms to encourage building resources with the operational flexibility, such as fast ramping, to support the grid's increasing complexity.

2. Ensure continued reliability during grid transformation — the ISO will work closely with state energy agencies to develop a long-term energy procurement policies that ensure reliability across all areas of the grid. This includes ensuring existing generation facilities necessary to support renewable resource integration has the financial support they need to remain in the market as well as encouraging innovation, such as flexible storage, demand response and flexible generation.

3. Strengthen California's global leadership commitment to renewable, responsible and reliable electricity — the ISO has the duty to provide an independent perspective on what it takes to reliably operate the grid while the industry complies with the state's multiple energy and environmental mandates. Providing greater transparency for agency and public input into our planning processes will create new opportunities for policy coordination.

4. Explore opportunities for regional collaboration and focused technological innovation — the ISO encourages the rapid deployment of advanced technologies, such as synchrophasors, that provide near instant snapshots of grid conditions and faster ways to coordinate responses to manage devices such as energy storage and electric vehicles.

The full five-year strategic plan is posted on the ISO website.

The Reliable Power For A Renewable Future: 2012-2016 Strategic Plan contains the refined vision of moving the corporation forward and is supported by initiatives to further flesh out the ISO strategy, while the budget explains how the Corporation funds and allocates its resources to support its business plans. ISO management and staff created a 2013 budget that supports the strategic plan with the right mix of talent, skills and financial resources to be effective and successful.

Aligning the strategic planning process more closely with budget planning reveals with greater transparency how ISO resources are used and the 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

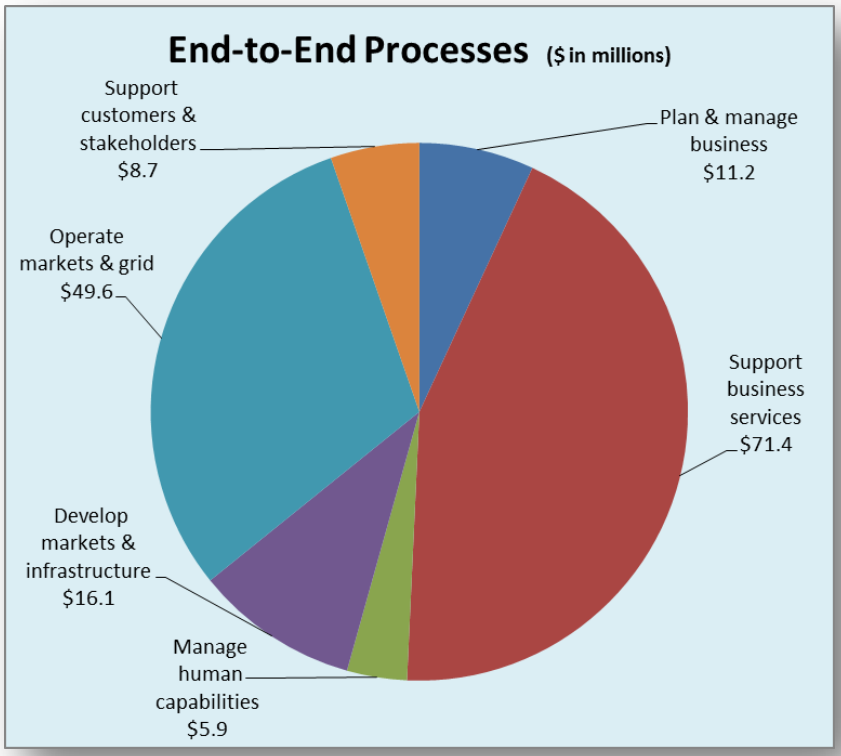
over resourced. The ISO is also scrutinizing day-to-day expenses in an effort to ensure the most effective use of budgeted resources.

The ISO leadership is actively involved with defining and nurturing a corporate culture of cost-consciousness while enhancing services but not adding costs. Stakeholders also participate in ISO governance by engaging in policy and tariff stakeholder processes that weigh and balance costs and reliability issues.

Not only is the ISO vigilant in containing costs, it also places a high emphasis on managing corporate resources in a smart and prudent manner that results in effective and efficient productivity.

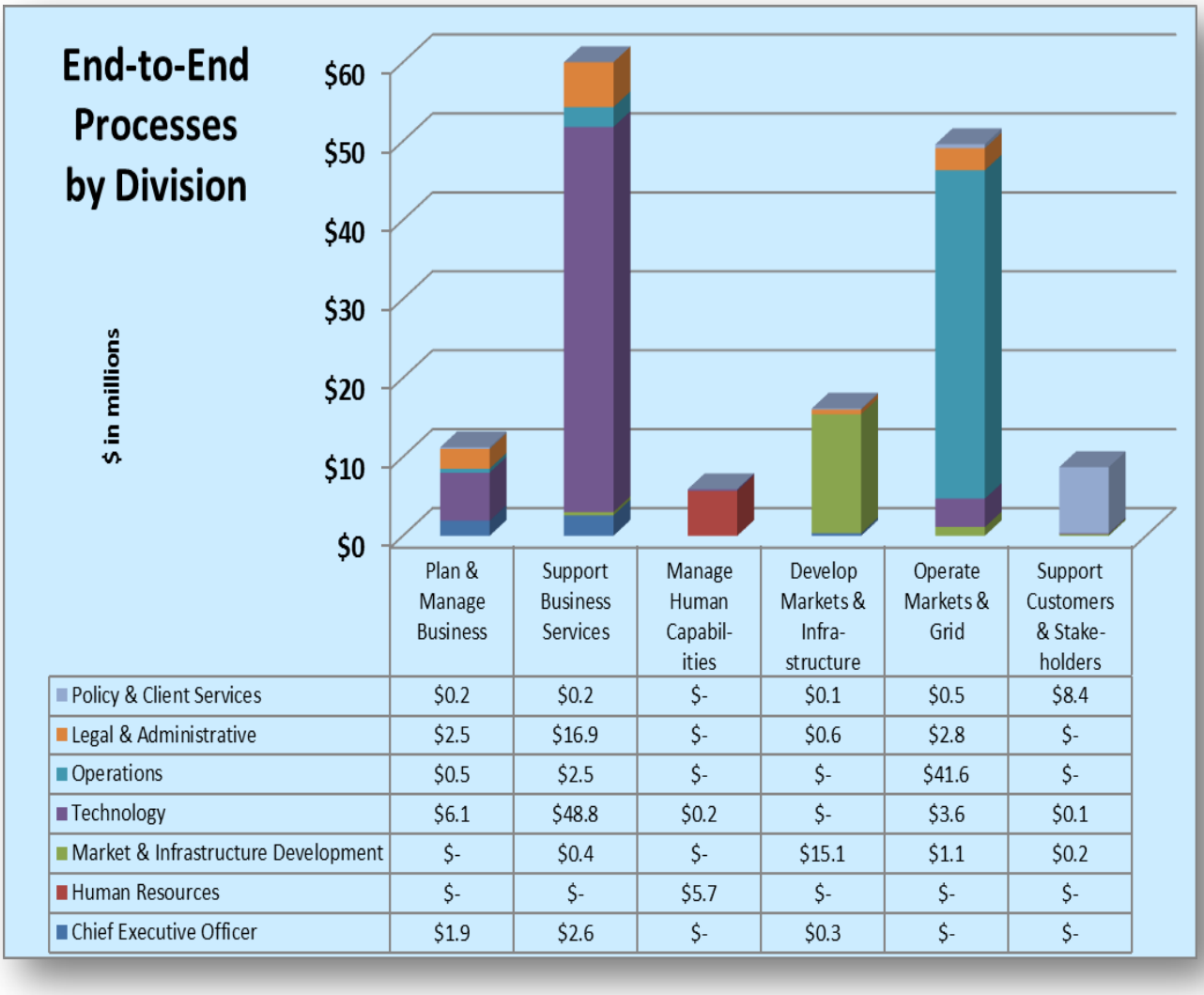
III. Process View

The ISO initiated activity based costing in the fall of 2009 and since then has further leveraged the system to provide greater transparency and granularity in how the budget supports corporate business plans. All employees are now charging time to second level processes. Costs for the activities were derived using the actual time reported by employees for the end-to-end process for a sample period in 2012. Those percentages were applied to the 2013 budget and then aggregated into the six summary activities described below. This budget reports the cost centers in the following buckets:



- 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; and
- Plan and manage business — strategic planning, governance, budgeting and project management

We allocated division costs into the end-to-end processes as follows:



	Plan & Manage Business	Support Business Services	Manage Human Capabil-ities	Develop Markets & Infra-structure	Operate Markets & Grid	Support Customers & Stake-holders
Policy & Client Services	$0.2	$0.2	$-	$0.1	$0.5	$8.4
Legal & Administrative	$2.5	$16.9	$-	$0.6	$2.8	$-
Operations	$0.5	$2.5	$-	$-	$41.6	$-
Technology	$6.1	$48.8	$0.2	$-	$3.6	$0.1
Market & Infrastructure Development	$-	$0.4	$-	$15.1	$1.1	$0.2
Human Resources	$-	$-	$5.7	$-	$-	$-
Chief Executive Officer	$1.9	$2.6	$-	$0.3	$-	$-

The ISO Board has approved three formal corporate initiatives for 2012 with eight associated goals. They are as follows:

1. Excellence in Grid and Market Operations

    - Goal 1 - sustain improved compliance levels by reducing incidents that affect grid reliability and violations of reliability standards.

    - Goal 2 - improve load and renewable generation forecasting

    - Goal 3 - improve real-time market performance by enhancing tools and processes to minimize the number of price corrections and manual dispatch interventions.

2. Infrastructure and Market Development

    - Goal 4 - facilitate renewable generation development by creating new policies and processes

    - Goal 5 - ensure reliable renewable resource integrations as well as complying with the state's clean water rule (once-through cooling).

3. Organizational Effectiveness

    - Goal 6 - implement a proactive customer service system that improves transparency and service.

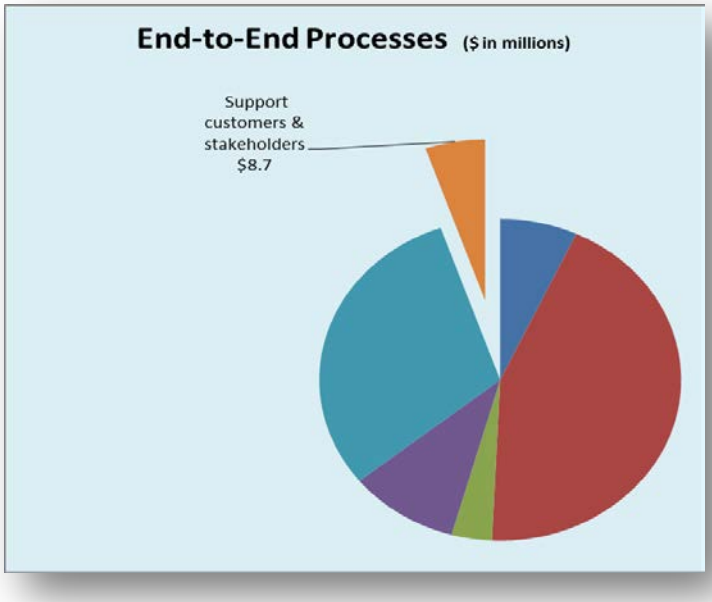
    - Goal 7 - complete critical market and technology projects that enhance functionality

    - Goal 8 - demonstrate fiscal responsibility by maintaining actual operating and maintenance expenses compared to 2012 budget.

Each corporate goal has associated initiatives that will develop the relevant policies, processes and services. Working these initiatives in a cross-functional and multi-disciplinary manner will allow the ISO to synergize its talent and optimize results.

Support Customers and Stakeholders

Support Customers and Stakeholders, amounting to $8.7 million and 33 staff, consists of the efforts produced by three divisions: Market Design and Infrastructure Development, Technology, and Policy and Client Services. The ISO is solid in its commitment to provide the highest quality of service to its customers, market participants and stakeholders. This includes resolving customer issues in a timely manner and streamlining access to market information when possible.



Primary Activities

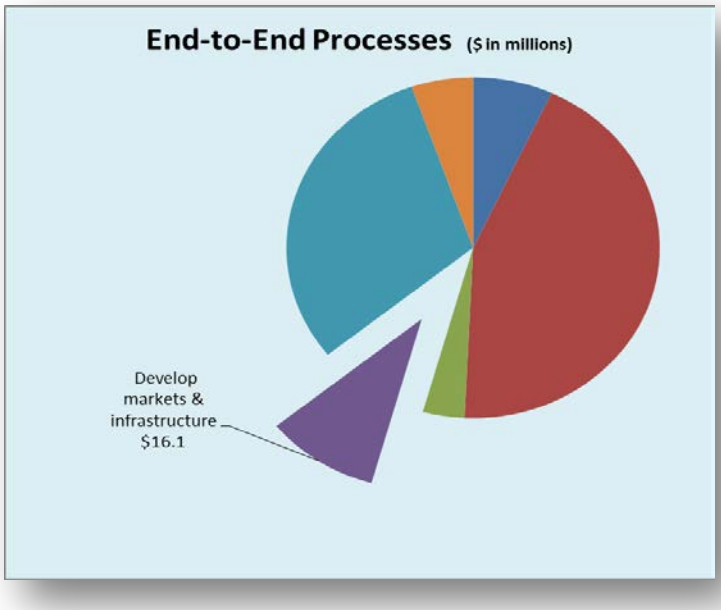
This process promotes improving the overall business experience with the ISO as well as sharing clear and consistent corporate information. Besides surpassing previous goals to resolve inquiries quickly and encouraging quality dialogue between the ISO and its key customers, this activity provides the framework to make improvements in the

stakeholder processes as well as build proactive outreach to new market participants that in turns encourages their active participation in the ISO market.
Another effort includes improving government affairs activities to more effectively share ISO technical expertise and communicate advice to government and regulatory bodies to advance policies and mandates that also protect grid reliability.

Develop Markets and Develop Infrastructure

Develop Markets and Develop Infrastructure are two separate processes that cover ISO activities that create value-added enhancements to the market design as well as proactively plan and facilitate grid upgrades, such as those needed to reliably integrate renewable resources.

Develop Markets
Develop markets, amounting to $5.8 million and 23 staff, is comprised of elements from four divisions: the Market Monitoring department of the CEO division, Market Infrastructure and Development, Legal and Administrative and Policy and Client Services. This activity includes improving our abilities to review and analyze the efficiency and quality of market results, as well as identifying needed market design enhancements that increase efficiencies and transparency.



