### BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

\* \* \* \* \*

RE: IN THE MATTER OF ADVICE	)	
LETTER NO. 1672-ELECTRIC FILED BY	)	
PUBLIC SERVICE COMPANY OF	)	
COLORADO TO REVISE ITS	) PROCEEDING NO. 14AL	E
COLORADO PUC NO. 7-ELECTRIC	)	
TARIFF TO IMPLEMENT A GENERAL	j ,	
RATE SCHEDULE ADJUSTMENT AND	)	
OTHER RATE CHANGES EFFECTIVE	)	
JULY 18, 2014.	)	

#### **DIRECT TESTIMONY AND ATTACHMENTS OF KELLY A. BLOCH**

ON

**BEHALF OF** 

PUBLIC SERVICE COMPANY OF COLORADO

June 17, 2014

### BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

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RE: IN THE MATTER OF ADVICE	)
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JULY 18, 2014.	)
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#### SUMMARY OF DIRECT TESTIMONY OF KELLY A. BLOCH

Ms. Kelly A. Bloch is the Senior Director, Engineering for Xcel Energy Services Inc. ("XES"). In this position, Ms. Bloch has responsibility for overseeing the planning, deployment, and financial governance of Public Service Company of Colorado's ("Public Service" or "Company") distribution system.

In her Direct Testimony, Ms. Bloch supports the \$236.6 million in 2014 distribution capital additions and \$233.4 million in 2015 distribution capital additions that Company witness Ms. Lisa Perkett utilizes to develop the plant-related roll forward, which is in turn used by Company witness Ms. Deborah Blair to calculate the 13-month average plant in service balance included in the Company's January 1, 2015 through December 31, 2015 Test Year ("Test Year") rate base. Ms. Bloch also supports the \$95.3 million in 2013 Operations & Maintenance ("O&M") expenses that are included in the Test Year cost of service. In support of these requests, Ms. Bloch provides an overview of the Company's distribution system and operations; describes how the Company prepares budgets for distribution-related projects including both routine and individual projects; identifies the

Company's distribution-related capital additions in 2014 and 2015 that are reflected in the Test Year presented by Ms. Blair; and discusses the distribution-related O&M expenses that are reflected in the Test Year. Ms. Bloch notes that the Company's 2013 O&M expenses are subject to the adjustments for the shift in spending associated with the Mountain Pine Beetle/wildfire protection activities from distribution to transmission explained by Company witness Mr. James Downie and for labor expenses explained by Company witness Ms. Ruth Lowenthal.

Ms. Bloch recommends that the Colorado Public Utilities Commission ("Commission") approve the \$470.0 million of capital additions presented in her testimony as reasonable and necessary to support Public Service's distribution system; that the Commission approve the \$95.3 million O&M presented in her testimony, as adjusted, as reasonable and necessary to support Public Service's ability to provide safe and reliable electric service to its customers; and that the Commission find that both levels of costs are a reasonable basis to set rates in the Company's Test Year cost of service.

### BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

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RE: IN THE MATTER OF ADVICE	)
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### **DIRECT TESTIMONY AND ATTACHMENTS OF KELLY A. BLOCH**

### **INDEX**

<u>SE(</u>	<u>PAGE</u>	Ξ
l.	INTRODUCTION, QUALIFICATIONS, PURPOSE OF TESTIMONY, AND RECOMMENDATION	
II.	DISTRIBUTION FUNCTIONS AND ACTIVITIES5	
III.	DISTRIBUTION CAPITAL BUDGET8	
	A. OVERVIEW OF CAPITAL PROJECT NEEDS	
	B. DISTRIBUTION BUDGET DEVELOPMENT AND MANAGEMENT14	
	C. TEST YEAR DISTRIBUTION CAPITAL PLANT ADDITIONS24	
IV.	OPERATIONS AND MAINTENANCE (O&M)41	
V.	SERVICE QUALITY	

### **LIST OF ATTACHMENTS**

Attachment No. KAB-1	Distribution Capital Additions: 2014-2015
Attachment No. KAB-2	2013 O&M Expenditures by Object and FERC Account

#### **GLOSSARY OF ACRONYMS AND DEFINED TERMS**

#### **Acronym/Defined Term**

#### **Meaning**

CBS CompetiSoft Budgeting System

CIAC Contribution In Aid of Construction

Commission Colorado Public Utilities Commission

CWIP Construction Work in Progress

DSM Demand Side Management

DVO Distribution Voltage Optimization

ECT Electric Continuity Threshold

ERT Electric Restoration Threshold

FERC Federal Energy Regulatory Commission

JDE J D Edwards

MCSG Metal-Clad Switch Gear

MPB Mountain Pine Beetle

NCAR National Center for Atmospheric Research

O&M Operations & Maintenance

OH Overhead

Public Service, or

Company

Public Service Company of Colorado

#### **Acronym/Defined Term**

#### **Meaning**

QSP Quality of Service Plan

RWT Reliability Warning Threshold

SAIDI System Average Interruption Duration Index

Test Year January 1, 2015 through December 31, 2015

TWP Transmission Wildfire Protection

UG Underground

URD Underground Residential Distribution

Xcel Energy Xcel Energy Inc.

XES Xcel Energy Services Inc.

### BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

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LETT BY P COLO COLO TARI RATE OTHE	IN THE MATTER OF ADVICE FER NO. 1672-ELECTRIC FILED UBLIC SERVICE COMPANY OF ORADO TO REVISE ITS ORADO PUC NO. 7-ELECTRIC FF TO IMPLEMENT A GENERAL E SCHEDULE ADJUSTMENT AND ER RATE CHANGES EFFECTIVE  7 18, 2014.
I.	INTRODUCTION, QUALIFICATIONS, PURPOSE OF TESTIMONY, AND
	RECOMMENDATION
Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
A.	My name is Kelly Bloch. My business address is 1123 West 3 <sup>rd</sup> Avenue,
	Denver, Colorado 80223.
Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?
A.	I am employed by Xcel Energy Services Inc. ("XES") as Senior Director,
	Distribution Engineering. XES is a wholly-owned subsidiary of Xcel Energy
	Inc. ("Xcel Energy"), and provides an array of support services to Public
	Service Company of Colorado ("Public Service" or "Company") and the other

### 12 Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

utility operating company subsidiaries of Xcel Energy on a coordinated basis.

13 A. I am testifying on behalf of Public Service.

### 1 Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AND

2 QUALIFICATIONS.

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- A. I provide strategic direction for the expansion, modernization, and maintenance of the electric distribution system for Public Service to ensure a safe, reliable, and cost effective distribution system. My key responsibilities include distribution infrastructure planning, system reliability, construction, design, and material & equipment standards, load forecasting, capital budget creation, distribution project management, system modernization and renewal strategy, and management of the current year capital budget.
  - A statement of my qualifications, duties, and responsibilities is provided as Attachment A.

### 12 Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY AND 13 ATTACHMENTS?

- A. The purpose of my testimony is to support the \$470.0 million in 2014 and 2015 distribution plant in-service additions and the \$95.3 million in Operations & Maintenance ("O&M") expense that are included in the January 1, 2015 through December 31, 2015 Test Year ("Test Year") cost of service that is presented by Company witness Ms. Deborah Blair. To support my position, I will provide the following:
  - A description of the Company's distribution system and operations;

- A description of how the Distribution business area prepares its capital
   budgets and manages to them. This description will identify the types of
   projects included in the Distribution Business Area's capital budgets;
  - A discussion of the individual capital additions with a cost greater than \$1 million that the Distribution Business Area will place into service in 2014 and 2015; and
    - A discussion regarding the level of Distribution-related O&M expenses that are reflected in the Test Year. In this discussion I will explain that the Test Year reflects the Distribution Business Area's 2013 O&M levels with adjustments for the shift in spending associated with the Mountain Pine Beetle/wildfire protection activities from distribution to transmission explained by Company witness Mr. James Downie and labor expenses explained by Company witness Ms. Ruth Lowenthal that is reflected in the Test Year cost of service supported by Company witness Ms. Deborah Blair. Ms. Lowenthal supports the increase in labor expenses due to anticipated merit and base salary increases for non-bargaining and bargaining employees through December 31, 2015 and Ms. Blair quantifies the increase in total labor expenses included in the Test Year cost of service.

#### Q. ARE YOU SPONSORING ANY ATTACHMENTS?

21 A. Yes. I am sponsoring the following Attachments:

• Attachment No. KAB-1, Distribution Capital Additions; and

 Attachment No. KAB-2, 2013 O&M Expenditures by Object and Federal Energy Regulatory Commission ("FERC") Account.

#### WHAT RECOMMENDATIONS ARE YOU MAKING IN YOUR TESTIMONY?

Q.

Α.

I recommend that the Colorado Public Utilities Commission ("Commission") approve the \$470.0 million of capital additions presented in my Direct Testimony as reasonable and necessary to support Public Service's distribution system; that the Commission approve the \$95.3 million O&M presented in my testimony, adjusted as I describe in Section IV, below, as reasonable and necessary to support Public Service's ability to provide safe and reliable electric service to its customers; and that the Commission find that both levels of costs are a reasonable basis to set rates in the Company's Test Year cost of service.

#### **II. DISTRIBUTION FUNCTIONS AND ACTIVITIES**

# Q. PLEASE PROVIDE AN OVERVIEW OF THE PUBLIC SERVICE DISTRIBUTION SYSTEM.

Α.

A.

To reliably and efficiently serve our approximately 1.3 million Colorado customers, Public Service owns and operates an extensive distribution system. Our distribution system has assets in 25 counties and provides service to both rural and urban customers. The distribution system consists of approximately 150 distribution-level substations that support a network of over 760 distribution feeders necessary to serve our customers. Our distribution system is further comprised of over 11,000 circuit miles of overhead distribution lines, over 12,000 circuit miles of underground distribution lines, and over 361,000 poles. To operate and maintain this extensive system, the Distribution Business Area has wide-ranging control center operations and a fleet of over 265 support vehicles.

#### 15 Q. PLEASE DESCRIBE THE DISTRIBUTION BUSINESS AREA.

The Distribution Business Area is responsible for the construction and operation of Public Service's distribution system, the portion of its electric system that delivers electricity to the vast majority of our customers. The Distribution Business Area is comprised of the following functional areas: (1) Distribution Vice President; (2) Electric Distribution Design, Construction, and Maintenance; (3) Electric Distribution Engineering; (4) Business Operations; and (5) Business Planning. There are a total of approximately 1,160

operating company and XES Distribution employees assigned to provide services to the Public Service distribution system. Of those employees, approximately 1,125 are Public Service Company employees.

# 4 Q. PLEASE DESCRIBE THE KEY FUNCTIONS AND SERVICES OF THE 5 DISTRIBUTION BUSINESS AREA.

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- The key services provided by the Distribution Business Area include developing infrastructure to serve new customers, restoring service after outages, performing routine maintenance, and making capital improvements when necessary to improve the performance and reliability of the distribution system. To deliver these services, the Distribution Business Area is structured around four key functions:
  - Operations, which includes the design, construction, and maintenance
    of the distribution system, as well as monitoring and operating system
    from the Electric Control Center, responding to electric distribution
    trouble calls, and coordinating emergency response.
  - Engineering, which includes technical support and system planning, design, construction, and material standardization, reliability planning, and addressing distribution-related customer service issues.
  - Business Operations, which includes vegetation management, outdoor lighting, metering systems and support, facility attachments, and the builder's call line.