Among the initiatives under this banner are ones that are building the business and operational framework that accommodates demand response and renewable resources, including distributed generation, and storage technologies participation in the ISO market.

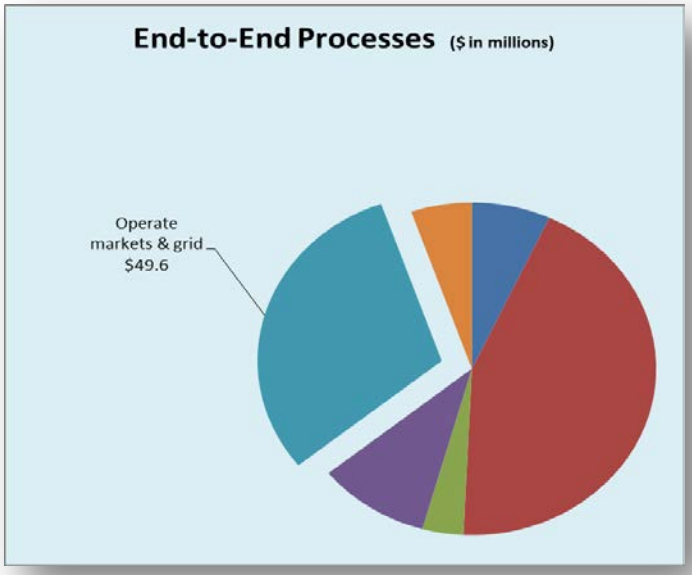
Develop Infrastructure
Develop infrastructure, amounting to $10.3 million and 50 staff, is comprised of four divisions: Market Infrastructure and Development, Operations, Legal and Administrative, and Policy and Client Services. The budget supports a comprehensive approach to transmission and generation interconnection planning that considers reliability and public policy needs.

Operate Markets and Grid

There are three end-to-end processes that make up Operate Markets and Grid: Manage Market and Reliability Data and Modeling, Manage Markets and Grid, and Manage Operations Support and Settlements.

Manage Market and Reliability Data and Modeling

Manage Market and Reliability Data and Modeling, amounting to $12.7 million and 63 staff, is primarily comprised of the Operations division with elements of Technology, Legal and Administrative, and Policy and Client Services divisions.



The ISO diligently checks and rechecks its network modeling policies and protocols to reduce as much as possible out-of-market energy dispatches, assure models reflect all grid constraints and produce timely and accurate prices.

Manage Markets and Grid

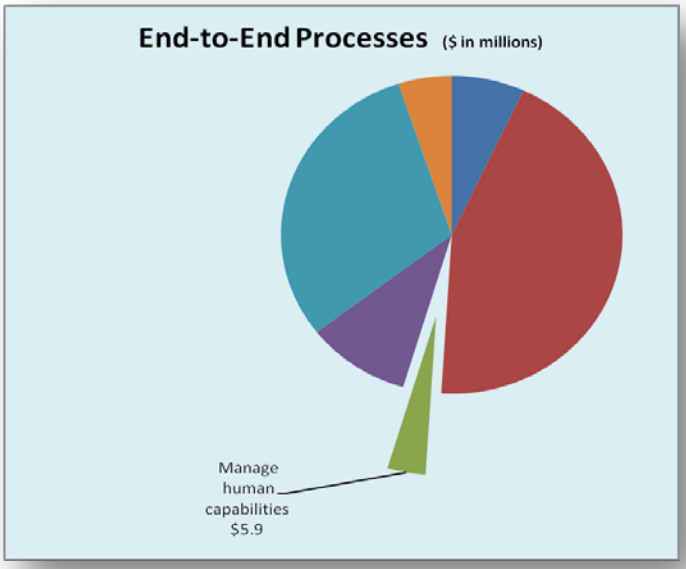
Manage Markets and Grid, amounting to $28.1 million and 110 staff, is primarily comprised of the Operations division with elements of the Technology division. A challenging ISO responsibility is to manage transmission and generation outages, especially those that are unplanned, as it takes expertise honed in split-second decision-making situations to ensure continuous flow of power to all customers. Managing the market includes executing the day-ahead market and interchange scheduling to make sure all local energy needs are met and the power is delivered at the most reasonable cost possible.

Manage Operations Support and Settlements

Manage Operations Support and Settlements, amounting to $8.8 million and 52 staff, is mostly comprised of Operations along with four other divisions: the Market Monitoring department of the CEO division, Market Infrastructure and Development, Technology, and Legal and Administrative. The budget provides the resources that result in creating new market efficiencies. This effort includes lowering the financial risk of participating in the wholesale market that in turn lowers the cost of doing business with the ISO. The lower cost translates into less overhead for ISO customers who can pass the savings to ratepayers.

Manage Human Capabilities

Manage Human Capabilities, amounting to $5.9 million and 16 staff, is mostly comprised of the Human Resources division with elements of the Technology division. It consists of five primary end-to-end processes that combine to ensure the ISO attracts and retains the skills and talent necessary to achieve business objectives. The processes are compensation, benefits, recruitment, training and development, and employee relations.



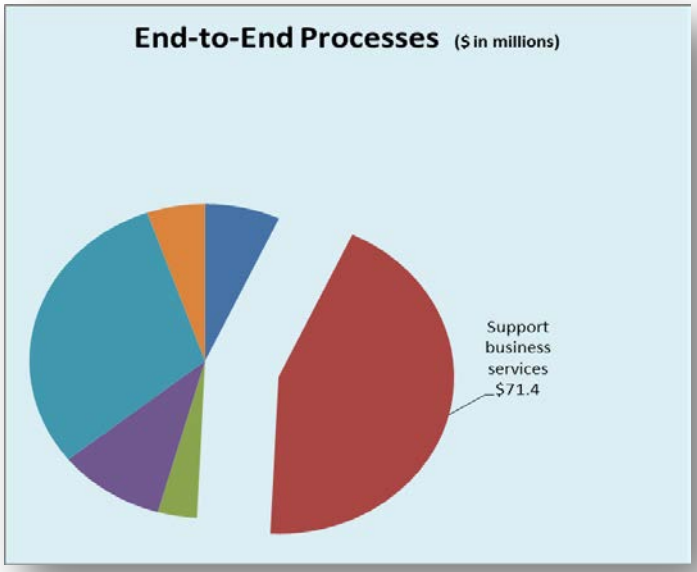
The budget provides resources to support the Company's ability to attract and retain uniquely skilled and highly sought-after professionals by continually assessing the quality of compensation and benefit packages. The benefits menu reflects creative cost containment measures while at the same time preserving the competitive options needed to meet the needs of a diverse employee population.

Developing the next ISO generation of equipped with the knowledge, skills and expertise to meet the increasingly complex challenges of today and the future remains a top corporate priority. The budget provides resources to ensure employees not only grow in their jobs but also increase their value to the corporation.

In addition, the budget provides resources to support management and employees in maintaining a high-performance and respectful workplace environment where employees are highly engaged in pursuing their highest potential as well as contributing to the success of the corporation.

Support Business Services

Support Business Services, amounting to $71.4 million and 227 staff, is comprised of elements of six divisions: the Market Monitoring department of the CEO division, Market and Infrastructure Development, Technology, Operations, Legal and Administrative, and Policy and Client Relations.



This process provides the resources to improve the ISO's ability to carry out its business duties by developing well defined, measured and controlled processes (workflow and information technology), as well as nurturing disciplined business decision making, maintaining quality assurance and efficiently implementing enhancements.

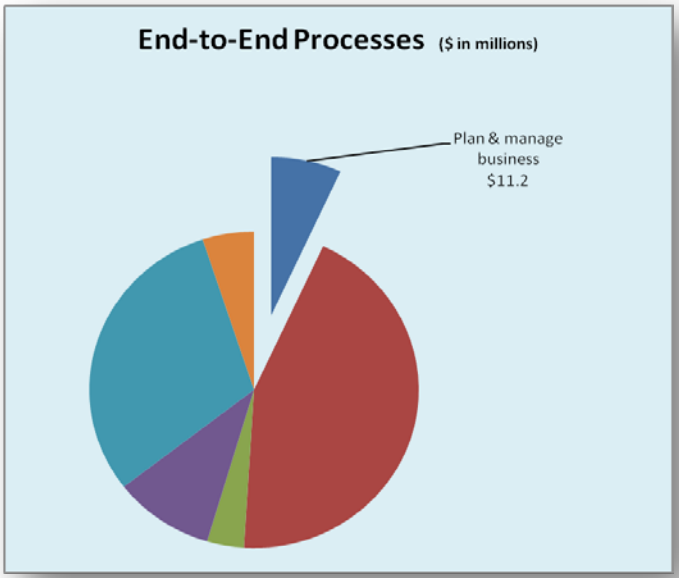
In addition, this process supports the initiatives that improve and maintain a responsive and effective compliance culture.

Plan and Manage Business

The Plan and Manage Business process, amounting to $11.2 million and 27 staff, is comprised of five divisions: CEO, Technology, Operations, Legal and Administrative, and Policy and Client Services.

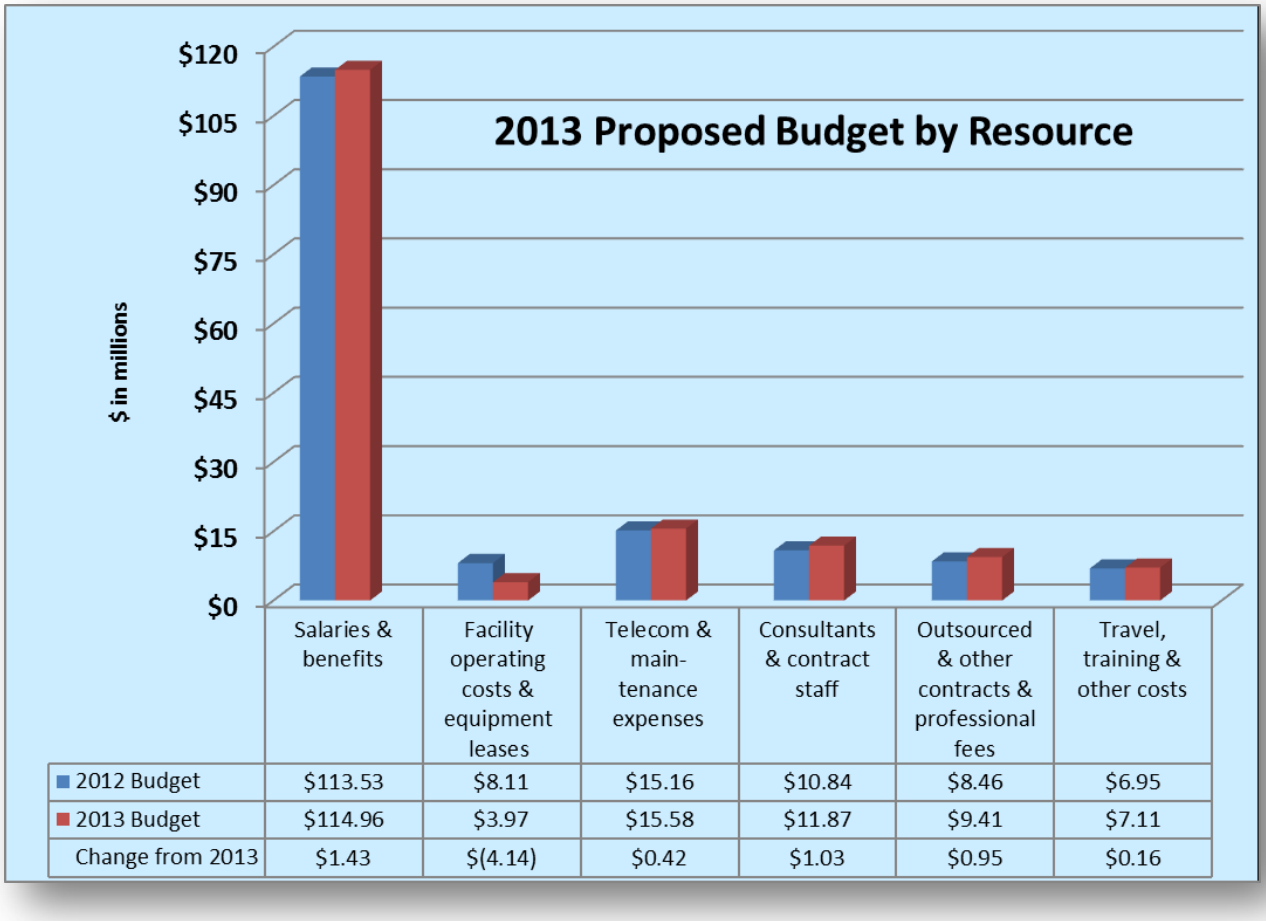
The ISO measures every process, project or policy against identified benefits. This activity finds support in part by aligning the strategic planning process with budget planning, as outlined in Section II: Aligning with the Strategic Plan.

It is the budget process that drives revenue requirement needs, which then translates into the rates charged to scheduling coordinators and other market participants.



IV. ISO Resource Utilization

This section deals with the resources consumed in the O&M budget to accomplish strategic objectives and goals. The 2012 budget reflects certain reclassifications made to conform to the 2013 presentation. The chart below shows the major resource components.



	Salaries & benefits	Facility operating costs & equipment leases	Telecom & main-tenance expenses	Consultants & contract staff	Outsourced & other contracts & professional fees	Travel, training & other costs
2012 Budget	$113.53	$8.11	$15.16	$10.84	$8.46	$6.95
2013 Budget	$114.96	$3.97	$15.58	$11.87	$9.41	$7.11
Change from 2013	$1.43	$(4.14)	$0.42	$1.03	$0.95	$0.16

Staffing

To operate the grid, the ISO depends on its highly educated employees, which makes staff a critically important resource with salaries and benefits comprising 71 percent of the 2013 O&M budget and 70 percent of the 2012 O&M budget.

The staffing plan concentrates on attracting and retaining the best and brightest individuals in the industry, and, at times, the ISO revises the organizational structure to accommodate such talent. The Company also makes periodic organizational changes to align resources to focus on the important matters identified in the five-year strategic plan, and better reflect end-to-end business processes.

The staffing level for 2013 is 601 employees (which include operators in training); the staffing level remains unchanged from 2012. As of the end of July 2012, there are 576 full time employees. As that equals 96 percent of the budgeted staffing level, the 2013 budget makes no provision for vacancies. A summary of the budgeted headcount for 2013 and 2012 is as follows:

Projected Staffing Levels	2013 Budget	2012 Budget	Change
Chief Executive Officer	16	16	-
Human Resources	16	15	1
Market and Infrastructure Development	76	75	1
Technology	191	191	-
Operations	205	207	(2)
General Counsel and Administration	60	60	-
Policy and Client Services	37	37	-
Gross headcount	**601**	**601**	-
Less Program Office staff included in capital	(5)	(5)	-
Net headcount	**596**	**596**	-

Staffing costs increased $1.5 million, or 1 percent, for a total of $115.0 million in 2013 from $113.5 million in 2012.