Planning and Performance, which includes business planning,
 consulting, and analytical services and performance governance and
 management.

#### III. DISTRIBUTION CAPITAL BUDGET

A. Overview of Capital Project Ne	∍eds
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A.

A.

# Q. WHAT ARE THE PRIMARY DRIVERS OF THE CAPITAL ADDITIONS THAT YOUR ORGANIZATION PLACES IN SERVICE?

System growth, capacity expansion, and replacement for normal wear and tear of our electric distribution assets and fleet vehicles drive the need for capital additions to the system to ensure safety, quality of service, and financial prudence while also satisfying environmental and other legal and regulatory requirements. These business drivers in turn influence the amount and type of infrastructure we need to connect service to our customers, including: poles, wires, cross-arms, protective equipment, meters, transformers, switches, and street light equipment.

# GIVEN THESE BUSINESS DRIVERS, WHAT TYPES OF CAPITAL PROJECTS DOES THE DISTRIBUTION BUSINESS AREA UNDERTAKE?

To ensure the health of our distribution system and to meet the needs of our new and existing customers, as a general matter the Distribution Business Area undertakes projects to either (1) support existing load or (2) provide electric service to new customers.

First, we undertake those projects that are necessary to maintain Public Service's utility distribution system to enable Public Service to provide safe and reliable electric service to our existing customers. As noted above, Public Service's distribution system is extensive and it is necessary for us to

make regular investments that support the ongoing health and reliability of that system. These projects can be routine or individual. Examples of individual projects include the Proactive Cable Replacement program under which we systematically replace cables as faulty cables are the biggest driver of outages and Overhead Rebuild projects, which include the conversion of 4 kV feeders to 13.2 kV and allow us to increase the efficiency and reliability of our feeder level network. We also undertake, as required, reconstruction investments for road moves.

Α.

Second, we make those investments necessary to expand our system to serve new customers on the system. These investments include equipment purchases and installation. Expansion of our distribution system may involve both overhead and underground extensions, and substation and distribution line projects.

To support continued reliable service to our existing customers and extension of service to our new customers, we also incur costs for fleet purchases, tool and equipment purchases, street lighting, right-of-way work, and facility locates.

### Q. DOES THE DISTRIBUTION BUSINESS AREA FURTHER CATEGORIZE ITS WORK?

Yes. Distribution has a well-defined process for identifying and determining electric distribution investments within eight categories encompassing our business area responsibilities. These categories include:

• Mandates: This category includes poles, wire, labor, fleet, and other costs associated with both the relocation of existing plant and the location of certain new plant, to meet Federal, State, or local requirements. These projects include relocating facilities that are in direct conflict with street expansions within public right-of-ways, undergrounding of facilities as required by franchise agreements or other authority, and safety-related work required by a governing authority. These projects are normally identified during planning meetings with local communities. Examples of these projects include relocations for state and local governments such as the FasTracks projects, which involves relocation across the Denver Metro area to facilitate the expansion of Light Rail. These projects are monitored monthly and adjustments are made based on customer requests and any changes in operational mandates.

New Service: This work includes new overhead and underground extensions and services associated with extending facilities to new customers. Projects required to support this growth include the installation of feeders, primary and secondary extensions, and service laterals. The amount of work in the category is growing as the economy improves. New meter sets increased 29 percent from 2012-2013 and based on data for Colorado from the National Home Builders association are expected to increase approximately 26 percent per year from 2014-2015.

• Equipment Purchase: – This work includes purchases of electric transformers and meters. The main drivers of the budget for transformers and meters are replacements due to normal wear and tear, emergencies, new customer growth, and increased transformer prices associated with raw materials, manufacturing, and delivery. We forecast these costs based on our historic experience of needing to replace this equipment as well as forecasts of new customer growth.

- Street Lights: Street lighting work includes items to support the installation
  and replacement of street light equipment as required by construction
  standards and Public Service's tariffs including light heads, steel poles,
  arms, contacts, wire, and labor required for continuous operation. Street
  light capital projects are largely driven by new customer growth, road
  projects, normal wear and tear, and damage or replacement.
- Contributions in Aid of Construction ("CIAC"): CIAC are payments made
  by a customer per our extension policy. Some of the work of the
  Distribution Business Area is performed at the request of our customers.
  To the extent allowed by our tariff, our customers fund some of this work.
  These customer funds are categorized as a CIAC and are an offset to our
  capital budgets for this work.
- <u>Capacity</u>: This category includes all distribution system equipment associated with upgrading or increasing capacity to handle system load

growth and serve load under single contingency conditions (i.e., when one element of the distribution system is out of service). The work includes installation of new or upgraded substation transformers and distribution feeders. Capacity projects generally span multiple years and are necessitated by increased load either from existing customers or new customers. The investment varies between years depending on the type of work being completed. The installation of a brand new substation or a reconfiguration in an urban substation can be significantly more costly than additions to existing suburban substations our budgets reflect these different types of work.

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Asset Health: Projects classified as asset health are related to infrastructure that is experiencing high failure rates and, as a result, impacting reliability of service and negatively increasing O&M expenditures. It also includes public damage and efficiency programs. Distribution assets are monitored to ensure that they provide reliable service throughout the year. When poor performing assets are identified, projects that will improve asset performance are included in the budget. Examples of these types of projects includes replacing underground tap and feeder cable, Feeder Performance Improvement Program projects along with other projects to address equipment experiencing multiple interruptions and customers experiencing multiple interruptions. This category also includes replacement of wood poles and overhead lines that have reached their end of life, replacing failed substation equipment, and proactively replacing transformers and switchgear that have reached their end of life, and public damage.

Other: The "other" category includes fleet, tools, right-of-way, land, communications, and locate costs associated with modifications or additions to the distribution system or supporting assets. Fleet costs represent the necessary replacement of vehicles and equipment that have become less reliable over time and costly to maintain. Right-of-way costs include capital additions associated with obtaining rights-of-way and easements.

Within each of these categories, we identify both "routine" and "individual" projects based on the nature of the work we are forecasting that we must undertake to continue to serve existing customers and meet the needs of new customers on our distribution system. I discuss each type of project later in my testimony. I note that even though much of our capital additions are related to maintaining the distribution system, our capital budgets identify those necessary projects that can be appropriately capitalized under the Public Service capitalization policy overseen by Company witness Ms. Lisa Perkett.

#### B. Distribution Budget Development and Management

A.

# Q. HOW DOES THE DISTRIBUTION BUSINESS AREA IDENTIFY WORK THAT MUST BE ACCOMPLISHED IN ANY GIVEN YEAR?

The Distribution Business Area must plan and budget for much of our work, identifying the necessary investments we need to make to the distribution system over the next five years, even though we may not have access to specific information regarding where new business will develop, assets will fail, or construction will necessitate the addition, replacement, or relocation of distribution assets. We therefore utilize sophisticated forecasting to budget for and track these costs.

We begin our budgeting process by assessing the work that must be accomplished in a given year. The state of the economy has a significant impact on the development of new and expanded business, as a robust economy drives new housing, large commercial load increases, more community work on roads that in turn affects distribution facilities in or near the right-of-way, and more residential and commercial construction work that may impact distribution lines. To do so, our budgeting process begins with economic forecasting and analysis of historical spending trends to assess likely new business needs, required replacement of assets, and movement of distribution facilities to accommodate road construction.

We also assess the likely impacts of system growth on our capacity needs, including the risk of overload and single contingencies. In addition, we forecast the likely costs of replacing assets that will fail or be damaged based on historical trends, and forecast our need for routine replacement of vehicles and tools based on the age and state of our fleet. These analyses lend themselves to a robust baseline identification of capital projects necessary for the routine, year-over-year work we must do to maintain our existing distribution system and plan for necessary support of new customers.

#### Q. HOW DO YOU ACCOUNT FOR ROUTINE WORK?

Α.

A.

Routine workorders are used to account for those regular, common capital additions needed to support new business growth, system reinforcements, or rebuilds. In developing our routine workorders, we take into account the economic forecasting I mentioned above as well as a five-year expenditure history for this type of work.

Utilizing routine workorders allows us to efficiently allocate funding for performing core business functions, such as connecting new customers, reconstruction of facilities, street lights expenditures, funds for the purchase of new meters, transformers and the fleet. Our routine workorders generally account for the following types of capital additions: new service, equipment purchases, street lighting, mandates, fleet, and asset health.

# Q. HOW DOES THE DISTRIBUTION BUSINESS AREA DEVELOP BUDGETS FOR ROUTINE WORKORDERS?

We budget for our routine workorders based on expenditure history, focusing on the type of work to be completed.

The budget for new service routine workorders is developed using a cost per meter methodology. This process begins with developing a forecast for the number of new meter sets for each local operating area. Inputs and assumptions are also developed that reflect inflation factors used in determining the assumed increase or decrease in the components that make up the new business costs. These factors (labor, non-labor, contractor, material, equipment, and fleet inflation rates, bargaining labor increases and corporate overhead rates) reflect both corporate and operating company rates. Historical data is used to determine the major drivers or components that make up new business costs. The components are: labor (both company and contracted), labor loadings, material (excluding meters and transformers), equipment, transportation, overheads, and other costs.

Using these components, Public Service then develops a cost per meter component matrix for each local operating area. The matrix provides us with the ability to apply the related inflation factors to the specific components that make up the overall cost per meter. Public Service also uses this data for variance analysis against what actually occurred during the year. The variance analysis allows us to determine which components account for the difference in the forecast versus actual expenditures.

After the preliminary forecasts estimating our new service needs have been determined, the data is reviewed with our management to determine if there will be substantial changes in the operations (e.g., crew mix, major projects, and labor issues). Pending the outcome of these reviews, adjustments are made to the preliminary forecast and the proposed routine workorder budgets are submitted for final approval. The routine workorder budget for equipment purchases and street lights also increase with the economy. We utilize similar forecasting techniques to determine our future needs for these areas.

Α.

For electric reconstruction routine workorders that address regulatory mandates and asset health matters, we use averages of historical values escalated by the corporate inflation rate (around 2 percent per year) to determine expected levels of spend. This total expected routine workorder budget is then allocated to each service area using the average historical ratio of the past five years. The allocation is adjusted to ensure unique, one-time projects in a service area do not impact the calculation of the average five-year historical expenditures.

## Q. HOW DOES THE DISTRIBUTION BUSINESS AREA ESTABLISH BUDGETS FOR NON-ROUTINE PROJECTS?

In addition to our routine workorders, the Distribution Business Area also identifies, budgets for and implements certain "individual" projects that are identified to address a specific need and that are not routine in nature. At a high level, the process of determining individual project capital additions within the business area begins with completing all the steps necessary to evaluate the capital expenditures for a project's life cycle. The identification

and assessment of problems, or "risks," along with their related solutions or "mitigations," is the key to identifying larger projects we must implement in addition to the work I describe above.