Staffing Related to Capital

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 five full-time staff in the Program Office department of the Technology division. Other staffs engaged in capital projects are budgeted in their respective cost centers, but will be capitalized for the financial statements that are prepared in accordance with generally accepted accounting principles.

Compensation Structure

The 2013 compensation budget includes funding for employee base salaries, benefits and payroll taxes, as well as other compensation elements, such as overtime and performance compensation, and related costs such as relocation and tuition reimbursement. The budget also includes funds for 2013 salary adjustments for merit, equity and market adjustments, as well as for increased healthcare costs. These costs have been budgeted for each position.

In setting the annual merit, equity and market adjustments budget, the Human Resources division participates in salary surveys that qualified third party vendors confidentially administer to gather information on competitive market pay rates. The

ISO ability to attract and retain talent with the necessary skills and knowledge is directly linked to our ability to maintain competitive pay practices.

The total compensation packages provided to employees include performance compensation with payouts in the subsequent year based on individual and corporate performance. A summary of the components of compensation is as follows ($ in millions):

Compensation Components With Benefit Burden	2013 Budget	2012 Budget	Change
Base compensation	$94.7	$92.8	$1.9
Overtime (includes structured overtime for grid operators)	6.4	6.9	(0.5)
Performance compensation	12.3	12.2	0.1
Other	1.6	1.6	-
Total	**$115.0**	**$113.5**	**$1.5**

To fund the benefits, employee benefits are budgeted at 36 percent of salary costs as summarized in the table below. The percentage applied for employee benefits, or the benefit burden, remains unchanged from 2012. Management will enter into contracts with selected vendors to ensure these benefits are available to eligible employees with the costs primarily depending on employee population levels and participation.

The 36 percent benefits burden is broken down as follows:

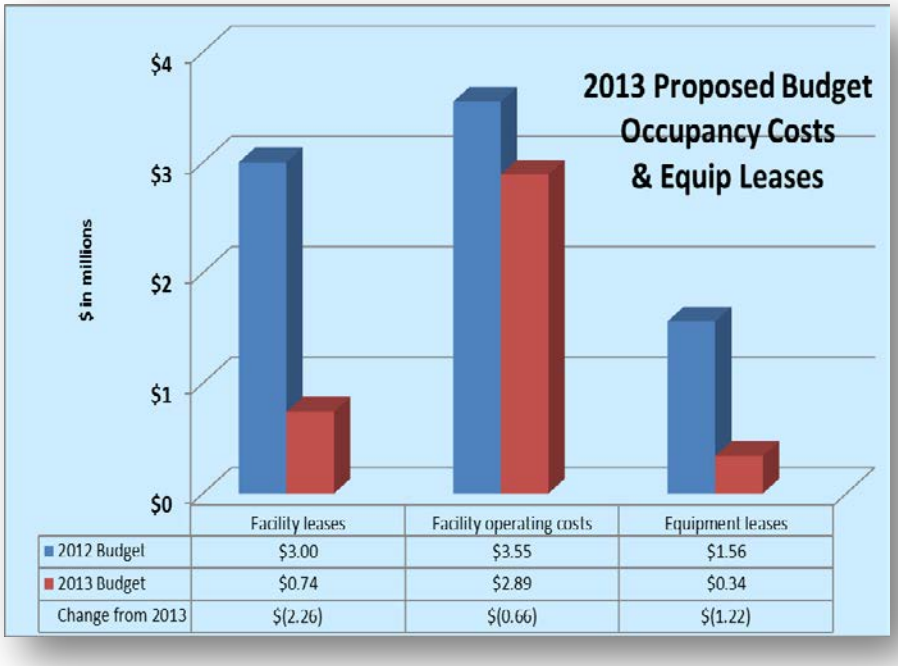
Benefit Obligation	ISO Cost Components	Rate
Health and Welfare plans Medical, Dental and Vision	Medical, dental and vision; life, accidental death and long-term disability insurance; state unemployment insurance; and worker's compensation	13%
Retirement Benefit Plans	Retirement Savings Benefit Plan 401(k); Federal social security and Medicare; executive retirement plans; and Retiree Medical Benefit Plan	22%
Other obligations	Administration related costs	1%
Total Burden		**36%**

Occupancy and Equipment Leases

Occupancy and equipment lease costs decreased by $4.1 million from $8.1 million in 2012 to $4.0 million in 2013. These costs make up approximately 2 percent of the 2013 budget and 5 percent of the 2012 budget.

Facility leases decreased by $2.3 million, or 75 percent, as the original Folsom, California leases expired in 2012.

Facility operating costs decreased by $663,000, or 19 percent, to $2.9 million in 2013 from $3.6 million in 2012. The decrease is due to fewer buildings requiring maintenance and property tax beginning in 2013.



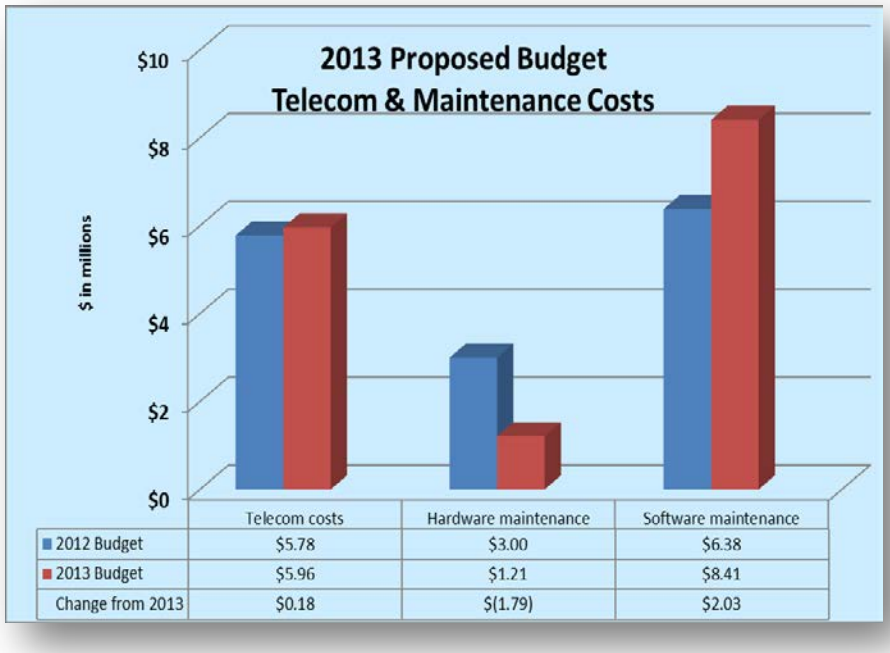
	Facility leases	Facility operating costs	Equipment leases
2012 Budget	$3.00	$3.55	$1.56
2013 Budget	$0.74	$2.89	$0.34
Change from 2013	$(2.26)	$(0.66)	$(1.22)

Equipment and equipment leases decreased by $1.2 million, or 78 percent, because of the expiration of data storage leases in 2012.

Telecommunications and Hardware and Software Maintenance Costs

Telecommunications and hardware and software maintenance costs increased $416,000, or 3 percent, to $15.6 million compared to $15.2 million in 2012. These costs make up approximately 10 percent of the 2013 budget and 9 percent of the 2012 budget.

Telecommunication costs increased $181,000, or 3 percent, to $6.0 million in 2013 compared to $5.8 million in 2012 because of increased network costs.



	Telecom costs	Hardware maintenance	Software maintenance
2012 Budget	$5.78	$3.00	$6.38
2013 Budget	$5.96	$1.21	$8.41
Change from 2013	$0.18	$(1.79)	$2.03

Hardware maintenance costs decreased by $1.8 million, or 60 percent, over the 2012 budget while the software maintenance costs increased by $2.0 million, or 32 percent. The changes to the budgets are primarily a result of the alignment of maintenance costs into their respective categories.

Consultants and Contract Staff

Consulting and contract staff costs increased by $1 million to $11.8 million in 2013 from $10.8 million in 2012. Whereas this is a 10 percent increase over the 2012 budget, it represents a 25 percent decrease over the last 5 years. The consulting and contract staff budgets make up 7 percent of the 2013 and 2012 budgets.

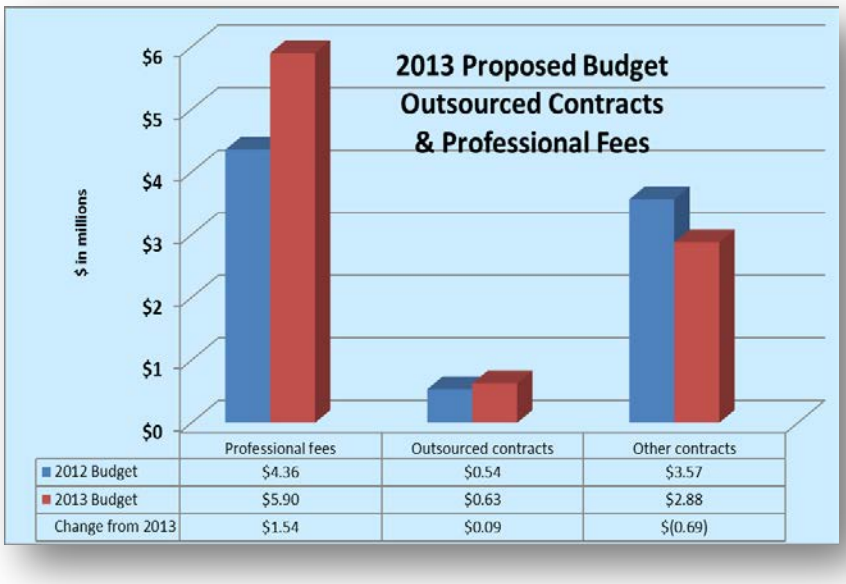
This increase is in support of a number of efforts that require outside resources. These efforts include regional collaboration, renewable integration, compliance, project development, facilities and physical security assistance, grid operations, and process documentation.

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 using outside resources (contractors, consultants or temporary staff). At times, the Company may bring in-house work 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. See additional discussion under Section VII.

Outsourced Contracts and Professional Fees

Outsourced contracts and professional fees increased by $1.0 million, or 12 percent, to $9.4 million in 2013. The budget category makes up 6 percent of the 2013 budget and 5 percent of the 2012 budget.

Professional fees increased $1.5 million, or 35 percent, to $5.9 million in 2013 from $4.4 million in 2012. The increase is in support of outside legal counsel costs. The primary drivers are additional litigation and hearings at FERC in connection with transmission planning and approvals and market investigations.



	Professional fees	Outsourced contracts	Other contracts
2012 Budget	$4.36	$0.54	$3.57
2013 Budget	$5.90	$0.63	$2.88
Change from 2013	$1.54	$0.09	$(0.69)

Outsourced and other contracts combined decreased $595,000, or 14 percent, to $3.5 million in 2013 from $4.1 million in 2012. Major outsourced contracts include locational marginal price validation, weather and wind forecasting, and credit rating services. The intermittent

resources pay forecasting revenues budgeted at $1.6 million in 2013 and $1.7 million in 2012, which are included in miscellaneous revenues to offset the forecasting costs.

Training, Travel and Other Costs

Training, travel and other costs increased $147,000, or 2 percent, to $7.1 million in 2013 from $7.0 million in 2012. These costs make up approximately 4 percent of the 2013 and 2012 budgets.

Insurance premiums remain at $2.0 million in 2013; this is the result of fewer locations to insure and cost management.

	Insurance premiums	Transportation & travel	Training fees & supplies	Professional dues	Other costs
2012 Budget	$2.01	$1.39	$1.28	$0.51	$1.76
2013 Budget	$2.01	$1.62	$1.22	$0.42	$1.82
Change from 2013	$-	$0.23	$(0.06)	$(0.09)	$0.06

Transportation and travel increased $232,000, or 17 percent, to $1.6 million in 2013 from $1.4 million in 2012.

Training fees and supplies decreased $62,000, or 5 percent, to $1.2 million in 2013.

Professional dues and other costs (primarily bank fees, office supplies and meeting costs) decreased $26,000, or 1 percent, to $2.2 million in 2013.

Reconciliation with 2012 O&M Budget

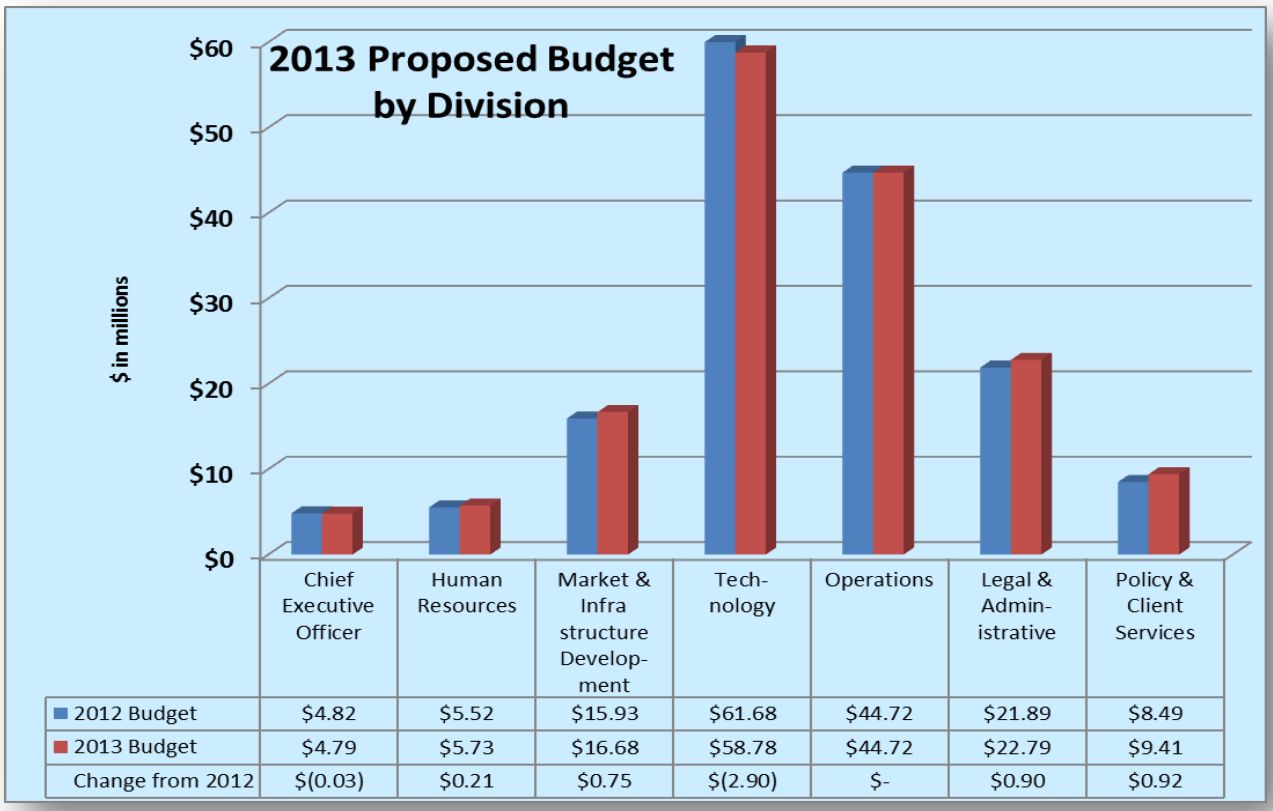
The 2013 proposed O&M budget decreased by $141,000, or less than 0.1 percent, to $162.9 million compared to $163.0 million in 2012. A reconciliation of the change follows ($ in millions):

2012 O&M Budget	**$163.0**
Increases in the budget	
Merit increases	1.9
Increase in legal fees	1.5
Increase in consultants and contract staff	1.0
Increase in maintenance costs	0.2
Increase in telecommunication and network costs	0.2
Increase in transportation and travel costs	0.2
Increase in other costs	0.2
Net increases in the budget	**5.2**
Decreases in the budget	
Reduction in facility operating expenses and facility leases	(3.0)
Reduction in equipment leases	(1.2)
Reduction in other contracts / services	(0.6)
Projected overtime decrease	(0.5)
Net decreases in the budget	**(5.3)**
Proposed 2013 O&M Budget	**$162.9**

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
- Human Resources
- Market and Infrastructure Planning
- Technology
- Operations
- Legal and Administrative
- Policy and Client Services



	Chief Executive Officer	Human Resources	Market & Infra structure Develop-ment	Tech-nology	Operations	Legal & Admin-istrative	Policy & Client Services
2012 Budget	$4.82	$5.52	$15.93	$61.68	$44.72	$21.89	$8.49
2013 Budget	$4.79	$5.73	$16.68	$58.78	$44.72	$22.79	$9.41
Change from 2012	$(0.03)	$0.21	$0.75	$(2.90)	$-	$0.90	$0.92

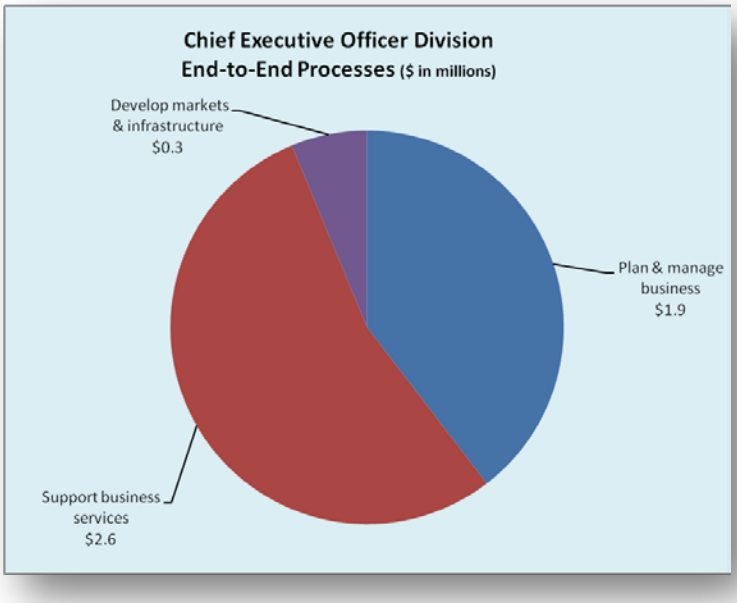
The 2013 proposed budget of $162.9 million is $141,000, or less than 0.1 percent, less than the 2012 budget of $163.0 million. The Technology and Operations divisions account for 36 percent and 27 percent, respectively, of the 2013 O&M budget while the Legal and Administrative division comprises 14 percent. The Market and Infrastructure Development division accounts for 10 percent, the Policy and Client Services division accounts for 6 percent, the Human Resources division accounts for 4 percent, and the Chief Executive Officer division makes up 3 percent. Staffing remains unchanged from 2012 at 601.

There were some minor organization changes made during 2012. With the creation of the new business units and the general ISO goal to optimize efforts, some staff members were transferred among and within the divisions. The 2012 budget reflects these changes to be comparable with the 2013 budget.

Chief Executive Officer Division (including Department of Market Monitoring)

The division comprises of the office of the Chief Executive Officer and the Department of Market Monitoring.

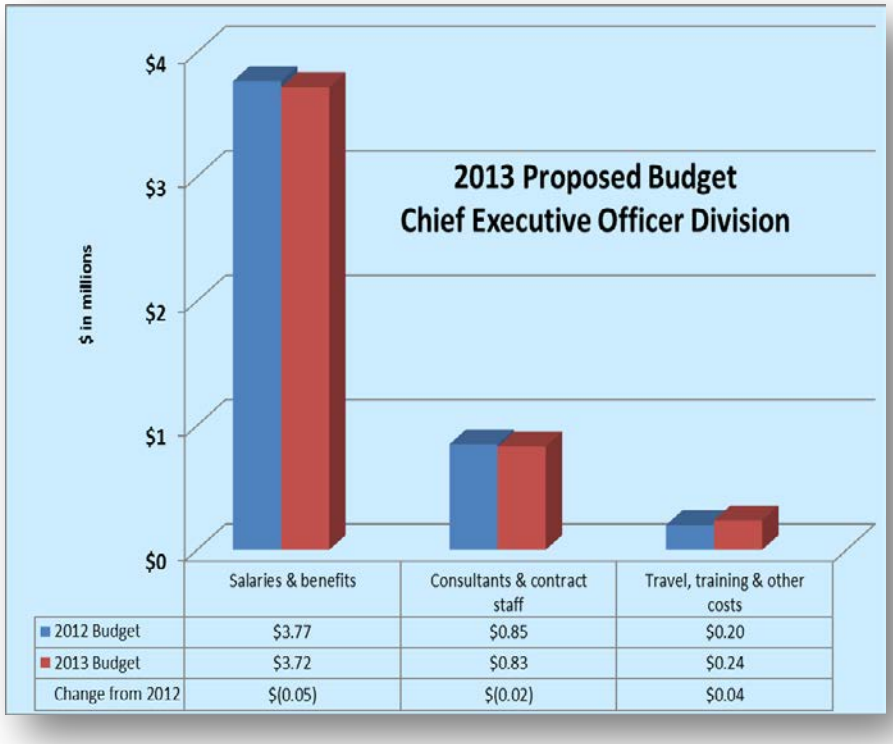
The Department of Market Monitoring (DMM) provides independent oversight and analysis of the ISO markets by identifying design flaws, potential rule violations and market power abuses.



The department is staffed with highly skilled analysts with advanced degrees in economics and engineering who publish quarterly and annual reports on market issues and performance as well as periodic ad-hoc reports. The market monitoring group is active in shaping policies to help establish provisions to ensure market efficiency and mitigate the exercise of market power, especially with new market features and services that facilitate the integration of renewable resources.

During 2012, the DMM placed a major emphasis on implementing and monitoring significant enhancements to the automated local market power mitigation mechanisms incorporated in the ISO market software. In 2013, the DMM will continue to focus closely on the monitor market performances and behaviors, the second phase of local market power mitigation implementation, and continue to provide input and review on major design initiatives.

Discussion of Proposed Budget

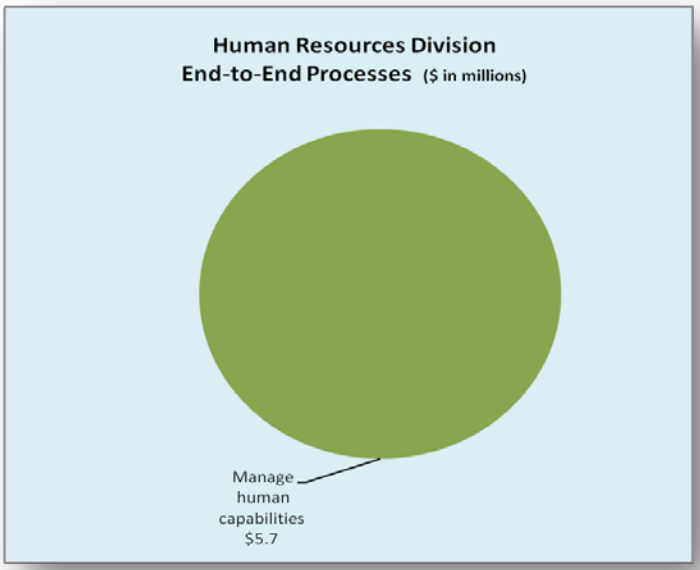


The 2013 proposed budget of $4.8 million remains substantially unchanged from 2012. The 2013 budget is $28,000, or 1 percent, less than the 2012 budget. Staffing remained the same in 2013 at 16.

Personnel costs decreased $53,000. Consultants and contract staff decreased $17,000, or 2 percent. Training, travel, and other costs increased $40,000, or 21 percent, primarily due to the need for additional subscription services.

Human Resources Division

The Human Resources division establishes the policies, programs and "people" strategies that enable the Corporation to attract and retain the uniquely talented professionals needed to operate the company and meet its objectives.



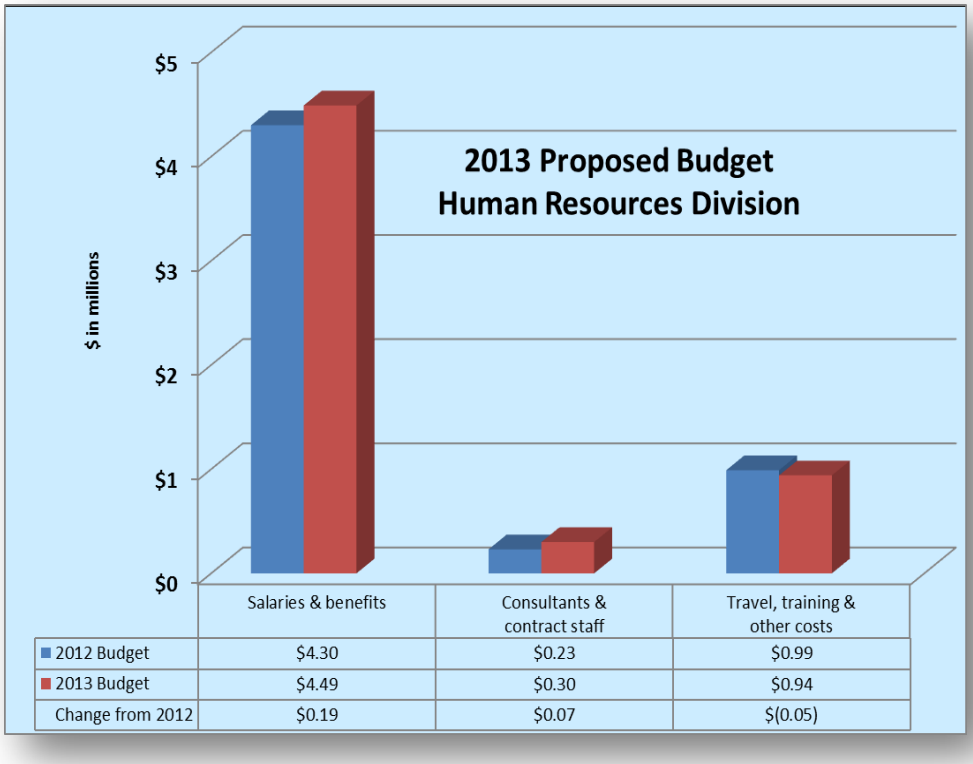
In addition to managing the division with best practices, Human Resources will in 2013 advance the corporate focus on developing the next generation of ISO people. Ensuring the organization has the right people with the right skills in all jobs is key

given the United States Department of Labor prediction of diminishing resource pools in engineering and other technical fields, and the global explosion of smart grid investments. ISO technical staff is extremely marketable and sought after as the competition for highly qualified people intensifies. At the same time, increasingly complex market systems, technological change and demanding operational needs require the ISO to keep staff skills up to date and on the forefront of technology.

Our integrated approach to developing the next generation of ISO people in 2013 includes dedicated focus on five key areas: enhancing the knowledge and skills of existing staff; continuing to develop technical experts; strengthening leadership and managerial capabilities; retaining and recruiting targeted skills for critical areas; and, sustaining an engaging workplace environment. Subject matter experts including economists, transmission engineers, market planners, and IT professionals receive targeted training via the ISO Academy and other venues. Power systems operators will participate in enhanced training simulations to master new tools and evolving technologies. Mentoring and coaching for leaders and managers will continue with executive-level sponsorships and support from The President's Leadership Academy. Human Resources will recruit externally for expertise in emerging areas and to fill skill and knowledge gaps to supplement the ISO mentoring efforts. We take our reputation as an employer of choice seriously and will continue to ensure our workplace supports every team member in achieving excellence.

Discussion of Proposed Budget

The 2013 proposed budget of $5.7 million is $200,000, or 4 percent, higher than the 2012 budget of $5.5 million. Staffing increased by one in 2013 to 16.



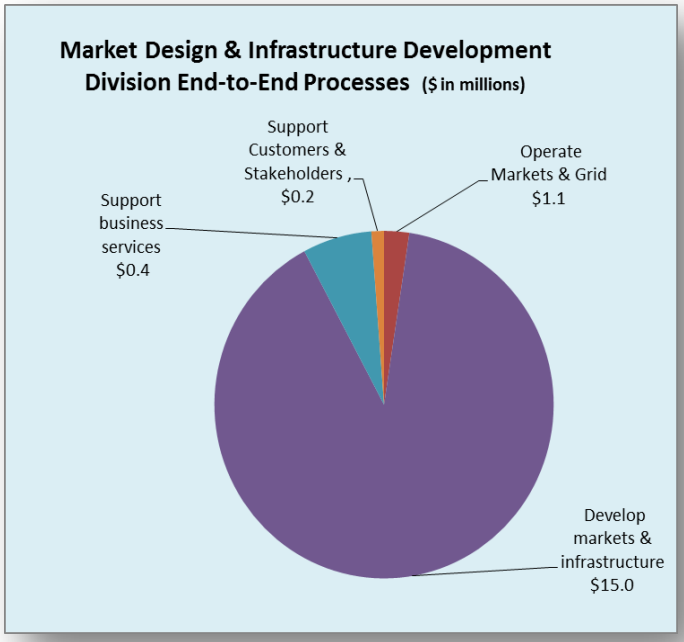
Salaries and benefits increased by $194,000, which includes additional salary for new staff and merit increases. Consultants and contract staff increased $70,000, or 30 percent, because of the need for additional contracted services for compliance support. Travel, training, and other costs decreased $50,000, or 5 percent.