A.

Risks are problems that can result in negative consequences to Public Service's customers, the environment, or Public Service's ability to provide safe and reliable service. Mitigations are solutions that address the risks; a mitigation may solve more than one risk. Therefore, to ensure each risk is being addressed by the most efficient solution, we assess mitigation alternatives and select the one that provides the best value.

## Q. PLEASE PROVIDE MORE EXPLANATION HOW INDIVIDUAL RISKS AND MITIGATIONS ARE IDENTIFIED AND DEVELOPED.

The electric distribution system serves a diverse range of customers across an equally diverse topography. As capital spending is determined and, throughout the year as new issues are identified, each operating area and supporting engineers bring risks and mitigations forward based on their knowledge of the assets and operations within their territory. The operating areas' focus is on building, operating, and maintaining physical assets while achieving quality improvements and cost efficiencies. All risks and mitigations are submitted as project requests and entered into RiskRegister, a software tool used to track and rank project requests based on the inputs provided. Individual project requests must include specific information regarding their annual costs and benefits.

Budgeting personnel focus on the health and lifespan of our existing assets, standardization, and mitigation of risk, and provide coordination and consistency in evaluating individual project requests within the electric distribution organization. A thorough review of each submission ensures that the proposed projects will be ranked and scored appropriately based on their merits. Additional review may occur after the project requests are scored based on the comparative ranking of individual projects. Corporate guidelines and economic factors (such as inflation) are identified annually and their impacts are included in the budgeting process and the review.

Engineering and operations personnel then work with budgeting personnel around each risk to evaluate and score each mitigation individually before ranking the projects. The business values used to score mitigations for identified risks are as follows:

- Reliability Identification of the overloaded facilities, potential customer minutes out and the annual hours at risk, failure probabilities, peak day hours, age of facilities, potential customer outages;
- Safety Identification of the yearly incident rate before and after the risk is mitigated;
- Environmental Evaluation of compliance before and after the risk is mitigated, and the estimated exposure;
- Legal Evaluation of compliance before and after the risk is mitigated; and
- Financial Identification of the gross cash flow, such as incremental revenue, realized salvage value, incremental recurring

costs, etc., and identification of avoided costs such as quality of service pay-outs and failure repairs.

Α.

Funding for projects is not unlimited and typically the cost for identified individual projects exceeds the available funding. In addition, the volume and diverse types of risks require utilization of a systematic process to perform asset specific risk assessment over the life cycle of the asset. Therefore, it is important to rank or prioritize proposed individual projects before authorizing or deploying the work. This is accomplished by ranking the assessment of each project against other asset assessments that have been reviewed using the same criteria. Highest priority is given to projects that we must carry out within the given budget year to ensure the distribution meets environmental or other regulatory compliance obligations, and to connect new customers. Projects that will be necessary at some point but can be deferred for a period, or which provide an incremental increase in efficiency, are ranked according to the value they provide based on the business values discussed earlier: safety, reliability, environment, legal, and financial.

# Q. PLEASE DESCRIBE HOW AUTHORIZED FUNDING OR SPENDING GUIDELINES ARE DETERMINED AND APPLIED.

The capital expenditure guidelines are determined at the corporate level for both the legal entity and the business area, as explained in the Direct Testimony of Company witness Mr. Gregory Robinson. Capital expenditures associated with non-discretionary projects are included in the budget first and

then any authorized spending is targeted at discretionary projects based on their ranking.

Α.

A.

By including routine workorders as well as individual projects in our capital budget, we are able to meet the more immediate needs of our customers while also proactively addressing system needs as budgeted funds allow. Further, this process also provides for flexibility in deploying out capital budget to address changing system needs and system emergencies.

# Q. WHY ARE IN-SERVICE DATES OR CLOSING PATTERNS DETERMINED AND ASSIGNED TO CAPITAL PROJECTS?

As explained by Ms. Perkett, capital projects are moved from CWIP to capital additions when placed in-service. Due to the nature of the capital work performed by the Distribution Business Area and the nature of our routine workorders, we must assign closing patterns to our projects so that our capital projects can be moved from construction works in progress ("CWIP") to capital additions on a regular basis as funds are expected from our routine workorders that represent distribution plant placed in-service.

# Q. HOW ARE IN-SERVICE DATES FOR ELECTRIC DISTRIBUTION DEVELOPED?

Routine workorders are assigned to a closing pattern, based on the type of work involved. An estimated in-service date is used for specific projects.

Closing patterns are developed to forecast when the construction of assets is expected to be complete and the assets placed in service. Thus,

closing patterns determine how and when capital expenditures are moved from CWIP to plant in-service. They are determined by evaluating the type of work (e.g., underground relocation, overhead new services, underground rebuilds) and using historical data to evaluate what percentage of the expected budgeted expenditures should close to plant in-service on a monthly basis. This analysis is based on the average time of construction and the energized date of the project.

Α.

For example, Overhead Extension projects have a closing pattern of three months and Underground Extension projects have a closing pattern of four months due to the nature of the work involved. These closing patterns are monitored and revised as construction practices change.

With respect to our individual projects, in-service dates are determined through individual project planning and scheduling, utilizing the forecast for the specific project's implementation date as its in-service date.

# Q. PLEASE DESCRIBE THE CAPITAL EXPENDITURES BUDGET APPROVAL PROCESS.

Capital projects that have been included in the approved funding are uploaded into our CompetiSoft Budgeting System ("CBS"). The Operations President executive management team reviews and approves this list. After the business area has been afforded the opportunity to make adjustments, the capital projects are available for corporate approval. At the corporate level, the business area and legal entity capital expenditures budget is

- reviewed and approved as described by Company witness Mr. Robinson.
- 2 After receiving approval at the Financial Council level, work release plans are
- 3 finalized and work can be deployed.

Α.

# 4 Q. PLEASE DESCRIBE HOW THE CAPITAL EXPENDITURES BUDGET IS 5 IMPLEMENTED.

A. After the capital expenditures budget is finalized, the approved project list becomes the basis for the release of projects during the related calendar year. This process must be somewhat flexible to allow for needed additions and deletions within a given year. For example, should an emergency occur during the year, priorities may change and result in an adjustment to the list of projects. Projects that were previously approved may be delayed to accommodate the emergency. Through our budget deployment process we are therefore able to meet identified needs and requirements, adjust to changing circumstances and prudently ensure the long-term health of the distribution system. This includes the addition of new vehicles and other supporting additions for our operations.

# Q. PLEASE EXPLAIN THE PROCESS YOU FOLLOW TO MANAGE CAPITAL EXPENDITURES AFTER BUDGET APPROVAL.

The engineering department within the Distribution Business Area monitors all distribution capital dollars to ensure that authorized projects align with the established budget. We perform a monthly project forecasting exercise to ensure we have a steady and dependable flow of financial information

regarding capital expenditures. We then compare our monthly expenditures to our budgets, and any variances are immediately addressed. Any project that may be outside of allowed variances is reevaluated and may be escalated to management or the corporate level as appropriate. Reviews are also performed to compare year-to-date actual performance with year-to-date and year-end forecasts. Deviations are identified and recommendations to meet financial targets are reviewed and approved.

#### C. Test Year Distribution Capital Plant Additions

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# 9 Q. WHAT IS THE DOLLAR AMOUNT OF THE DISTRIBUTION BUSINESS 10 AREA'S CAPITAL ADDITIONS FOR THE TEST YEAR?

- 11 A. The Distribution Business Area is forecasting capital additions for 2014 in the 12 amount of \$236.6 million and for 2015 in the amount of \$233.4 million, for 13 total capital additions affecting the Test Year of approximately \$470 million.
- 14 Q. WHAT TYPES OF COSTS ARE INCLUDED IN THE DISTRIBUTION
  15 CAPITAL ADDITIONS FOR THE TEST YEAR?
- 16 A. The eight categories of Distribution Business Area capital costs were
  17 described earlier in my testimony. Table 1 provides a summary of the major
  18 categories that comprise the Distribution capital additions for 2014 and 2015:

Table 1 (\$ in millions)

Category	2014	2015
Mandates	\$20.7	\$18.7
New Service	\$45.8	\$52.6
Equipment Purchase	\$15.9	\$20.4
Street Lights	\$4.7	\$6.8
CIAC	(\$22.8)	(\$26.5)
Capacity	\$85.2	\$59.0
Asset Health	\$72.8	\$91.2
Other	\$14.3	\$11.2
Totals	\$236.6	\$233.4

1 Attachment No. KAB-1 provides greater detail regarding the

2 Distribution Business Area's capital additions requested in this case.

#### 3 Q. PLEASE DESCRIBE THE INFORMATION CONTAINED IN ATTACHMENT

- 4 **NO. KAB-1.**
- 5 A. Attachment No. KAB-1 provides the following information:

Column A	Work Order Number	Provides the project J. D. Edwards ("JDE") accounting parent number that tracks costs at the highest level for a capital addition.
Column B	Description	Provides a short description of the project or type of work.
Column C	Estimated In- Service Date	Identifies the month and year the capital addition was placed into service or is forecasted to be put into service.
Column D	2014	Reflects dollar amounts anticipated to be placed in service during the period January 1, 2014 through December 31, 2014.
Column E	2015	Reflects dollar amounts anticipated to be placed in service during the period January 1, 2015 through December 31, 2015.
Column F	Project Category	Provides a high level category to which similar projects are assigned.

#### 1 Q. IN COLUMN C, ESTIMATED IN-SERVICE DATE, THERE ARE A NUMBER

- 2 OF LINE ITEMS WITH CAPITAL ADDITIONS BEING PLACED IN SERVICE
- WITH THE DATE DECEMBER 31, 2021.
- 4 A. All line items with an in-service date of December 31, 2021 represent routine
- work placed in service for each of the years included in Attachment No. KAB-
- 1. To ensure that the standard "routine" workorder is not closed inadvertently,
- an arbitrary date significantly out in the future (December 31, 2021) is
- 8 selected as a placeholder to record routine capital items.
- 9 Q. ALSO IN COLUMN C THERE ARE A NUMBER OF DATES BEFORE
- JANUARY 1, 2014. WHY ARE THESE INCLUDED?
- 11 A. For various projects, charges can continue for a short period after the in-
- service date is recognized on a workorder. These charges are for recognition

1	of the final bills from vendors, testing of the equipment, restoration of the
2	ground, settlement of any disputes, and returning unused stock to inventory

# Q. PLEASE DESCRIBE THE CAPITAL ADDITIONS THAT WILL BE PLACED IN SERVICE IN 2014 WITH A COST GREATER THAN \$1 MILLION.

As shown above, we are placing in-service approximately \$236.6 million in capital additions in 2014. I will describe all capital additions for individual projects of \$1 million or greater:

- Feeder Cable Replacement-Proactive: This project involves
  replacement of mainline feeder cables that have failed or are imminently
  failing to maintain current levels of reliability. This project represents
  \$6.6 million in capital additions.
- Cable Cure- Underground Residential Distribution ("URD") Cable
  Injection: This project will extend the life of approximately 230,000 feet of
  underground tap level cable. This is done by injecting a fluid into the
  cable that "heals" the cable insulation. This project represents \$2.8
  million in capital additions.
- FasTracks West Corridor Relocation: This project is to relocate facilities
  that are in conflict with RTD's light rail project. This project was originally
  developed for the West Corridor but has remained in place and is
  accepting charges for all light rail lines. This project represents \$4.3
  million in capital additions.