Market and Infrastructure Development

The Market and Infrastructure Development division develops a forward looking, comprehensive and fully compliant transmission plan in addition to activities that develops policies and rules that facilitate a robust market, support the state's resource adequacy program, align with generator interconnection studies and support renewable resource integration analysis. Other responsibilities include performing seasonal operating studies, maintaining operating procedures, supporting real-time operations, and coordinating with neighboring balancing authorities on engineering operational issues.

Ongoing duties include developing policy positions on regulatory issues and responsibility for over 2,700 ISO regulatory contracts, including their negotiation, drafting and administration.

This division provides subject expertise and regulatory support to state regulators implementing legislative mandates such as greenhouse gases, increasing demand response participation in the wholesale market and setting capacity requirements. It also provides technical support to the Market Services group on congestion revenue rights and to the Market Operations group, both of which are in the Operations division, on full network modeling capabilities.

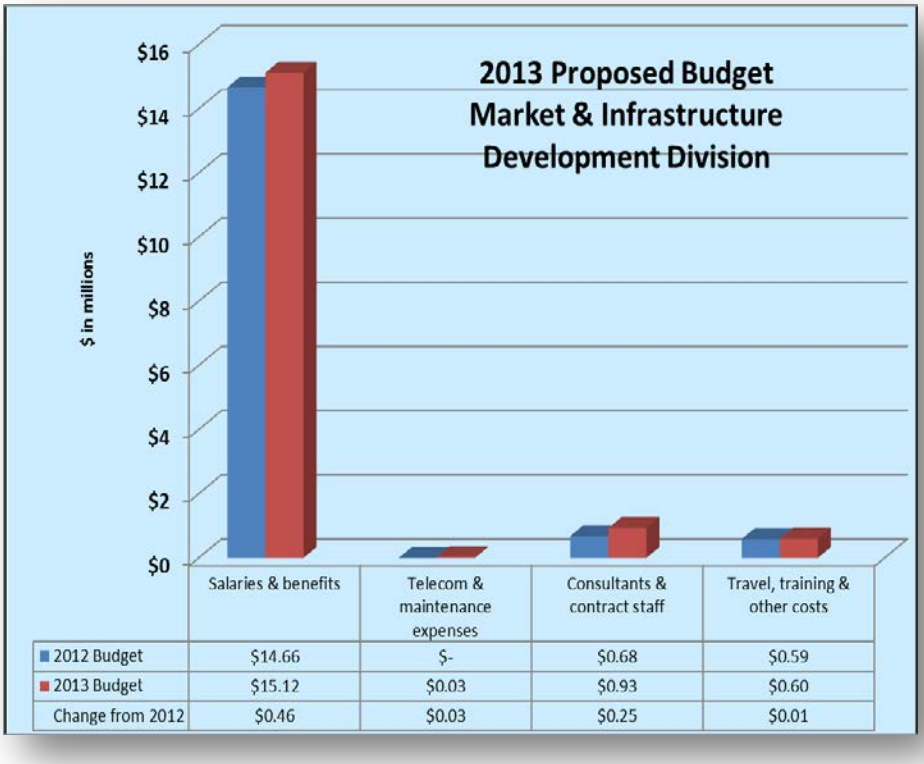


The Market and Infrastructure Policy Department is responsible for designing market rules and mechanisms, including those mandated by federal regulators for enhancement, expanding opportunities for demand response resources to participate in the wholesale markets, real-time dispatch and pricing rules for constrained generation.

The Market Analysis and Development Department monitors the market, identifies systemic issues, and develops conceptual solutions to address them. The department holds a stakeholder Web conference about every six weeks that provides updates and observations on market performance with an emphasis on coordinating plans with stakeholders to implement market enhancements, services and features. The outreach reflects ISO efforts to improve its communications with stakeholders and encourage feedback.

The division as a whole is focusing a substantial amount of resources in developing the rules and mechanisms to integrate renewable resources. Progress is being made on related initiatives that include meeting goals to advance smart grid technology, distributed resources and renewable resources integration. In addition, the division's work on transforming the transmission planning and generator interconnection processes has resulted in a new process that substantially helps meeting state renewable portfolio standard targets as well as maintaining reliability during the major shift of diversifying the state's generation fleet with green fuels such as wind and solar.

Discussion of Proposed Budget



The 2013 proposed budget of $16.7 million is $743,000 (or 5 percent) higher than the 2012 budget of $15.9 million. Staffing increased by one in 2013 to 76.

Personnel costs increased $462,000, which includes additional salary for new staff and merit increases. Maintenance costs increased $25,000 due to inclusion of division specific software maintenance costs. Consulting and contract staff costs increased by $250,000, or 37 percent, primarily because of additional support for renewable integration. Travel, training, and other costs decreased by $6,800, or 1 percent.

Technology

The Technology division encompasses Information Technology, Campus Operations, and the Project Office. The division provides reliable, cost efficient and world-class services that deliver exceptional system performance and new functionalities that support corporate goals and objectives.

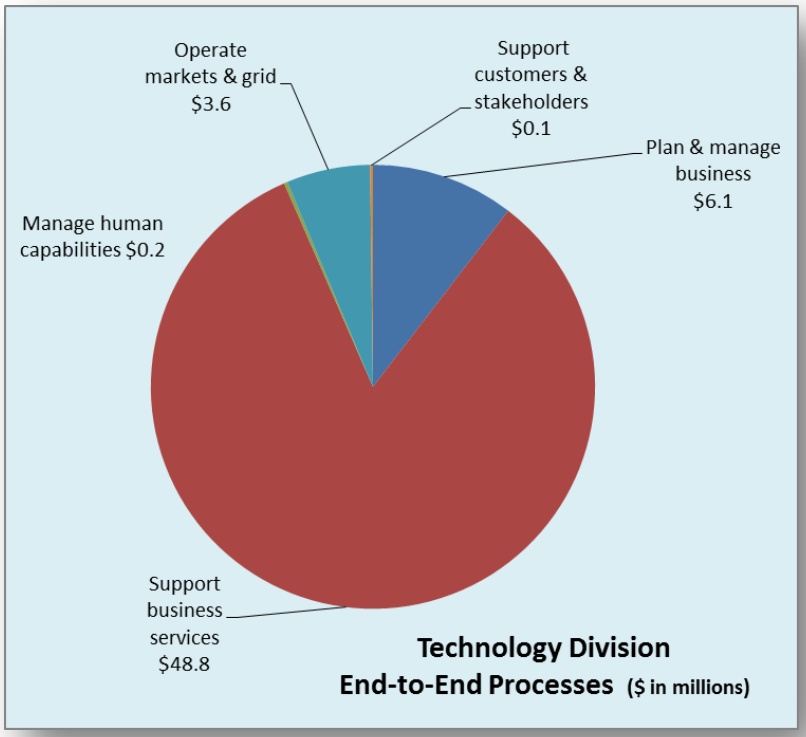
The division's priorities in 2013 are as follows:

- to make incremental technology improvements, especially for market and reliability operations;

- to proactively identify system problems and to fix them; and

- to predict system vulnerabilities and strengthen them before they become problems.

The Technology division is the ISO foundation that supports the many changes needed to integrate renewable resources and has key initiatives directly related to facilitating new generation and transmission construction in California.



In the mid- to long-term future, the division is developing plans to make network architectural changes so that ISO systems are easier to maintain, reduce maintenance costs and leverage technologies to improve cost effectiveness.

The Program Office Department leads and manages key initiatives and projects that focus on enhancing customer service and processes. Core functions include release planning, program management for the Strategic Plan and the market initiatives roadmap. All Program Office efforts have a strong process and quality focus based on Project Management Institute and Capability Maturity Model Integration standards.

The Smart Grid Technologies and Strategy Department leads the ISO effort to identify emerging technologies, which also includes better leveraging mature technologies that enhance grid efficiencies and monitoring capabilities. These technologies are critical in enabling the ISO to interconnect and manage the variability of renewable resources.

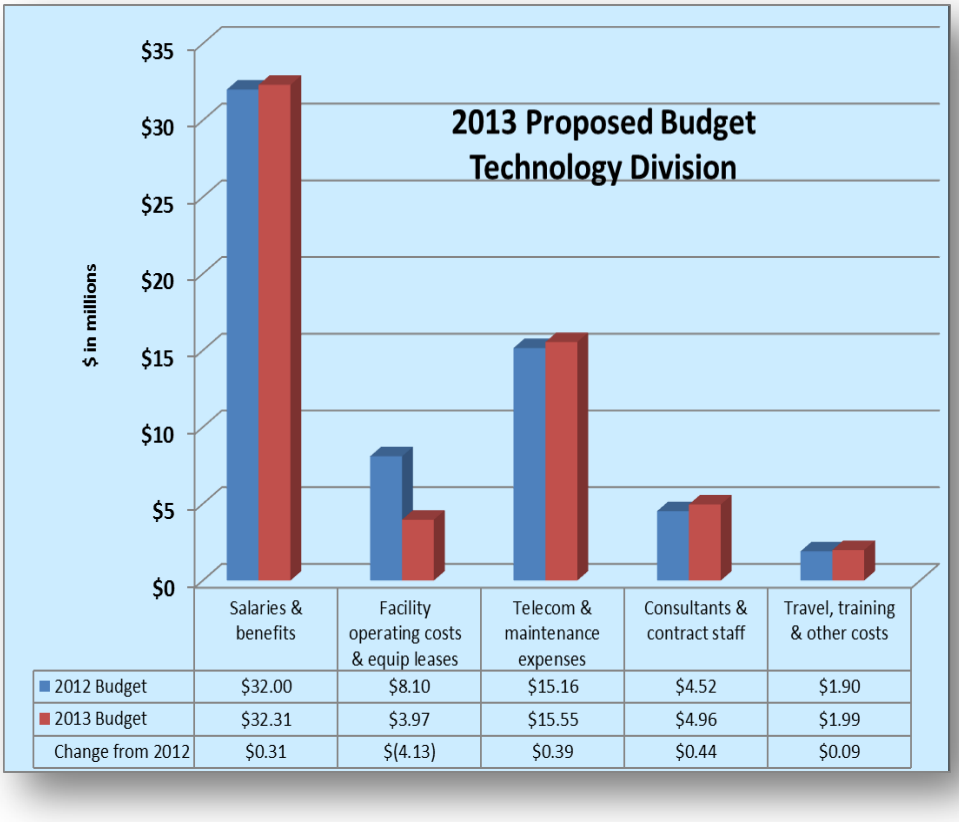
The Power Systems Technology Development Department is responsible for reviewing and approving technical requirements, software design, and tests the scheduling infrastructure business rules, integrated forward market, real-time markets, and market quality service applications. This department is also responsible for developing, reviewing, and approving technical requirements, software design, and testing advanced applications, such as on line and look-ahead voltage stability analysis,

dynamic stability analysis applications, and advanced market operator training simulator. Working with the Policy, Operations, and Program Office, the department makes sure that project implementation plans are feasible.

The Campus Operations Department manages ISO buildings and infrastructure that supports a safe, efficient and comfortable work environment. In 2012, Campus Operation minimized costs while it learned to better operate and maintain the ISO's 277,000 square foot LEED certified building that sits on 27 acres.

Discussion of Proposed Budget

The 2013 proposed budget of $58.8 million is a reduction of $2.9 million (or 5 percent) over the 2012 budget of $61.7 million. Staffing remained the same in 2013 at 191.



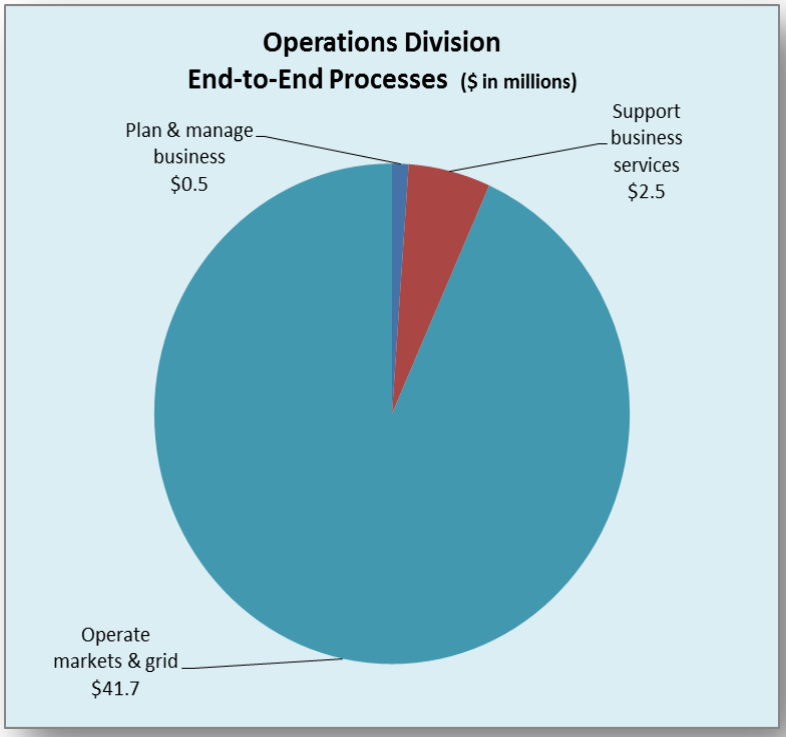
	Salaries & benefits	Facility operating costs & equip leases	Telecom & maintenance expenses	Consultants & contract staff	Travel, training & other costs
2012 Budget	$32.00	$8.10	$15.16	$4.52	$1.90
2013 Budget	$32.31	$3.97	$15.55	$4.96	$1.99
Change from 2012	$0.31	$(4.13)	$0.39	$0.44	$0.09

Personnel costs increased $315,000, which reflects merit increases offset by decreased overtime. Facility leases decreased by $2.3 million, or 75 percent, as the original Folsom, California leases expired in 2012. Facility operating costs decreased by $663,000, or 19 percent, to $2.9 million in 2013 from $3.6 million in 2012. The decrease is the result of fewer buildings requiring maintenance and property tax beginning in 2013. Equipment and equipment leases decreased by $1.2 million, or 78 percent, because of the expiration of data storage leases in 2012. Telecommunication costs increased $181,000, or 3 percent, to $6.0 million in 2013 compared to $5.8 million in 2012 because of increased network costs. Hardware maintenance costs decreased by $1.8 million, or 60 percent, over the 2012 budget while the software maintenance costs increased by $2.0 million, or 32 percent. The changes to the budgets are primarily a result of the alignment of maintenance costs into their respective categories. Consulting and contract staff costs increased by $440,000, or 10 percent, to support project development and additional facilities costs. Travel, training, and other costs increased by $85,000, or 4 percent.