• FastTracks West Corridor New: This project is to extend service to new load as part of RTD's light rail project. This includes service to traction power substations stations that are used to convert AC to DC to power the rail line along with signal crossings and light rail station stops. As with the project above it was originally set up for the West line but receives charges for all of the rail lines. This project represents \$1.4 million in capital additions.

- Silverthorne Substation Siting and Permitting: This project is for the
  permitting and real estate necessary for the construction of a new
  substation near Silverthorne, Colorado, known as Ptarmigan Substation.
  This project will resolve single contingencies in the town of Silverthorne
  and parts of Summit County. This project represents \$3.8 million in
  capital additions.
- Ptarmigan Substation Construction: This project is for the actual construction of the 230 kV to 25 kV, 28 MVA Ptarmigan substation near the town of Silverthorne, Colorado. This project will resolve single contingencies in the town of Silverthorne and parts of Summit County. This project represents \$14.7 million in capital additions.
- Lacombe #3 230-13.2 kV, 50 MVA & MCS: This project installs a third transformer and associated switchgear at the Lacombe Substation located on the north side of downtown Denver. This project is required to resolve a single contingency for loss of a transformer at the Lacombe

substation and to provide service to future load growth. This project represents \$5.2 million in capital additions.

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- Lacombe #3 14<sup>th</sup> Network Cables: This project installs a new network on the north side of downtown Denver to support the new load growth in the area. This project represents \$1.7 million in capital additions.
- Install Ptarmigan Substation 1<sup>st</sup> Feeder: This project installs feeders from the new Ptarmigan Substation near Silverthorne, Colorado to the existing distribution system. This project along with the substation projects are required to resolve single contingencies in Silverthorne and Summit County. This project represents \$3.3 million in capital additions.
- Dakota #2 & Switchgear: This project installs a second transformer and associated switchgear at the Dakota Substation located near Alameda and Broadway in Denver, Colorado. This project resolves single contingencies in the area and provides the ability to serve future load growth. This project represents \$5.0 million in capital additions.
- Feeder #1 from Dakota #2: This project installs two feeders from the new transformer at Dakota Substation and ties into the existing distribution system. This project along with the substation project above resolves single contingencies in the area and will support load growth in the area. This project represents \$3.2 million in capital additions.
- Land for 136<sup>th</sup> Ave-Holly St. Substation: This project is for the purchase of land for a new substation in Thornton, Colorado. The site to be

purchased has not yet been determined. This project will resolve voltage issues, single contingencies, and will support future load growth in the area. This project represents \$1.7 million in capital additions.

- Purchase 44/69/138 kV Mobile Substation: This project is for the purchase of a 20 MVA mobile substation for use during emergency outage situations, maintenance, or during substation construction. This mobile substation replaces a unit that had reached the end of life. This project represents \$2.4 million in capital additions.
- Chatfield #2 3<sup>rd</sup> Feeder: This project installs the third feeder out of the
  existing Chatfield substation located near Chatfield Reservoir. This
  project resolves several single contingencies in the area. This project
  represents \$1.4 million in capital additions.
- Install 13.2 Murphy Creek #2 & Metal-Clad Switch Gear ("MCSG"): This project installs a second substation transformer and associated switchgear at the Murphy Creek Substation located in southeast Aurora. This project is needed to resolve a single contingency for the loss of the existing Murphy Creek transformer. This project represents \$5.4 million in capital additions.
- Install 13.2 Murphy Creek #2 Feeders: This project installs two feeders from the new second transformer at Murphy Creek Substation and connects them into the existing distribution system. This project along with the substation project above is required to resolve single

contingencies in the area and provide support for the growing load in the area. This project represents \$4.1 million in capital additions.

- Install Russell Bank #2: This project installs a second transformer at the
  existing Russell Substation. This project is required to resolve existing
  system intact overloads and contingencies in the area. This project
  represents \$6.2 million in capital additions.
- Install Santa Fe T2, MCS, and Cap: This project installs a second transformer and associated switchgear at the existing Santa Fe Substation located near Littleton, Colorado. This project is required to resolve existing single contingencies in the area. This project represents \$2.5 million in capital additions.
- Install Glenn #3: This project installs the third transformer and associated switchgear at Glenn Substation. This project will support load growth in the area until the new Thornton Substation can be installed. Once the Thornton Substation is installed this project will support the load in the area Northglenn and Federal Heights area. This project represents \$5.7 million in capital additions.
- Install 2 new feeders (Glenn #3): This project installs two new feeders from the third transformer Glenn Substation and ties it into the existing distribution system. This project will support load growth in the area until the new Thornton Substation can be installed. This project represents \$1.3 million in capital additions.

 Boulder-Eldora-Ski Resort: This project reinforces the existing feeder that serves the Eldora Ski Resort to provide support to serve customer load projections. This project represents \$4.7 million in capital additions.

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- Substation Switchgear Replacement: This project replaces substation switchgear that has reached end of life. This is required to continue to serve the load in the area while maintaining reliability. This project represents \$4.8 million in capital additions.
- Garfield Operations Center Warehouse Expansion: This project was required to expand the storage area for inside materials and to resolve drainage issues on the site. This project represents \$1.2 million in capital additions.
- Install Sectionalizing Equipment: This project improves reliability by targeting high customer count feeders for additional sectionalizing equipment and some remote switching. This project represents \$1.2 million in capital additions.
- Install Jewell #3 feeder #3: This project installs the third feeder from the third transformer at Jewell Substation and ties it into the existing distribution system. This feeder is required to resolve system intact overloads and single contingencies in the southeast Denver area. This project represents \$2.8 million in capital additions.
- 40<sup>th</sup> & Blake 1 percent Feeder/streetlight: This project is a 1 percent franchise project for the city of Denver which involves conversion of

existing overhead facilities to underground facilities in the area of 40<sup>th</sup> and Blake Street. This project represents \$1.2 million in capital additions.

- Heritage Road 1 percent underground conversion: This project is a 1
  percent franchise project for the city of Golden which involves conversion
  of existing overhead facilities to underground facilities. This project
  represents \$1.1 million in capital additions.
- DCP Midstream-SLW, Sullivan: This project is for the extension of facilities to serve new gas and oil drilling load northeast of Greeley, Colorado. This project represents \$1.3 million in capital additions.
- Order new 230/13 kV spare transformer: This project will replace a 230/13 kV, 50 MVA substation transformer that was used for the acceleration of the Glenn #3 project. This project represents \$1.0 million in capital additions.
- City of Denver 1 percent Overhead ("OH") to Underground ("UG")
   Streetlight: This project is a 1 percent franchise project for the city of Denver which involves conversion of existing overhead to underground streetlight facilities along Monaco Blvd from Montview to 6<sup>th</sup> Avenue.
   This project represents \$1.3 million in capital additions.
- Replacement of National Center for Atmospheric Research ("NCAR") #1
   transformer: This project is for the replacement of the failed 28 MVA

1		transformer at the NCAR substation located in Boulder, Colorado. This
2		project represents \$1.0 million in capital additions.
3	Q.	PLEASE DESCRIBE THE CAPITAL ADDITIONS THAT WILL BE PLACED
4		IN SERVICE IN 2015 WITH A COST GREATER THAN \$1 MILLION.
5	A.	As shown above, we are placing in-service approximately \$233.4 million in
6		capital additions in 2015. I will describe all capital additions for individual
7		projects of \$1 million or greater:
8		• Feeder Cable Replacement-Proactive: This project involves replaces
9		mainline feeder cables those have failed or are imminently failing. These
10		additions are needed to maintain current levels of reliability. This project
11		represents \$8.4 million in capital additions.
12		Cable Cure-URD Cable Injection: This project will extend the life of
13		approximately 310,000 feet of underground tap level cable. This is done
14		by injecting a fluid into the cable that "heals" the cable insulation. This
15		project represents \$3.7 million in capital additions.
16		• FasTracks West Corridor Relocation: This project is to relocate facilities
17		that are in conflict with RTD's light rail project. This project was originally
18		set up for the West Corridor but has remained in place and is accepting
19		charges for all of the lines. This project represents \$5.0 million in capital
20		additions.
21		FastTracks West Corridor New: This project is to extend service to new
22		load as part of RTD's light rail project. This includes service to traction

power substations stations that are used to convert AC to DC to power the line along with signal crossings and light rail station stops. As with the project above it was originally set up for the West line but receives charges for all of the lines. This project represents \$1.5 million in capital additions.

- CO Infrastructure Invest-System Reliability: This project supports the
  replacement of underground tap cable that has reached the end of its
  life. This project is required to maintain reliability to the Company's
  existing customers. This project represents \$14.8 million in capital
  additions.
- CO Infrastructure Invest OH rebuild: This project is for the rebuild of existing overhead systems that have reached the end of their life. This project is required to maintain reliability for the Company's existing customers. This project represents \$3.5 million in capital additions.
- DDII: Install Capital Hill #3: This project installs the third substation transformer and associated switchgear from the Capital Hill Substation located near the Colorado state capital. This project resolves several single contingencies in the area. This project represents \$7.8 million in capital additions.
- Capital Hill #3 Feeders #1: This project installs feeders associated with the installation of the third transformer at Capital Hill Substation and ties into the existing distribution system. This project resolves several single

1 contingencies in the area. This project represents \$1.3 million in capital additions.

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- Replace Breakers (various types): This project replaces substation feeder breakers that have reached end of life. This project is required to maintain reliability to the Company's existing customers. This project represents \$1.2 million in capital additions.
- Install Transformer-136<sup>th</sup> Ave-Holly St Substation: This project install the new Thornton Substation in Thornton, Colorado. This project will resolve voltage issues, single contingencies, and will support future load growth in the area. This project represents \$6.0 million in capital additions.
- Convert Krameria 410 to 13 kV: This project converts the existing Krameria 4 kV feeder to 13 kV. This project will rebuild a feeder that is at end of life along with upgrading it to a higher voltage which will improve system efficiency. This project represents \$1.2 million in capital additions.
- Install Sheridan T2 50 MVA: This project installs the second transformer and associated switchgear at Sheridan substation located in the southwest Denver Metro area. This project will resolve contingencies in the area including the loss of the existing Sheridan transformer. This project represents \$4.9 million in capital additions.
- Install Santa Fe T2, MCS, and Cap: This project installs a second transformer and associated switchgear at the existing Santa Fe

substation located near Littleton, Colorado. This project is required to resolve existing single contingencies in the area. This project represents \$2.8 million in capital additions.

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- Install 2 new feeders (Glenn #3): This project installs two new feeders from the third transformer Glenn Substation and ties it into the existing distribution system. This project will support load growth in the area until the new Thornton Substation can be installed. This project represents \$1.8 million in capital additions.
- Substation Switchgear Replacement: This project replaces substation switchgear that has reached end of life. This is required to continue to serve the load in the area while maintaining reliability. This project represents \$1.2 million in capital additions.
- Install Argo #2 transformer: This project installs the second transformer and associated switchgear at the Argo Substation located in north Denver. This project is required to support load growth on the north side of downtown Denver and resolve single contingencies in the area. This project represents \$4.6 million in capital additions.
- Install first feeders from Argo #2: This project installs feeders from Argo Substation and ties them into the existing distribution system. This project is required to support load growth on the north side of downtown Denver and resolve single contingencies in the area. This project represents \$3.2 million in capital additions.

 Convert Russell #1 to 230 KV: The existing 115 kV transmission line that serves Russell Substation is being converted to 230 kV and so the existing transformer must be converted so that we can continue to serve load in the area. This project represents \$1.6 million in capital additions.

Α.

- Install Chatfield 1010: This project installs a new feeder from the existing Chatfield Substation. This feeder is required to resolve system intact overloads and single contingencies in the area. This project represents \$1.4 million in capital additions.
- Install 1000 Al along 37<sup>th</sup> 29-17 Aves: This project in Greeley installs a
  new feeder tie to support the load under single contingencies. This
  project represents \$1.3 million in capital additions.

# Q. WHAT IS DISTRIBUTION VOLTAGE OPTIMIZATION ("DVO") AND ARE AMOUNTS FOR DVO INCLUDED IN THE COMPANY'S CAPITAL ADDITIONS FOR EITHER 2014 OR 2015?

DVO technology allows the utility to monitor the voltage along the feeder and control line capacitors, line regulators, and load tap changers located at the substation to optimize the voltage year-round as opposed to at a single point in time, as it did in the past. While the actual equipment and the functions of the equipment used as part of DVO have not changed, the ability to control the equipment and utilize additional functionality has changed with DVO. DVO provides new functionality that allows the Company to dynamically control the voltage, enabling us to operate in the lower end of the acceptable

voltage range, thereby reducing the energy consumption of customers' appliances and equipment. We applied and tested DVO on a limited basis as part of our SmartGridCity project in Boulder.

Α.

In anticipation that the Commission would approve our request to go forward with DVO as part of its ruling on our Demand Side Management ("DSM") Strategic Issues application in Proceeding No. 13A-0686EG, we included DVO in the Distribution Area's capital budgets in both 2014 and 2015. In 2014, we anticipated spending \$2.4 million for DVO; in 2015, \$10.9 million. However, whether we can spend these amounts will depend on the outcome of our DSM Strategic Issues proceeding.

# Q. PLEASE EXPLAIN WHY THIS PROJECT IS DEPENDENT ON THE DSM STRATEGIC ISSUES PROCEEDING.

Company witness Ms. Jackson will address that proceeding in more detail, but it is my understanding that the Commission has deliberated in this proceeding and intends to issue an initial ruling that requires that the Company file a separate application containing additional information regarding the costs and implementation plan for the project before it can proceed. I also understand that the Commission denied both the Company's request for current cost recovery and for an incentive sufficient to offset the loss of margins due to DVO. As Ms. Jackson explains, until the Commission decision is final, it is premature for us to take any action regarding our 2014 or 2015 budgets. As a consequence, I have left amounts for DVO in the

- Distribution Business Area's capital cost projections for 2014 and 2015, but it is possible that we may not go forward with the project on the presently planned timeframe.
- Q. IF THE COMPANY DECIDES NOT TO PURSUE THE DVO PROJECT AT
   THIS TIME, WILL YOU LOWER THE DISTRIBUTION AREA'S CAPITAL
   COST PROJECTIONS FOR 2014 AND 2015?
- A. No. Using the project prioritization process that I have previously described,
  we would undertake alternative projects. On a preliminary basis, I have
  looked at what projects we would do next, and identified several projects
  involving the replacement of wood poles, underground feeder and tap cables,
  and overhead lines that have reached the end of their useful life. There are
  also three feeder projects that we would pursue to resolve single contingency
  issues.
- 14 Q. ARE THE DISTRIBUTION BUSINESS AREA CAPITAL ADDITIONS
  15 PRESENTED IN ATTACHMENT NO. KAB-1, AND INCLUDED IN
  16 ATTACHMENT NO. LHP-1, SPONSORED BY COMPANY WITNESS MS.
  17 LISA PERKETT, REASONABLY REFLECTIVE OF WHAT YOU EXPECT
  18 PUBLIC SERVICE TO PLACE IN SERVICE DURING THE PERIOD
  19 BEGINNING DECEMBER 31, 2014 THROUGH DECEMBER 31, 2015?
- 20 A. Yes.

### IV. OPERATIONS AND MAINTENANCE (O&M)

# 2 Q. WHAT ARE THE TYPES OF COSTS THAT THE DISTRIBUTION 3 BUSINESS AREA INCURS FOR OPERATIONS AND MAINTENANCE?

- A. I described above the various work that is performed by the Distribution

  Business Area. To perform these functions, we incur O&M expenses related

  to:
  - Labor costs related to exempt, benefit, non-benefit, and union personnel to perform the key activities I described above.
    - Programs costs related to Damage Prevention, lighting surveys, relamping, photocell replacement, repair underground cable cuts, repair underground cable faults, non-capital replacement of lighting equipment, non-capital replace/remove underground facilities.
    - Capital Support O&M needed to support capital construction programs. While many capital projects are funded almost completely through the capital budget, certain capital projects also have an O&M component associated with them. For instance, our pole replacement costs are typically 80 percent capital and 20 percent O&M. The O&M component covers such activities as wire and equipment transfers (from old pole to new pole) and minor material replacements associated with the work which cannot be capitalized.

- Vegetation Management costs associated with scheduled work that
   needs to be done each year to maintain appropriate cycles of
   maintenance on each transmission and distribution circuit.
  - Base Non-Labor contract labor, materials, fleet operations and maintenance, and miscellaneous employee expenses.

# Q. WHAT WERE PUBLIC SERVICE'S O&M COSTS IN 2013 FOR THE DISTRIBUTION BUSINESS AREA?

Α.

Our actual O&M expenditures for 2013 totaled \$95.3 million, including \$5.7 million amortization expenses incurred to recover expenses deferred during 2011 and 2012 associated with our work to mitigate hazard trees due to the Mountain Pine Beetle ("MPB") epidemic and approximately \$7 million for MPB and Transmission Wildfire Protection ("TWP"), of which \$4 million is transmission O&M associated with ordinary vegetation management work that is managed through the Distribution Business Area. Table 2 breaks down the amount of overall O&M costs by the categories I discussed above, excluding the \$5.7 million in MPB amortization expense, and including the \$20.6 million total of distribution and transmission O&M incurred for ordinary vegetation management, MPB and TWP. Attachment No. KAB-2 provides an accounting of these expenditures by Object and Federal Energy Regulatory Commission ("FERC") account.

Table 2

Cost Category	\$ Millions
Base Labor	\$31.1
Programs	\$15.6
Capital Support	\$3.9
Vegetation Management	\$20.6
Base Non-Labor	\$24.1
O&M Total	\$95.3

### 1 Q. ARE THE \$95.3 MILLION IN 2013 O&M COSTS YOU DESCRIBE IN TABLE

## 2 2 ABOVE REFLECTED IN THE COST OF SERVICE TEST YEAR

### 3 **PRESENTED BY MS. BLAIR?**

- A. Yes, with two adjustments. As discussed by Ms. Jackson, Public Service is proposing to set rates based on our historic 2013 O&M costs, with limited adjustments for known and anticipated changes between the end of our 2013 base period and December 31, 2015. As related to the Distribution Business Area, our 2013 historic O&M costs with two adjustments provide a reasonable level of O&M for the Test Year.
- 10 Q. WHAT ADJUSTMENTS ARE YOU PROPOSING TO THE 2013 LEVEL OF
  11 O&M FOR DISTRIBUTION BUSINESS AREA FOR PURPOSES OF THE

### 12 **TEST YEAR?**

A. First, while the Test Year includes approximately \$7 million in transmission and distribution O&M that was spent on the MPB and TWP initiatives, Mr.

Downie explains that in 2015 we expect that a greater portion of our work on these initiatives will be transmission O&M than it was in 2013. Therefore, for purposes of the Test Year, we have included 85 percent of the \$7 million as transmission O&M and 15 percent as distribution O&M. This shift has the effect of reducing our total revenue requirement somewhat because, as Ms. Blair explains, a portion of transmission O&M is allocated to the wholesale jurisdiction and is therefore excluded from the Test Year cost of service.

A.

Second, Ms. Lowenthal supports the increase in labor expenses due to anticipated merit and base salary increases for non-bargaining and bargaining employees through December 31, 2015 and Ms. Blair quantifies the increase in total labor expenses included in the Test Year cost of service.

- Q. WHAT IS THE TOTAL AMOUNT OF O&M COSTS THAT THE DISTRIBUTION BUSINESS AREA IS PROPOSING FOR THE TEST YEAR COST OF SERVICE PRESENTED BY MS. BLAIR?
  - We are proposing that the Test Year cost of service reflects our historic 2013 O&M costs of \$95.3 million, as adjusted for the shift in spending associated with the Mountain Pine Beetle/wildfire protection activities from distribution to transmission O&M as addressed by Mr. Downie and the labor expense adjustment addressed by Ms. Lowenthal.

- 1 Q. ARE THESE O&M EXPENSES REASONABLE AND NECESSARY TO
- 2 CARRY OUT DISTRIBUTION'S KEY FUNCTIONS YOU DESCRIBED
- **ABOVE?**
- 4 A. Yes. These O&M expenses are necessary to ensure that Distribution is able
- 5 to deliver safe and reliable electric service to our Colorado customers.

### V. SERVICE QUALITY

# Q. HOW DOES THE COMPANY DETERMINE THAT IT IS PROVIDING RELIABLE SERVICE TO ITS CUSTOMERS?

Α.

A. The Distribution Business Area commits both capital and O&M investments to maintain reliable electric service. These generally either prevent future outages, or improve our ability to limit any outages to the smallest number of customers for the shortest possible duration. The Company tracks reliability metrics and measures performance through benchmarking with other utilities.

The Company also has a Quality of Service Plan ("QSP") in place with the Commission.

# 11 Q. WHAT RELIABILITY MEASUREMENTS ARE USED AS PART OF THE 12 QSP?

The QSP has two types of measurements: system level and customer level. For the system level measurement, the QSP utilizes System Average Interruption Duration Index ("SAIDI") for a selected set of data. It is normalized data that focuses on performance of distribution lines only, and specifically excludes impacts due to Public Damage, properly planned outages, and outages caused by outages deliberately caused in the interest of public safety. Annual performance targets are defined based on historical performance within each region separately. There are performance penalties if any region does not meet its target for two years or more in a row. For the customer based measurements the QSP has monitoring and penalty

structures for customers experiencing multiple outage events within a given time frame, and for customers experiencing outage events that last longer than 24 hours.

# 4 Q. WHAT HAS BEEN THE COMPANY'S PERFORMANCE RELATIVE TO THE 5 QSP IN 2012 & 2013?

A.