Operations

The Operations division main mission is the reliable operation of the power grid, markets and operations support. It is comprised of Systems Operations, Operations Engineering Services, Market Services, and Operations Compliance and Control.

The power system is undergoing a dramatic evolution to accommodate an increasing amount of renewable and distributed resources connecting to the grid, as well as having to manage rising levels of imports and exports and the participation of demand resources in the wholesale market.



In addition, new reliability standards affect how the ISO reliably operates the grid. With advanced tools, the division will proactively manage the changing profile and characteristics of the power system and generation fleet changes, which includes managing the variability of renewable resources. The major vehicle for this activity is the ISO control center that boasts awarding winning geospatial technology and advanced visualization capabilities. The center's pioneering technologies provide grid operators a more granular view of grid conditions and the ability to identify potential problems with the capability to solve them in advance of real time. The Systems Operations Department operates the forward and real-time markets in a manner that delivers the most cost effective energy to California consumers while maintaining grid reliability.

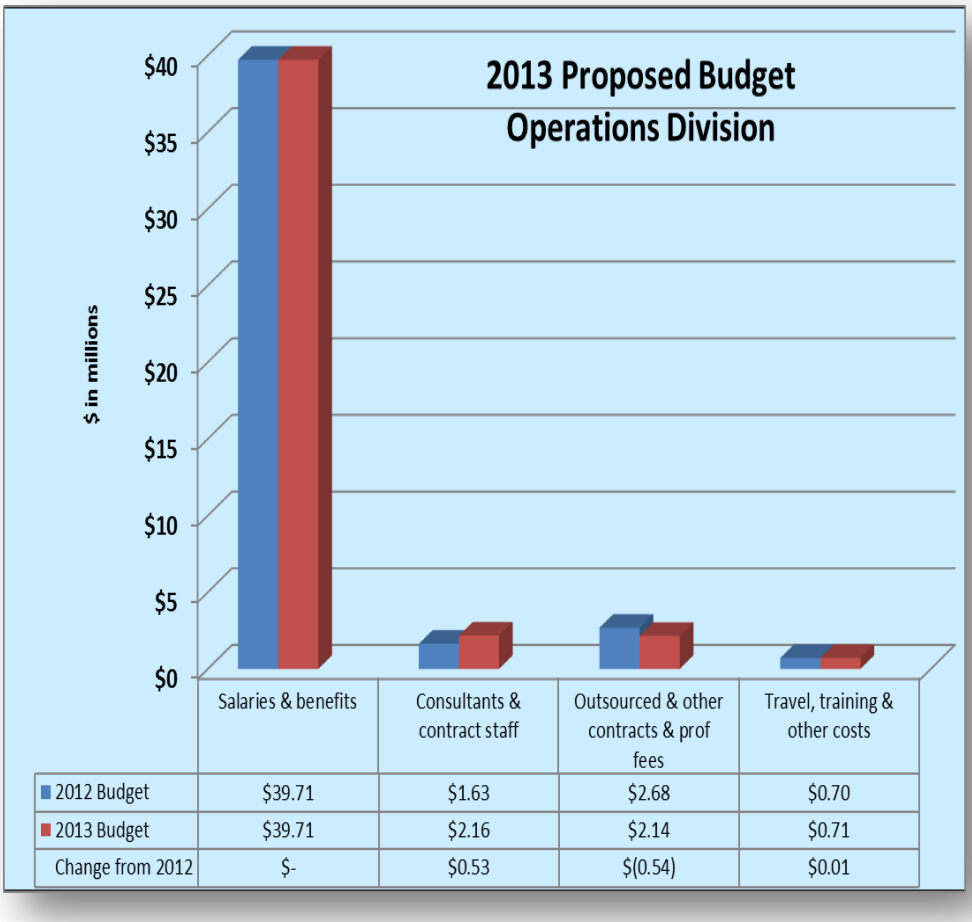
The professionals staffing the Systems Operations and Operations Engineering Services Departments are highly skilled in using the advanced technologies and tools necessary to reliably operate the grid and facilitate efficient markets in complex environments while evolving the grid to meet policy goals.

The Market Services Department performs the market settlement function as well as metering. It implements market enhancements that produce transparent, consistent and efficient operations as well as ones that reduce the settlement timeline that achieve greater market efficiencies.

The Operations Compliance and Control Department has focused on updating its procedures as well as establishing new levels of training. That includes creating an operations simulator, which is a smaller replica of the control room, which provides essential life-like and hands on experience in operating the grid. Continuing a plan began in 2011 and 2012, the department is developing more sophisticated training policies that empower its staff to successfully operate in a more complex and technical operating environment.

Discussion of Proposed Budget

The 2013 proposed budget of $44.7 million remains the same as the 2012 budget. Staffing decreased by two in 2013 from 207 to 205.

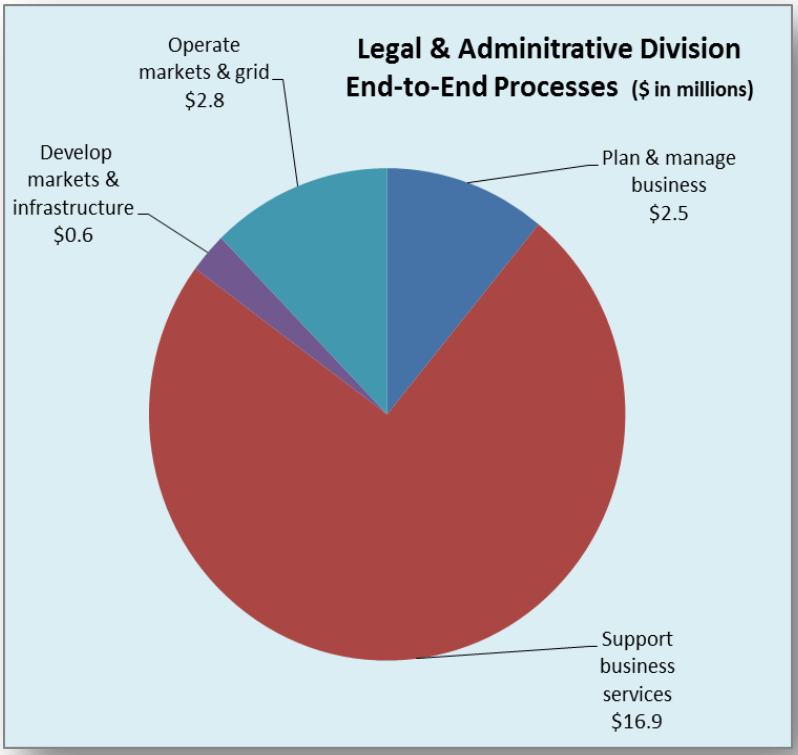


Personnel costs of $39.7 million remained unchanged from the 2012 budget. The 2013 personnel budget reflects a reduction in staff and a reduction in overtime offset by merit increases. Consulting and contract staff costs increased by $531,000, or 33 percent, to support grid operations and process documentation. Outsourced and other contracts and professional fees decreased $543,000, or 20 percent, because of a reduction in forecasting costs. The variable resources pay forecasting revenues, which are included in miscellaneous revenues to offset the forecasting costs. Transportation, training and other costs increased $7,000, or 1 percent.

General Counsel and Chief Administrative Officer

The Legal and Administrative division is comprised of the legal, corporate compliance, internal audit, business planning and operations, corporate secretary and finance departments.

This division strives to provide high quality counsel throughout the organization, as well as ensure compliance with complex rules and regulations that govern the ISO. The division's expertise is integral in resolving intricate matters found in all areas of the company's business. It represents the organization in regulatory and legal proceedings to protect the ISO interests and to ensure that the tariff and other legal requirements allow the company to meet its objectives.



The Corporate Counsel department is responsible for managing key vendor contracts and other agreements, as well as providing counseling on corporate, employment, intellectual property, finance, tax, governance and other general legal matters including conflicts and ethics advice.

The Regulatory Counsel department oversees legal and regulatory functions (including tariff amendments), state and federal regulatory matters, and litigation. Its duties include working closely with policy development teams to create market, transmission and operations services and features that conform to existing tariffs, or work in parallel to draft, stakeholder and file tariff additions and modifications. This work was especially important in 2012 in reforming the ISO transmission planning process and enhancing current rules on integrating renewable and storage technologies.

The Tariff and Tariff Compliance department is primarily responsible for all tariff related activities including stakeholder processes and drafting amendments, interpretations, and compliance advice and investigations. In addition, this department is responsible for regulatory contracts and their associated tariff amendments. Highlights in 2012 include working with subject matter experts in developing transmission, generation interconnection and demand response tariff amendments and updating the Tariff with new appendices that add, among other things, clarifications and greater transparency.

The Litigation and Mandatory Standards department oversees all state and federal court litigation, appellate work, adversarial proceedings, and other standards related matters. Its duties include managing work related to the pending crisis-era proceedings. The department also advises the corporate compliance team regarding mandatory standards, investigations and regulatory audits.

The Paralegal and Office Administration department provides paralegal, administrative and technical assistance to the legal department.

Corporate Compliance department assesses and ensures business units are ready to implement new and revised reliability standards that ensure tariff compliance. It diligently promotes a corporate culture of compliance with all laws and corporate policies. This department also is responsible for corporate records management.

The Internal Audit department is responsible for developing and implementing the annual internal plan and conducting audits to evaluate the effectiveness of management practices and controls. This department also has the responsibility for the enterprise risk management assessment that feeds into the organization's initiatives to mitigate identified risks.

The Business Planning and Operations department is responsible for developing the strategic plan, developing and monitoring the yearly corporate goals, and oversight for all corporate policies and procedures. This department is also responsible for the management and maintenance of the corporate business process architecture (end-to-end business processes) and works across the organization on business improvement projects, instilling a culture of continuous improvement and quality throughout the organization.

The Corporate Secretary department coordinates Board-related matters that include communications, setting meeting agendas and reviewing Board-specific documents. This department is also responsible for maintaining the official corporate record.

The Finance department consists of CFO and Treasury, Credit and Corporate Insurance, Accounting and Financial Reporting, Financial Planning and Analysis, and Procurement and Vendor Management. The group's mission is to provide high quality financial and procurement services to the ISO, its customers and vendors and to be recognized as an innovative, customer focused business partner across the organization.

The Treasury and Credit departments are responsible for the cash and investment management of ISO resources, banking relationships, insurance, and the credit and collateral management function of the ISO markets.

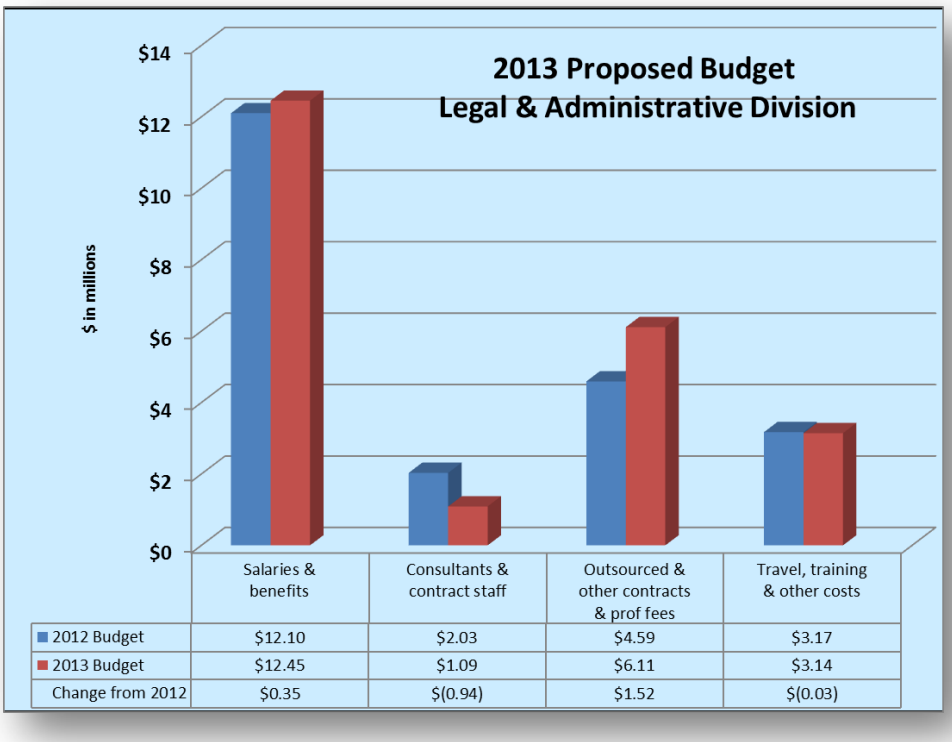
The Accounting and Financial Reporting department is responsible for implementing internal control policies, general accounting, external financial reporting, clearing the markets, and payables processing.

The Financial Planning and Analysis department is responsible for managing debt, overseeing the financial affairs of capital projects, financial planning and forecasting, budgeting, and administering the grid management charge.

The Procurement and Vendor Management department is the focal point for all commercial contracting. It procures goods and services for the corporation by efficiently selecting vendors and managing costs. This department also is responsible for issuing all corporate purchase orders.

Discussion of Proposed Budget

The 2013 proposed budget of $22.8 million is $900,000, or 4 percent, higher than the 2012 budget of $21.9 million. Staffing remained unchanged from 2012 at 60.