The Company has performed well in 2012 and 2013 relative to the QSP. For each the 9 QSP reporting regions, SAIDI penalties are paid if the region's Reliability Warning Threshold ("RWT") is exceeded 2 years in a row. No penalties were paid in 2012 or 2013. In 2012, 3 of the 9 regions (Front Range, Greeley, and Northern) exceeded RWT. In 2013, only the High Plains region exceeded RWT.

For the customer based metric for customers experiencing multiple interruptions, penalties were paid in 2012 and 2013 to some of Public Service's approximately 1.3 million customers. The maximum penalty for Public Service is \$1 million/year for this metric, with a \$50 maximum paid to any customer. In 2012, Public Service paid \$795,750 as \$50 bill credits to 15,915 customers for exceeded the Electric Continuity Threshold ("ECT"). In 2013, \$430,450 was paid to 8,609 customers.

For customers experiencing long interruptions, a \$50 bill credit is paid anytime the Electric Restoration Threshold ("ERT") is exceeded. In 2012, 486 customers received penalty payment for a total of \$24,300 in bill credits. In

- 2013, 53 customers exceeded the ERT with a total penalty of \$2,650 paid by
- Public Service.
- 3 Q. DOES THIS CONCLUDE YOUR TESTIMONY?
- 4 A. Yes.

#### Attachment A

#### **Statement of Qualifications**

### Kelly Bloch

Kelly Bloch is the Senior Director of Electric Distribution Engineering, for Xcel Energy. Kelly's role is to provide strategic direction for the expansion, modernization, and maintenance of the electric distribution system for Xcel Energy to ensure a safe, reliable, and cost effective distribution system. Key responsibilities include 5 year distribution infrastructure planning, system reliability, creation of cost effective construction, design, and material & equipment standards, load forecasting, capital budget creation, distribution project management, system modernization and renewal strategy, and management of the current year capital budget.

Kelly has 23 years of experience in the utility industry where she has compiled a diverse background. She joined Public Service Company of Colorado in 1991 and has served in various engineering roles in the four operating companies at Xcel Energy, Manager of Capacity Planning for Xcel Energy, Manager of Distribution Planning for Public Service, and Manager of System Planning and Strategy for Xcel Energy South in addition to her current role.

Kelly graduated from South Dakota State University in December of 1989 where she earned a Bachelor of Science degree in Electrical Engineering.

	Distribution Operations
Func Class Descr	(AII)

		Activity Year			
Project ID	Project Nbr Desc	Est ISD	2014	2015	Project Category
10015321	Deferred Debits/Property Acctn	12/31/2021	420		Other
	Dist. Subs Tools & Equipment	12/31/2021	(434,467)	(500,630)	Other
10130051	1910 - Central - Oh Ext	12/31/2021	(464,906)	(654,676)	New Service
10130052	1912 - Central -Ug Extensions	12/31/2021	(5,124,216)	(5,383,227)	New Service
10130053	1916 - Central - Oh Street Lts	12/31/2021	(154,850)	(137,753)	Street Lights
10130054	1917 - Central - Ug Street Lts	12/31/2021	(750,622)	(1,288,381)	Street Lights
10130055	Dm-Elec Non-Refundable Ciac	12/31/2021	4,979,830	4,413,000	CIAC
10130058	Psco - Dist. Trfs	12/31/2021	(7,016,116)	(11,825,286)	Equip Purchase
10130059	Psco - Elec Meters	12/31/2021	(8,856,335)	(8,568,628)	Equip Purchase
10130064	1911 - Central Denver - Oh Reb	12/31/2021	(1,778,588)	(1,788,179)	Asset Health
10130065	1913 - Central - Ug Rebuilds	12/31/2021	(519,218)	(770,658)	Asset Health
	1911 - Gj / Rifle - Oh Rebuild	12/31/2021	(649,384)	(640,864)	Asset Health
10130104	1910 - Sw - Oh Extensions	12/31/2021	(152,249)	(172,406)	New Service
10130105	1916 - Sw - Oh Street Lts	12/31/2021	(37,333)	(41,188)	Street Lights
10130106	1917 - Sw- Ug Street Lts	12/31/2021	(88,245)	(110,262)	Street Lights
10130107	Sw-Elec Non-Refundable Ciac	12/31/2021	1,671,463	2,014,000	CIAC
10130112	1912 - Sw - Ug Extensions	12/31/2021	(2,762,657)		New Service
	1911 - Sw - Oh Rebuilds	12/31/2021	(600,602)	(627,013)	Asset Health
10130114	1913 - Sw - Ug Rebuilds	12/31/2021	(729,462)	(824,428)	Asset Health
	1910 - North Metro - Oh Extens	12/31/2021	(107,747)	(130,412)	New Service
10130156	1912 - North Metro - Ug Extens	12/31/2021	(3,091,120)	(3,187,677)	New Service
	1916 - Norh Metro - Oh Street	12/31/2021	(40,479)		Street Lights
10130158	1917 - North Metro - Ug Street	12/31/2021	2,658	(335,464)	Street Lights
	Nm-Elec Non-Refundable Ciac	12/31/2021	2,154,841	2,683,000	
10130160	1911 - North Metro - Misc Oh R	12/31/2021	(926,725)		Asset Health
10130161	1913 - North Metro - Ug Conver	12/31/2021	(617,641)		Asset Health
	1910 - Boulder - Oh Extentions	12/31/2021	(40,267)	· · · /	New Service
	1912 - Boulder - Ug Extentions	12/31/2021	(1,596,390)	(1,112,216)	New Service
	1916 - Boulder - Oh Street Lig	12/31/2021	(1,041)		Street Lights
10130179	1917 - Boulder - Ug Street Lts	12/31/2021	45,182	(32,410)	Street Lights
	Bo-Elec Non-Refundable Ciac	12/31/2021	2,184,445	2,460,000	

Budget Org ID	Distribution Operations
Func Class Descr	(AII)

			Activity Year		
Project ID	Project Nbr Desc	Est ISD	2014	2015	Project Category
10130188	1911 - Boulder - Oh Rebuilds	12/31/2021	(460,093)	(460,345)	Asset Health
10130189	1913 - Boulder - Ug Conversion	12/31/2021	(614,915)	(763,480)	Asset Health
10130200	Fr-Elec Non-Refundable Ciac	12/31/2021	447,061	308,000	CIAC
10130201	1910 - Southeast Metro - Oh Ex	12/31/2021	(32,346)	(37,644)	New Service
10130202	1912 - Southeast Metro -Ug Ext	12/31/2021	(7,073,047)	(2,397,560)	New Service
10130203	1916 - Southeast Metro - Oh St	12/31/2021	(6,759)	(19,801)	Street Lights
10130204	1917 - Southeast Metro - Ug St	12/31/2021	(109,604)	(259,739)	Street Lights
10130205	Sem-Elec Non-Refundable Ciac	12/31/2021	2,207,196	3,346,000	CIAC
10130221	1911 - Southeast Metro - Oh Re	12/31/2021	(484,618)	(491,869)	Asset Health
10130222	1913 - Southeast Metro - Ug Co	12/31/2021	(1,024,380)	(1,217,133)	Asset Health
10130259	1910 - F.Range - Oh Extension	12/31/2021	(271,895)	(290,013)	New Service
10130260	1912 - F.Range - Ug Extension	12/31/2021	(244,436)	(387,184)	New Service
10130261	1916 - F.Range - Oh SI	12/31/2021	(9,905)	(14,397)	Street Lights
10130262	1917 - F.Range Ug SI	12/31/2021	(72,244)	(30,647)	Street Lights
10130263	1910 - Mnt - Oh Extension	12/31/2021	(261,083)	(309,539)	New Service
10130264	1912- Mnt - Ug Extension	12/31/2021	(1,169,298)	(1,782,447)	New Service
10130265	1916 - Mnt - Oh SI	12/31/2021	(7,828)	(11,022)	Street Lights
10130266	1917 - Mnt - Ug SI	12/31/2021	(23,658)	(26,908)	Street Lights
	Mnt-Elec Non-Refundable Ciac	12/31/2021	1,461,613	1,907,000	
10130270	1911 - F.Range - Oh Rebuilds	12/31/2021	(351,027)	(395,481)	Asset Health
	1913 - F.Range - Ug Rebuilds	12/31/2021	(100,650)	(124,593)	Asset Health
10130273	1911 - Mnt - Oh Rebuilds	12/31/2021	(201,335)	(229,730)	Asset Health
10130274	1913 - Mnt - Ug Rebuilds	12/31/2021	(136,065)	(168,268)	Asset Health
10130299	1910 - Gj / Rifle - Oh Extensi	12/31/2021	(400,629)	(467,912)	New Service
10130300	1912 - Gj / Rifle -Ug Extensio	12/31/2021	(1,675,298)	(2,096,995)	New Service
	1916 - Gj / Rifle - Oh Sl	12/31/2021	(47,117)	(73,496)	Street Lights
10130302	1917 - Gj / Rifle - Ug Sl	12/31/2021	(101,499)	(232,846)	Street Lights
10130303	Gj-Elec Non-Refundable Ciac	12/31/2021	2,942,097	3,379,000	CIAC
10130305	1913 - Gj / Rifle - Ug Convers	12/31/2021	(329,377)		Asset Health
10130316	1910 - Ft.Coll - Oh Extensions	12/31/2021	(98,356)	(94,859)	New Service
10130317	1912 - Ft.Coll - Ug Extensions	12/31/2021	(1,360,989)	(695,041)	New Service

	Distribution Operations
Func Class Descr	(AII)