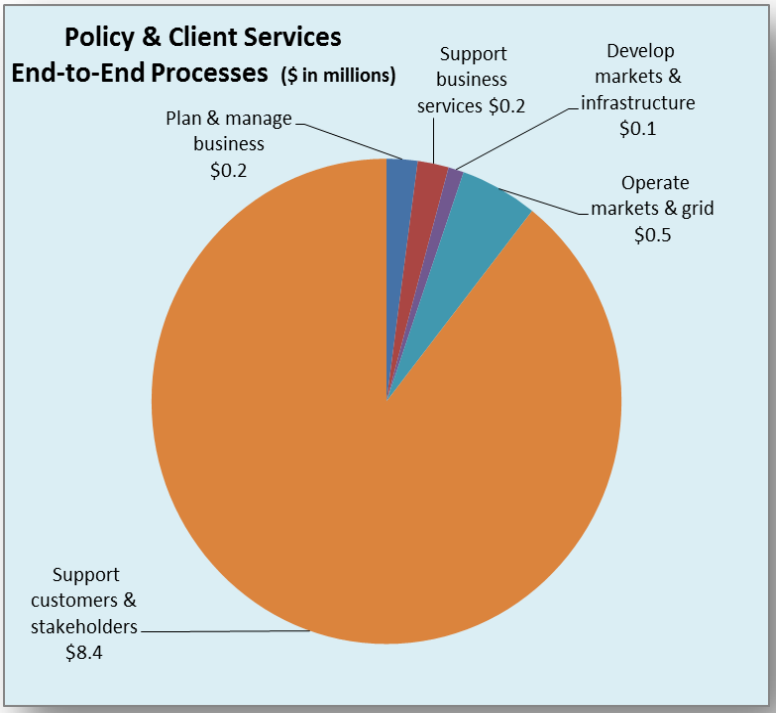
	Salaries & benefits	Consultants & contract staff	Outsourced & other contracts & prof fees	Travel, training & other costs
2012 Budget	$12.10	$2.03	$4.59	$3.17
2013 Budget	$12.45	$1.09	$6.11	$3.14
Change from 2012	$0.35	$(0.94)	$1.52	$(0.03)

Personnel costs increased $350,000 primarily due to merit increases. Consultants and contract staff decreased $940,000, or 5 percent, because of less need for contracted services. Outsourced and other contracts and professional fees increased $1.5 million, or 35 percent, primarily due to the need for additional outside legal counsel services. The main drivers are additional litigation and hearings at FERC in connection with transmission planning and approvals and market investigation. Travel, training and other costs decreased $25,000, or 1 percent.

Policy and Client Services

The Policy and Client Services division builds high quality collaborative relationships with a wide variety of stakeholders, regulators and consumer groups. It strives for excellence by providing timely and accurate information for public dissemination, fostering value added customer service, anticipating and addressing issues in a timely manner, and advancing objectives that benefit retail consumers and the electric

industry. The division works toward these goals by collaborating across the corporation to quickly resolve wholesale market customer issues, improve communications with stakeholders and effectively represent the ISO before state agencies, regional organizations and federal energy regulators.



The division is also responsible for key aspects in facilitating the integration of renewable resources by clearly presenting ISO advice, analyses and grid needs to technical and non-technical audiences. This has included such things as developing the "green pages" on the external ISO website and producing fact sheets, corporate brochure and info graphics that transform highly technical grid terms and concepts into more readable language that facilitates better comprehension and retention. Other activity includes coordinating and consulting with state and federal agencies and the Governor's office to help shape regulatory policies that preserve or enhance grid reliability.

The division also updates and manages the ISO Business Practice Manuals, which contain the information that explains underlying tariffs and are critical in providing stakeholders and customers the information they need to interconnect and operate renewable facilities, among other things.

The Communications and Public Relations department manages internal and external communications, including all Web communications and website management, 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 external affairs departments (federal, state and regulatory) oversee interactions with state and federal legislators, the governor's office, and federal and state agencies regarding matters that could impact the reliability or economics of the ISO controlled electric system. The departments' activities include building and maintaining relationships with regulatory agencies such as the California Public Utilities Commission, the California Energy Commission, and the California Air Resources Board, as well as monitoring and managing federal legislative and regulatory matters that could influence ISO practices and policies. The departments also work with legislators to advise and educate lawmakers on policies that could impact the power

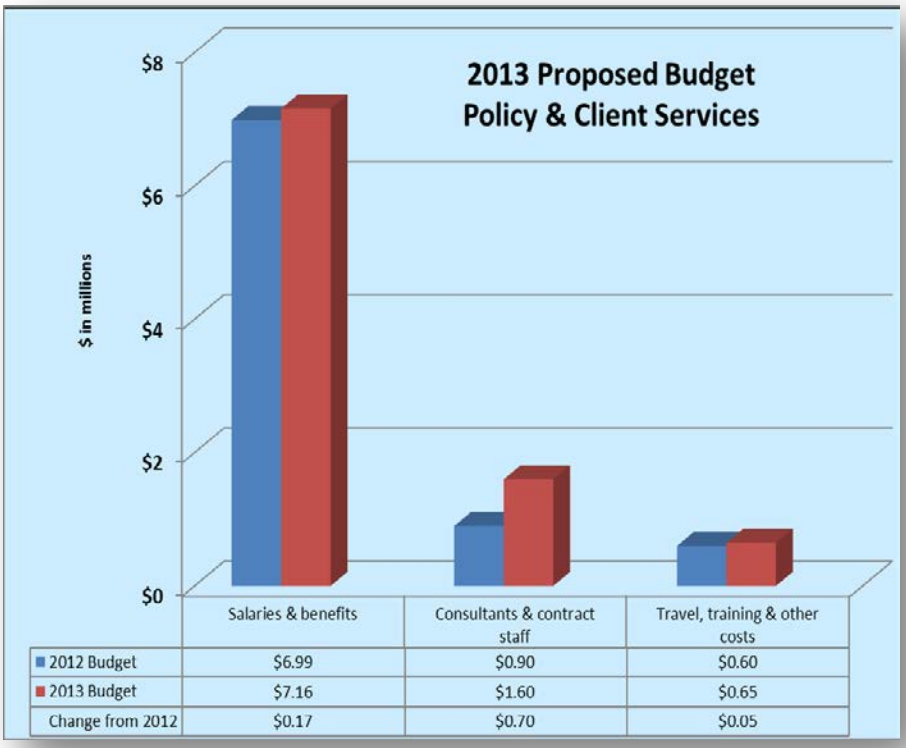
system. For example, the ISO continues to closely work with the Air Resources Board as it develops the rules to implement California's landmark greenhouse gas emissions reduction law, Assembly Bill 32.

The Customer Services and Stakeholder Affairs department is the primary business interface between ISO and its clients and stakeholders. The department rolled out a new program in 2012, to support newcomers to the ISO. New web-based resources, linkages to trade associations and personal support for incoming newcomer issues is making it easier for market entrants to navigate the ISO. The Customer Services group will refine its newcomer programs in 2013 to help make the transition to active participation in the ISO markets as seamless as possible.

Discussion of Proposed Budget

The 2013 proposed budget of $9.4 million is $920,000, or 11 percent, higher than the 2012 budget of $8.5 million. Staffing remained at 37.

Personnel costs increased $170,000, primarily because of merit increases. Consultants and contract staff increased $700,000, or 78 percent, in support of the California's Clean Energy Future activities and the ISO regional collaboration strategic initiative. Travel, training, and other costs increased $52,000, or 9 percent.



	Salaries & benefits	Consultants & contract staff	Travel, training & other costs
2012 Budget	$6.99	$0.90	$0.60
2013 Budget	$7.16	$1.60	$0.65
Change from 2012	$0.17	$0.70	$0.05

VI. Debt Service

Debt service budgeted for inclusion in the 2013 revenue requirement includes principal and interest on the ISO outstanding Series 2008A and 2009A bonds.

The 2008 bonds will be retired in full by February 2014 and bear interest at 5 percent, as summarized below:

Amortization schedule for 2008 bonds ($ in millions)	Principle	Interest	Proceeds from debt service fund	Total
2012	$25.1	$4.2	($0.7)	$28.6
2013	36.0	3.0	(0.7)	38.3
2014	23.5	1.2	(20.4)	4.3
Total	**$84.6**	**$8.4**	**$(21.8)**	**$71.2**

The ISO included the 2012 payment of $28.6 million in the 2011 revenue requirement and collected in the 2011 GMC rates. In an effort to maintain rate stability, the ISO has modified its tariff to allow for a level collection of debt service over the two-year period of 2012 and 2013. To accomplish this, $15.6 million of collections were deferred in 2012 until 2013.

In 2009, the ISO issued debt to finance a new facility in Folsom, California, on land owned by the ISO. The 2012 revenue requirement included debt service costs related to this offering. The bonds are fixed rate serial bonds with coupons ranging from 4.5 percent to 6.25 percent with a final term of 30 years. Lease payments on the corporation's previous facilities in Folsom, California, will expire at the end of November 2012. Amortization of the 2009 bonds is shown below:

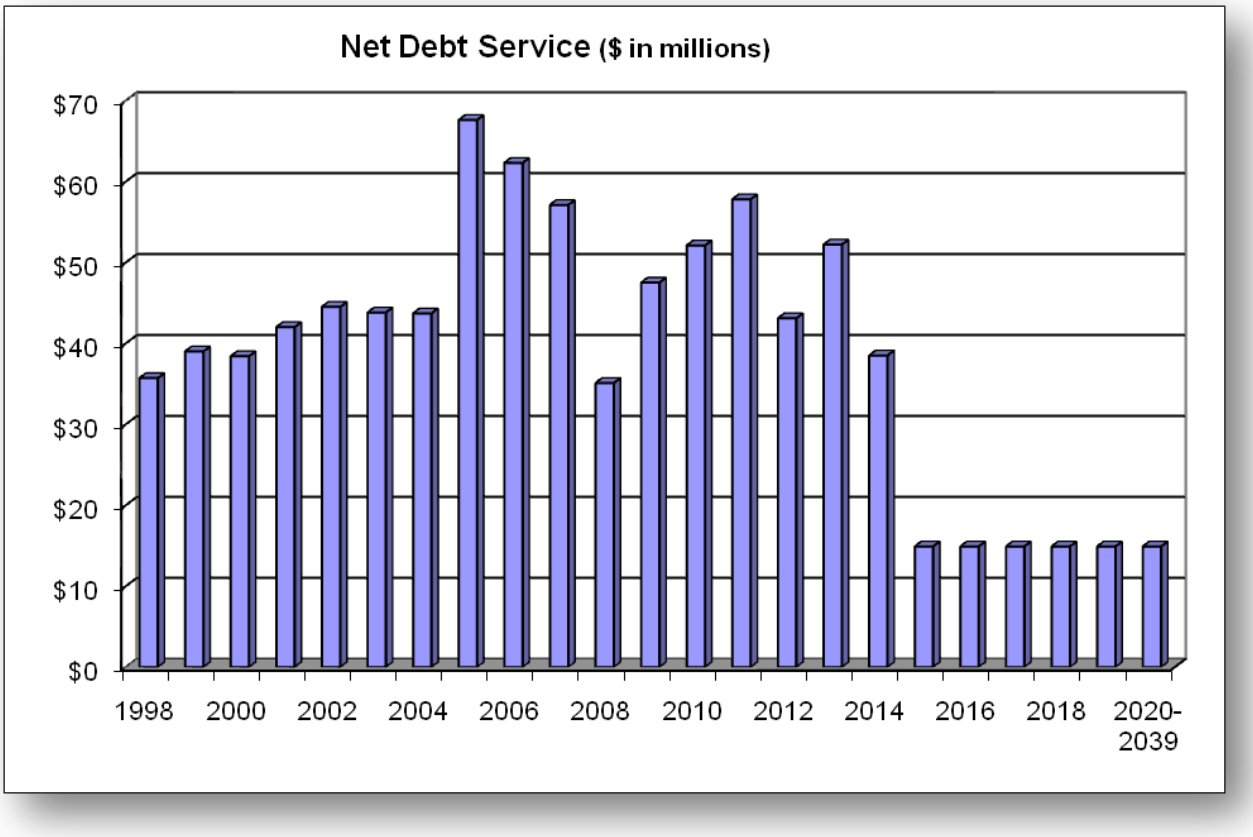
Amortization schedule for 2009 bonds ($ in millions)	Principle	Interest	Proceeds from debt service fund	Total
2013	$3.6	$11.2	$(0.5)	$14.3
2014	3.7	11.1	(0.5)	14.3
2015	3.8	11.0	(0.5)	14.3
2016	4.0	10.9	(0.5)	14.3
Thereafter	181.5	158.3	(26.1)	313.7
Total	$196.5	$202.3	$(28.1)	$370.7

Collecting for bonds in the revenue requirement occurs the year before making the payments. Principle payments occur in February and interest is paid semiannually in February and August.

A summary of the debt service components contained in the revenue requirement is as follows:

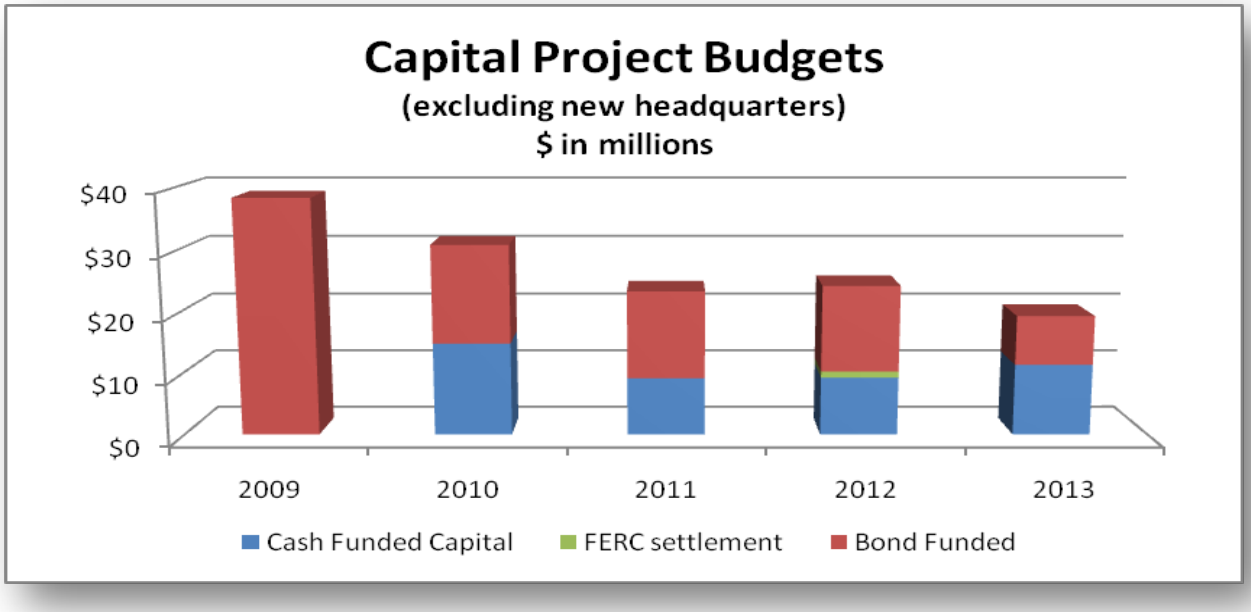
Debt Service ($ in millions)	2013 Budget	2012 Budget	Change
Principle payments on 2008A and 2009A bonds	$27.0	$39.6	($12.6)
Interest payments	12.3	14.2	(1.9)
Less amounts from debt service and capital interest reserve	(20.9)	(1.2)	(19.7)
Debt service collection leveling adjustment	15.6	(15.6)	31.2
Subtotal	**34.0**	**37.0**	**(3.0)**
25% Debt Service Reserve	8.5	9.3	(0.8)
Total	**$42.5**	**$46.3**	**$(3.8)**

Net debt service from ISO inception is shown below:



VII. Capital / Project Budget

The 2013 capital/project budget of up to $19.5 million will fund projects as detailed on the following pages. The cash funded capital collected via the revenue requirement is $21.0 million with the excess after utilization of the remaining bond proceeds will be used to fund future projects. The ISO will continue assessing its capital spending needs over the coming months.



The 2012 budget of $20.8 million included decommissioning costs at the former site of $1.3 million and $19.5 million of ongoing projects. In July, the Board approved a budget increase of $3.6 million to cover $2.6 million of hardware costs and $1.0 million for improvements to the market surveillance systems. The improvements to market surveillance systems are required by Federal Energy Regulatory Commission (FERC) in conjunction with the receipt of $1.0 million from a FERC settlement with a market participant.

Capital / Project Budget Development Process

The 2013 project prioritization process will run from August through November 2012. The program office will collaborate with the internal business units and maintain a list of projects throughout the year. The list is based on the five-year strategic plan, the information technology roadmap, and the ISO market initiatives roadmap. On a periodic basis, strategic initiative owners and managers review the progress of active projects, identify issues and risks, and propose changes to the master project listing. During the budgeting process, the information technology roadmap items are combined with the strategic projects scheduled for the following year and an initial master listing is developed. A prioritization and ranking process will be completed and used when the project list exceeds the available budget to determine preliminary project cut off. The

following chart shows the criteria for ranking projects. The full ranking criteria schedule is posted on the ISOs website.

Ranking Criteria		
Strategy	**Strategic Initiative**	**Weight**
Facilitate California's transition to a smarter, cleaner and more secure energy future (renewables)	Incorporate renewable resources Evolve the market Market and performance (MAP)	10%
Ensure continued reliability during grid transformation (capacity on the system)	Evolve the market MAP Develop infrastructure and tools	10%
Strengthen California's global leadership commitment to renewable, responsible and reliable energy (regulatory coordination)	Advance state energy and environmental initiatives	10%
Explore opportunities for regional collaboration and technological innovation	Incorporate renewable resources Improve forecasting capabilities MAP	10%
Grid reliability	Enhances reliability of the grid by addressing and existing or potential operational issue	15%
Market Efficiency	Addresses a current or potential market inefficiency	10%
Contributes to increased customer service		7%
Compliance	Establish a culture of compliance	15%
Development of staff / talent pipeline	People strategies	5%
ISO process improvement	Process and quality	5%
Information Technology system qualities	System and tools	7%

The following are the business and financial case criteria:

- Does the project require market participant development efforts?
- Does the project deliver cost savings?
- How much are the project implementation costs?
- Does the project reduce operations and maintenance costs?
- Does the project mitigate any corporate risk?
- Executive discretion.

The complete evaluation has been posted to the website.

Proposed Project List

The current project list now exceeds the proposed funding level but will be prioritized and brought within the proposed budget level. The following listing provides an indication of the projects proposed for initiation during 2013. The final prioritized listing will be in the final budget presentation. This year's list includes the following five areas and initiatives:

- implementing system and tools
- enhancing markets and performance
- technology projects

- incorporating distributed resources
- other costs

A review will take place of all projects on the final 2013 listing identified 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 and General Counsel, reviews and approves all projects considered for funding in 2013. The 2013 priorities may change depending on developments during the remainder of 2012 and 2013.

Proposed Projects for 2013	**Amount**
Implementation of Systems and Tools	
Outage management system (OMS) phase 3	large
Incorporate current manual workarounds into Siemens products to improve performance and support	large
Resources Interconnection Management System (RIMS) enhancements 2013	large
Energy management system (EMS) enhancements	large
Enterprise model management systems (EMMS) phase 3	large
Improve forecasting tools (ancillary services, flexible ramping)	medium
Operational meter analysis and reporting (OMAR) new features, corrections, and automation	medium
Market validation tools phase 2 and 3	medium
Topology estimation tool	small
Secondary e-tagging system for robustness	small
PROBE Enhancements	small
Total	**$12,725,000**
Enhancement of Markets and Performance	
Operations enhancements 2013	large
Non-generator resources (NGR) in ancillary services market requirements - regulation energy management (REM) - dispatchable demand response (DDR)	large
Flexible ramping (market product) / simultaneous residual unit commitment and integrated forward market	medium
Intertie pricing and settlement	medium
Outage coordination (optimization)	medium
Extending the network model	medium
Bid cost recovery / renewable integration market & product review (RIMPR) phase 1	medium
Blackstart restoration phase 1 and phase 2	medium
Exceptional dispatch mitigation in real time	medium
Market services enhancements 2013	medium
Participating intermittent resource project (PIRP) decremental bidding	medium
Subset of hours for all resources (includes updates to exceptional dispatch)	medium
Standard capacity product phase 3	small

Proposed Projects for 2013	Amount
Decoupling of short term unit commitment (DSTUC) extended to 9 or 10 hours	small
Circular scheduling	small
Default energy bids (DEB) enhancements	small
Enhanced generation contingency model for markets	small
Replacement requirement for generation outages - phase 2 automation	small
Marginal loss surplus allocation	small
Price consistency improvements	small
Secured credit changes for convergence bidding	small
Constraint parameter enhancement	small
Administrative pricing rule	small
Ancillary services (AS) buy back	small
Flexible capacity procurement	small
Total	**$13,100,000**
Technology Projects	
Architecture: consolidation of multiple overlapping applications, improve operational monitoring dashboard, market participant interfaces, reporting and pass through systems, remediation of single points of failure, and consolidation of settlement and post processes	large
Enterprise hardware and software purchases	large
Upgrades to Oracle eBusiness suite software – human resources, finance, procurement and market clearing	medium
Corporate systems enhancements	medium
Master file enhancement phase 2	small
Testing automation phase 3	small
eDiscovery for Legal	small
Customer inquiry, dispute and information (CIDI) functionality enhancements	small
Compliance automation and controls governance, phase 3	small
Update FERC electronic quarterly report (EQR) software	small
Total	**$11,680,000**
Incorporation of Distributed Resources	
Technology pilots and demonstrations (including micro grid, demand response, and energy storage)	medium
Smart Grid California Energy Commission (CEC) phasor project	medium
Synchrophasor research and development	small
Cost-effective measurement infrastructure project	small
Smart Grid - dynamic thermal line ratings project	small
Grid index - price-responsive wholesale to retail demand project	small
Price consistency improvements	small
Operational impacts of distributed energy resources (DER) at scale	small
Total	**$2,800,000**

Proposed Projects for 2013	Amount
Other Costs	
Program Office project management costs	medium
Annual request for facilities costs	small
Total	**$1,100,000**
Total Proposed Projects for 2013	**$41,405,000**

Note: The costs of the individual projects are not shown, but are categorized by size as follows: small projects under $500,000, medium projects from $500,000 to $1 million, and large projects over $1 million. The actual projects completed during 2011 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

Miscellaneous revenue for 2013 is budgeted at $7.9 million, $500,000 lower than 2012 primarily due to lower interest revenues from dropping rates but partially mitigated by higher billings for interconnection studies. The details of this category are as follows:

Miscellaneous Revenue ($ in millions)	2013 Budget	2012 Budget	Change
Interest earnings	$1.8	$2.9	$(1.1)
California-Oregon Intertie path operator fees	2.0	2.0	-
Large generation interconnection fees	2.0	1.5	0.5
Intermittent resource (wind and solar) forecasting fees	1.6	1.7	(0.1)
Scheduling Coordinator application and training fees, summer reliability program fees and other fees	0.5	0.3	0.2
Total	**$7.9**	**$8.4**	**$(0.5)**

IX. Reserve Credit from 2012

The operating reserve credit is a reduction or offset to the ISO revenue requirement for 2013. In any year that the ISO operating reserve account exceeds 15 percent of the prospective year's O&M budget, the excess goes toward reducing the revenue requirement for the coming year. For 2013, the ISO forecasts a credit from the operating reserve account of $22.5 million. A summary is below.

Reserve Credit from prior year ($ in millions)	2013 Budget	2012 Budget	Change
Increase (decrease) in 15% reserve for O&M budget	$ -	$(0.1)	$0.1
25% debt service collection from prior year	9.2	8.7	0.5
Collection of additional 2 weeks grid management charges from implementation of weekly market clearing	9.8	-	9.8
True-up of actual to forecast revenues and expenses	3.5	14.5	(11.0)
Total	**$22.5**	**$23.1**	**$(0.6)**

X. Unbundled Grid Management Charge Calculations

The ISO recovers its costs through separate grid management charges to market participants. The ISO and stakeholders developed a new rate design for 2012, which was approved by the Board and filed with FERC. FERC approved the design on September 30, 2011 without change. The new design provides for three service categories and five associated fees and charges. The ISO derives the rate by dividing the recoverable costs for the category by the estimated billing determinants.

Components of GMC and billing Determinants

The three service categories, five associated fees and charges, and their billing determinants are as follows:

Type	Bill Determinant	Charge Code
Service Categories		
Market Service Charge	Awards in MWh or MW of supply and demand excluding Transmission Ownership Rights (TORs)	4560
Systems Operations Charge	Metered flows in MWh of supply and demand in the ISO balancing authority with the following two exceptions, TORs and qualifying grandfathered supply contracts	4561
CRR Service Charge	MWh of congestion	4562
Fees		
Bid segment fees	Number of bid segments in the ISO market for supply or demand	4515
Inter-SC Trades fee	Number of trades by scheduling coordinator (SC)	4512
SCID fee	Monthly charge if statement produced for an SC	4575
TOR charges fee	Minimum of metered supply or demand in MWh on TORs	4560
CRR auction bid fees	Number of accepted bids in CRR auctions	4516

Rate Calculation

There are seven steps to calculate rates, as noted below:

1. estimate billing determinant volumes for fees and charges;
2. multiply volumes by rates to derive revenues for individual fees and charges;
3. allocate revenue requirement into three service categories;
4. deduct fee and charge revenue from associated service category costs;
5. estimate billing determinant volumes for three service categories;
6. deduct TOR and grandfathered supply volumes from System Operations Charge; and
7. divide residual revenue requirement from Step 4 by adjusted billing determinant volumes from Step 6 to derive individual service category rates.

Calculation of Fee and Charge Revenue
($ in millions)

Fee or Charge	Rate	Estimated Volumes	Estimated 2013 Revenue
Bid segment fee	$0.005	34,820,800	$ 174,104
Inter-SC Trades fee	1.00	2,787,257	2,787,257
SCID fee (annual)	12,000	174	2,085,000
TOR charges fee	0.27	3,641,748	983,272
CRR auction bid fee	1.00	206,055	206,055
Total			$6,235,688

Calculation of Service Category Rates
($ in millions)

Component	Market Services	System Operations	CRR Services	Total
Allocation of Revenue Requirement				
Percentages	27%	69%	4%	100%
Allocation of costs	$52,927,618	$135,259,468	$7,841,129	$196,028,214
Deduct fee and charge revenue				
Bid segment fees	174,104	-	-	174,104
Inter-SC Trades	2,787,257	-	-	2,787,257
SCID fees	2,085,000	-	-	2,085,000
TOR charges	-	983,272	-	983,272
CRR auction bid fees	-	-	206,055	206,055
Total Fees and charges	**5,046,361**	**983,272**	**206,055**	**6,235,688**
Calculation of Recoverable costs				
Costs less fees & charges	**$47,881,257**	**$134,276,196**	**$7,635,074**	**$189,792,526**
Estimated volumes				
Volumes	509,094,790	469,849,646	581,122,704	
Deduct exceptions				
Less grandfathered supply	-	7,179,425	-	
Adjusted Volumes	**509,094,790**	**462,670,221**	**581,122,704**	
Resulting rates	**$0.0941**	**$0.2902**	**$0.0131**	

Summary of GMC Costs, Volumes and Rates for 2013

Net Revenue Requirement, Volume Forecast and Rate by Service Category

($ in millions, volumes in thousands and rates in $ per unit)

Charge Code	Service Category or Fee	2013 Budget	2013 volumes	2013 rates
4560	Market Service Charge	$47.88	509,095	$0.0941
4561	Systems Operations Charge	134.28	462,670	0.2902
4562	CRR Services Charge	7.64	581,123	0.0131
4515	Bid segment fees	0.17	34,821	0.005
4512	Inter-SC Trades fees	2.78	2,787	1.00
4575	SCID (monthly) fees	2.09	174	1,000
4560	TOR charges	0.98	3,642	0.27
4516	CRR auction bid fees	0.21	206	1.00
Total		**$196.03**		

Comparison of Net Revenue Requirements by Service Category

($ in millions)

Charge Code	Service Category or Fee	2013 Budget	2012 Budget	$ Variance	% change
4560	Market Service Charge	$47.88	$46.49	$1.39	3.0%
4561	Systems Operations Charge	134.28	133.52	0.76	0.6%
4562	CRR Services Charge	7.64	7.31	0.33	4.5%
4515	Bid segment fees	0.17	0.13	0.04	30.8%
4512	Inter-SC Trades fees	2.78	3.85	(1.07)	(27.8)%
4575	SCID fees	2.09	2.12	(0.03)	(1.4)%
4560	TOR charges	0.98	0.90	0.08	8.9%
4516	CRR auction bid fees	0.21	0.48	(0.27)	(56.3)%
Total		**$196.03**	**$194.80**	**$1.23**	**0.6%**

Comparison of rates

($ per unit)

Charge Code	Service Category or Fee	2013 Rate	2012 Rate	$ Variance	comments
4560	Market Service Charge	$0.0941	$0.0851	$0.0090	9% lower volumes projected for 2013
4561	Systems Operations Charge	0.2902	0.2845	0.0057	1% lower volumes projected for 2013
4562	CRR Services Charge	0.0131	0.0170	(0.0039)	30% higher volumes projected for 2013

Bid segment fees, inter-SC trade fees, SCID fees, TOR charges and CRR auction bid fees are fixed.