		Activity Year			
Project ID	Project Nbr Desc	Est ISD	2014	2015	Project Category
10130318	1916 - Ft.Coll - Oh Street L	12/31/2021	(17,499)	(27,081)	Street Lights
10130319	1917 - Ft.Coll - Ug Street L	12/31/2021	30,089	(111,292)	Street Lights
	Fc-Elec Non-Refundable Ciac	12/31/2021	1,744,708	2,102,000	CIAC
10130325	1911 - Ft.Coll - Oh Rebuilds	12/31/2021	(318,377)	(319,079)	Asset Health
10130326	1913 - Ft.Coll - Ug Rebuilds	12/31/2021	(164,940)	(190,262)	Asset Health
10130342	1910 - Slv - Oh Extensions	12/31/2021	(414,193)	(383,965)	New Service
10130343	1912 - Slv - Ug Extensions	12/31/2021	(490,262)	(627,388)	New Service
10130344	1916 - Slv - Oh Street L	12/31/2021	(32,757)	(49,075)	Street Lights
10130345	1917 - Slv - Ug Street L	12/31/2021	(66,105)	(76,664)	Street Lights
10130347	Slv-Elec Non-Refundable Ciac	12/31/2021	863,971	999,000	CIAC
10130348	1911 - Slv - Oh Rebulds	12/31/2021	(552,699)	(540,078)	Asset Health
10130349	1913 - Slv - Ug Rebuilds	12/31/2021	(22,522)	(27,505)	Asset Health
10130371	1910 - Grly/Strl - Oh Ext	12/31/2021	(564,500)	(665,018)	New Service
10130372	1912 - Grly/Strl - Ug Ext	12/31/2021	(743,932)	(1,099,336)	New Service
10130373	1916 - Grly/Strl - Street L	12/31/2021	(22,405)	(32,315)	Street Lights
10130374	1917 - Grly/Strl - Ug Street L	12/31/2021	(68,808)	(78,524)	Street Lights
10130375	Grl-Elec Non-Refundable Ciac	12/31/2021	2,008,179	2,756,000	CIAC
10130382	1911 - Grly/Strl - Oh Rebuilds	12/31/2021	(638,902)	(674,297)	Asset Health
10130383	1913 - Grly/Strl - Ug Rebuilds	12/31/2021	(236,083)	(273,812)	Asset Health
	Dist. Sub Equipment Replacemen	12/31/2021	(1,471,737)	(1,555,192)	Asset Health
10138523	Psc Elec Tools Rep Blnkt	12/31/2021	(621,284)	(543,810)	Other
10143069	Overhead Services-Denver Metro	12/31/2021	(428,645)	(811,222)	New Service
10143070	Underground Services-Denver Me	12/31/2021	(269,146)	(501,753)	New Service
10143072	Underground Network	12/31/2021	(190,025)	(279,271)	Capacity
10143074	Overhead Reinforcements	12/31/2021	(26,096)	(27,202)	Capacity
10143075	Underground Reinforcements	12/31/2021	(46,470)	(48,747)	Capacity
10143076	Overhead Relocations	12/31/2021	(196,176)	(295,620)	Mandates
10143077	Underground Relocations	12/31/2021	(398,679)	(464,850)	Mandates
	1% Franchise Projects	12/31/2021	(266,880)	(206,612)	Mandates
	Dist Sub Capacity Reinforcemen	12/31/2021	(274,944)	(238,874)	
	Overhead Services-Southwest Me	12/31/2021	(92,522)	(173,925)	New Service

Budget Org ID	Distribution Operations
Func Class Descr	(All)

		Activity Year			
Project ID	Project Nbr Desc	Est ISD	2014	2015	Project Category
10143090	Underground Services-Southwest	12/31/2021	(164,256)	(305,289)	New Service
10143092	Overhead Reinforcements	12/31/2021	(58,428)	(106,019)	Capacity
10143093	Underground Reinforcements	12/31/2021	(949,600)	(289,337)	Capacity
10143094	Overhead Relocations	12/31/2021	(205,929)	(218,276)	Mandates
10143095	Underground Relocations	12/31/2021	(242,323)	(358,632)	Mandates
10143096	1% Franchise Projects	12/31/2021	(335,333)	(177,336)	Mandates
10143110	Overhead Services-North Metro	12/31/2021	(93,975)	(181,778)	New Service
10143111	Underground Services-North Met	12/31/2021	(225,124)	(404,963)	New Service
	Overhead Reinforcements	12/31/2021	(7,458)	(15,400)	Capacity
10143115	Underground Reinforcements	12/31/2021	(104,131)	(109,524)	Capacity
10143116	Overhead Relocations	12/31/2021	(282,475)	(279,548)	Mandates
10143117	Underground Relocations	12/31/2021	(114,541)	(219,888)	Mandates
10143118	1% Franchise Projects	12/31/2021	(299,535)	(349,990)	Mandates
10143128	Overhead Services	12/31/2021	(17,824)	(28,945)	New Service
10143129	Underground Services	12/31/2021	(104,069)	(156,455)	New Service
10143131	Overhead Reinforcements	12/31/2021	(54,527)	(44,899)	Capacity
10143132	Underground Reinforcements	12/31/2021	(144,231)	(151,353)	Capacity
	Overhead Relocations	12/31/2021	(348,511)	(345,131)	Mandates
10143134	Underground Relocations	12/31/2021	(249,289)	(356,541)	Mandates
	1% Franchise Projects	12/31/2021	(67,116)	(68,626)	Mandates
10143143	Overhead Services-Southeast Me	12/31/2021	(103,689)	(208,098)	New Service
10143144	Underground Services-Southeast	12/31/2021	(346,798)	(581,944)	New Service
	Overhead Reinforcements	12/31/2021	(1,796)	(4,001)	Capacity
10143147	Underground Reinforcements	12/31/2021	(90,498)	(5,441)	Capacity
10143148	Overhead Relocations	12/31/2021	(105,846)	(109,639)	Mandates
10143149	Underground Relocations	12/31/2021	(447,323)	(512,561)	Mandates
	1% Franchise Projects	12/31/2021	(735,837)	(842,734)	Mandates
	Overhead Services	12/31/2021	(12,893)	(29,126)	New Service
10143161	Underground Services	12/31/2021	(218,851)	(455,320)	New Service
	Overhead Reinforcements	12/31/2021	(1,534)	(3,124)	Capacity
10143164	Underground Reinforcements	12/31/2021	(30,286)	(34,681)	Capacity

Budget Org ID	Distribution Operations
Func Class Descr	(All)

		Activity Year			
Project ID	Project Nbr Desc	Est ISD	2014	2015	Project Category
10143165	Overhead Relocations	12/31/2021	(65,542)	(73,822)	Mandates
10143166	Underground Relocations	12/31/2021	(58,343)	(86,611)	Mandates
10143167	1% Franchise Projects	12/31/2021	(15,686)	(18,829)	Mandates
10143175	Overhead Services	12/31/2021	(20,286)	(39,543)	New Service
10143176	Underground Services	12/31/2021	(42,783)	(91,105)	New Service
10143178	Overhead Reinforcements	12/31/2021	(6,995)	(14,562)	Capacity
10143179	Underground Reinforcements	12/31/2021	(128,594)	(133,857)	Capacity
	Overhead Relocations	12/31/2021	(160,761)	(186,992)	Mandates
10143181	Underground Relocations	12/31/2021	(19,618)	(31,255)	Mandates
	Overhead Services	12/31/2021	(48,587)	(99,499)	New Service
10143191	Underground Services	12/31/2021	(185,425)	(319,590)	New Service
10143192	Overhead Reinforcements	12/31/2021	(6,995)	(14,562)	Capacity
10143193	Underground Reinforcements	12/31/2021	(7,271)	(7,410)	Capacity
10143194	Overhead Relocations	12/31/2021	(228,623)		Mandates
10143195	Underground Relocations	12/31/2021	(64,175)	(105,112)	Mandates
	1% Franchise Projects	12/31/2021	(162,051)	(183,040)	Mandates
10143204	Overhead Services-Northern	12/31/2021	(11,831)	(25,329)	New Service
10143205	Underground Services-Northern	12/31/2021	(155,522)	(255,843)	New Service
	Overhead Reinforcements	12/31/2021	(27,365)	(57,211)	Capacity
10143207	Underground Reinforcements	12/31/2021	(72,308)		Capacity
	Overhead Relocations	12/31/2021	(108,310)		Mandates
10143209	Underground Relocations	12/31/2021	(3,967)	(8,376)	Mandates
	1% Franchise Projects	12/31/2021	(99,853)	(114,518)	Mandates
	Overhead Services	12/31/2021	(31,604)		New Service
10143226	Underground Services	12/31/2021	(71,996)		New Service
	Overhead Reinforcements	12/31/2021	(9,797)	(139,921)	
10143229	Overhead Relocations	12/31/2021	(14,511)		Mandates
10143231	1% Franchise Projects	12/31/2021	(41,605)	(47,921)	Mandates
	Overhead Services-Home Light	12/31/2021	(15,351)		New Service
	Underground Services-Home Ligh	12/31/2021	(68,547)	(122,424)	New Service
	Overhead Reinforcements	12/31/2021	(16,627)		Capacity

	Distribution Operations
Func Class Descr	(AII)

			Activit	y Year	
Project ID	Project Nbr Desc	Est ISD	2014	2015	Project Category
10143242	Underground Reinforcements	12/31/2021	(45,649)	(2,737)	Capacity
10143243	Overhead Relocations	12/31/2021	(120,321)	(126,689)	Mandates
10143244	Underground Relocations	12/31/2021	4,221	(14,086)	Mandates
10145898	Overhead Extension	12/31/2021	(135,731)	(117,119)	New Service
10145903	Overhead Services-High Plains	12/31/2021	(14,838)	(31,226)	New Service
10145906	Underground Extension	12/31/2021	(89,785)	(124,526)	New Service
10145909	Underground Services-High Plai	12/31/2021	(10,409)	(18,920)	New Service
10145915	Overhead Streetlights	12/31/2021	(15,953)	(18,930)	Street Lights
10145919	Underground Streetlights	12/31/2021	(5,792)	(8,655)	Street Lights
10145920	Stlg-Elec Non-Refundable Ciac	12/31/2021	47,155	57,000	CIAC
10145921	Overhead Rebuilds	12/31/2021	(254,608)	(265,644)	Asset Health
10145922	Underground Conver/Rebuilds	12/31/2021	(1,688)	(8,434)	Asset Health
10145923	Overhead Reinforcements	12/31/2021	(8,535)	(17,734)	Capacity
10145925	Overhead Relocations	12/31/2021	(17,342)	(20,682)	Mandates
10145927	Underground Relocations	12/31/2021	(43,044)	(5,800)	Mandates
10145928	1% Franchise Projects	12/31/2021	(82,240)	(94,753)	Mandates
10184416	Transportation Tools & Equipme	12/31/2021	(148,929)	(151,276)	Other
10229464	PSCO-Poor Perf Fdr Replace Blk	12/31/2021	(840,753)	(1,371,121)	Asset Health
10229476	Psco-Fdr Cable Replacement-Eme	12/31/2021	(2,813,771)	(3,950,135)	Asset Health
10229490	Psco-Fdr Cable Replacement-Pro	12/31/2018	(6,642,811)	(8,400,189)	Asset Health
10229676	Elec New Business Carryover-PS	12/31/2021	(5,006,024)	(19,365,379)	New Service
10230427	Psco Metering Sys-Tools & Equi	12/31/2021	(77,948)	(85,304)	Other
10231063	Land Rights Blanket - PSC - El	12/31/2021	(1,859,711)	(1,826,000)	Other
10231832	Logistics-Psco Metro Tools	12/31/2021	(179,340)	(194,010)	Other
10233245	Carryover Projects-EL-SR	12/31/2021	(388,998)	(2,556,241)	Asset Health
10233661	Co-Construct Dist Sub Tool & E	12/31/2021	(55,984)	(71,388)	Other
	Ele Contributions Cap Acct Use	12/31/2021	(10,807)		CIAC
10330128	PSCO Major Storm Recovery Blan	12/31/2021	(200,346)		Asset Health
10333868	PSCO-Accelerated URD Cable Rep	12/31/2021	(18,407,414)	(8,478,726)	Asset Health
10390350	Scrap Sale Credits-CO	12/31/2022	(4,016)		Other
10437237	Capitalized Locating Costs-Ele	12/31/2021	(311,435)	(257,427)	Other

	Distribution Operations
Func Class Descr	(AII)

			Activity Year		
Project ID	Project Nbr Desc	Est ISD	2014	2015	Project Category
10476693	CableCURE-URD Cable Injection-PSCO	12/31/2018	(2,755,749)	(3,699,859)	Asset Health
10557117	Fleet New Unit Purchase El Ops	12/31/2021	(4,821,063)	(4,626,960)	Other
10557123	Fleet New Unit Purchase Common	12/31/2021	(1,634,977)	(1,314,114)	
10593269	Capital Transportation Blanket	12/31/2018	(25,552)	(2,236)	
10650045	Dist Subs Capacity WCF-PSCo	12/31/2021		(5,415,882)	Capacity
10652156	Asset Sales - PSCo Subs	12/31/2018	(711)	,	Other
10734597	STLT Recon or Rebuild Denve	12/31/2021	(297,099)	(165,715)	Street Lights
10734608	STLT Recon Rebuild North Metro	12/31/2021	(56,242)	(68,198)	Street Lights
10734649	STLT Recon or Rebuild Southeas	12/31/2021	(77,951)	(44,590)	Street Lights
10734655	STLT Recon or Rebuild Southwes	12/31/2021	(95,630)	(54,732)	Street Lights
10734661	STLT Recon or Rebuild Greeley	12/31/2021	(4,132)	(2,819)	Street Lights
10734666	STLT Recon or Rebuild Boulder	12/31/2021	51,337	(220)	Street Lights
10734668	STLT Recon or Rebuild Front Ra	12/31/2021	(83)	(2)	Street Lights
10768623	fast tracks west corridor relo	12/31/2018	(4,286,831)	(5,042,804)	Mandates
10773469	Fast Tracks West Corridor, New	12/31/2018	(1,356,605)	(1,496,819)	New Service
10786182	Silverthorne Sub Siting and Pe	11/30/2014	(3,807,951)	,	Capacity
10797507	Colorado Inspect/Replace poles	12/31/2021	(2,840,659)	(4,349,854)	Asset Health
10952699	Reilability Monitoring System	12/31/2021	(457,204)	(587,720)	Asset Health
10955005	Environmental Work PSCO-EL	12/31/2021	(1,039,687)	(1,181,880)	Capacity
11034686	Replace Network Isolation Boxes	12/31/2021	(152,145)		Asset Health
11096797	CO Infratructure Invest - Sys Rel	12/31/2020	Ì	(14,790,676)	Asset Health
11096800	CO Infratructure Invest -OH Rebuild	12/31/2020	(906,852)	(3,459,193)	Asset Health
11102972	FasTracks Gold Line - ROW	12/31/2016	(480,273)	(600,000)	Other
11142530	Ptarmigan Sub Construction	11/30/2014	(14,704,474)	,	Capacity
11148901	Replace unrepairable URD/Feeder	12/31/2021	(103,961)	(81)	Asset Health
11156382	Inst Havana #3 115/13.2 kV, 50 MVA	2/28/2014	(57,839)	,	Capacity
11172365	Fdr#1 fr Lacombe #3 MCS	4/30/2014	(334,792)		Capacity
11172366	Fdr#2 fr Lacombe #3	3/31/2014	(315,003)		Capacity
	Lacombe #3, 230-13.2kV,50 MVA & MCS	5/31/2014	(5,239,084)		Capacity
11172927	New ODL, FasTracks West Corridor	12/31/2016	6,167	0	Street Lights
11201600	Franchise Renewal Elec < 100K	12/31/2021	(100,881)	(53,380)	

Budget Org ID	Distribution Operations
Func Class Descr	(AII)

			Activity	/ Year	
Project ID	Project Nbr Desc	Est ISD	2014	2015	Project Category
11201764	Logistics - Security Fencing - PSCO	12/31/2021	(280,668)	(233,650)	Other
	Logistics - Security Equipment-PSCO	12/31/2021	(34,880)	(75,161)	
11205954	C&C of Denver Signal/St Lt Rebuild	12/31/2021	(1,050,667)	(1,233,203)	Street Lights
11228065	WCF - 1% Franchise Projects	12/31/2021		(7,516,621)	Mandates
11228217	Network Protector Replacements	11/30/2014	(142,237)		Asset Health
11228224	Replace ATO's at PSCo	12/31/2016	(2,172)	(131,043)	Capacity
11228231	Lacombe 14th Net Cables-Laco#3	4/30/2014	(1,708,106)		Capacity
11228234	14th Net Lacombe#3 2x2 duct bank	1/31/2014	(401)		Capacity
11228240	Install Ptarmigan Sub 1st feeder	10/31/2014	(3,251,116)		Capacity
11228242	WCF - Oh Street Light	12/31/2021	Ì	(1,023,067)	Street Lights
11229445	Dakota #2 & Switchgear	7/31/2014	(5,006,382)	,	Capacity
11229446	DDII: IInstall Capital Hill #3	12/31/2015	Ì	(7,750,300)	Capacity
11229447	Capital Hill #3 Fdrs #1 - DDII	12/31/2015		(1,262,278)	Capacity
11230833	Fdr#1 from Dakota #2	4/30/2014	(3,225,914)	,	Capacity
11230881	Replace overloaded Switch Cabinets	1/31/2014	(457,221)		Capacity
11232269	Network Dist Monitoring Equip	1/31/2014	(853,947)		Asset Health
11238781	PSC, Capitalized Replacement of Cor	12/31/2021	(880,829)	(1,036,636)	Street Lights
11256801	Replace PSC Breakers(various types)	12/31/2018	(569,427)	(1,214,841)	Asset Health
11325538	CO Inspect/Replace Poles	12/31/2018	(193,683)	(87,448)	Asset Health
11330877	Land for Avery Sub	12/31/2015	Ì	(730,602)	Capacity
11333259	Inst Xfmr-136th Ave-Holly St Sub	5/31/2015	(740,424)	(6,045,880)	Capacity
	Land for 136th Ave-Holly St Sub	12/31/2014	(1,688,193)	,	Capacity
11333262	Install Fdrs-136th Ave-Holly St Sub	6/30/2014	(145,797)		Capacity
11341696	Purchase 44/69/138kV Mobile Su	1/31/2014	(2,364,714)		Asset Health
11360916	Radio Equipment for ISOC	1/31/2014	48,121		Other
	Chatfield #2 - 3rd Feeder	3/31/2014	(1,400,664)		Capacity
11361843	Convert Krameria 410 to 13kV	12/31/2015	, í	(1,161,498)	Asset Health
11361857	Convert Barnum 229 to 13kV	1/31/2014	(217)	,	Asset Health
11361866	Install Cobb Lake 1398 Breaker	1/31/2014	(128)		Capacity
11362784	Install 13.2 Murphy Creek #2 & MCSG	7/31/2014	(5,363,979)		Capacity
11362797	Install Fdr Russell #2	11/30/2014	(61,697)		Capacity

Budget Org ID	Distribution Operations
Func Class Descr	(All)

			Activity Year		
Project ID	Project Nbr Desc	Est ISD	2014	2015	Project Category
11362806	Install Sheridan T2 50 Fdrs	5/31/2015		(4,940,624)	Capacity
11362812	Replace Damaged Electrical Cabinets	12/31/2021	(156,445)	(187,752)	Asset Health
	Install 13.2 Murphy Creek #2	8/31/2014	(4,107,112)	,	Capacity
11362828	Install 2 UG Santa Fe Feeders	7/31/2015		(3,318,624)	Capacity
11362842	DDII: Reinforce DTER1308 to AHEC	4/30/2014	(200,053)		Capacity
11362913	Sheridan Bank #2, Switchgear & Cap	9/30/2015		(5,750,222)	Capacity
11362918	Install Russell Bank #2	6/30/2014	(6,196,537)		Capacity
11362928	Install Federal Heights Bank #3	5/31/2014	(830,179)		Capacity
11362933	Install 13.2 Jewell #3 & SWGR	1/31/2014	5,263		Capacity
11362968	Install Santa Fe T2, MCS, and Cap	7/31/2015	(2,547,160)	(2,763,831)	Capacity
11362969	Install 3rd Bank at Bancroft	1/31/2014	(454,000)		Capacity
11382219	PSCo Communication Equip-Dist Subs	12/31/2021	(46,486)	(169)	Other
11405614	Elect Dist Communication Equipment	12/31/2021	(81,538)	(93,586)	Other
11424739	Federally Funded & Installed St.Lts	12/31/2021	(8,538)	(0)	Street Lights
11434566	Convert Fairfax 421 From 4kV to 13k	3/31/2014	(53,795)		Asset Health
11449438	Conversion of Fairfax 422 from 4.2k	5/31/2015	(773,026)	(490,922)	Asset Health
11500959	Remove Barnum Sub & Decommission	4/30/2014	(190,630)		Asset Health
11500965	Install Glenn #3	5/31/2016	(5,738,543)	(98,708)	Capacity
11500966	Remove Chestnut Sub & Decommission	12/31/2014	(186,487)		Asset Health
11500968	Install 2-Way Control to PSCo ATOs	12/31/2015	(185,162)	(174,316)	Other
11500973	Convert Krameria #2 Fdr 413 to 13kV	4/30/2014	(982,047)		Asset Health
11500980	Install 2 new Feeders	10/31/2016	(1,344,563)	(1,790,505)	Capacity
11500991	Convert Chestnut 411 from 4KV to 13	12/31/2013	(248,915)		Asset Health
11525440	Bldr - Eldora - Ski Resort	9/30/2014	(4,673,991)		Capacity
11575400	3 Network Transformers&Protectors	9/30/2014	(584,407)		Capacity
11578665	Extend 2 New Tower Feeders to GE Si	2/28/2014	(121,384)		New Service
11580012	Picadilly OH Rebuild - I3	2/28/2014	(652,000)		Asset Health
11580971	Bancroft #1 Replacement Transformer	1/31/2014	(6,931)		Asset Health
11586606	Upgrade Circuit Switcher at Argo	6/30/2014	(519,196)		Asset Health
11587090	City of Boulder-OH Extension	12/31/2021	(37,518)	(44,492)	New Service
11587094	City of Boulder-UG Extension	12/31/2021	(1,080,746)	(1,082,690)	New Service

Budget Org ID	Distribution Operations
Func Class Descr	(AII)

			Activity \	<b>′</b> ear	r	
Project ID	Project Nbr Desc	Est ISD	2014	2015	Project Category	
11587096	City of Boulder-OH Street Lights	12/31/2021	(1,743)	(2,902)	Street Lights	
11587099	City of Boulder-Elec New Const CIAC	12/31/2021	72,961	86,770	CIAC	
11587112	City of Boulder-OH Rebuilds	12/31/2021	(74,353)	(31,730)	Asset Health	
11587114	City of Boulder-UG Services	12/31/2021	(168,850)	(196,551)	New Service	
11587115	City of Boulder-OH Reinforcements	12/31/2021	(4,470)	(9,301)	Capacity	
11587118	City of Boulder-OH Relocations	12/31/2018	(64)		Mandates	
11587119	City of Boulder-UG Relocations	12/31/2021	(14,000)	(3,515)	Mandates	
11587124	City of Boulder-UG Street Lights	12/31/2021	2,904	(26,907)	Street Lights	
11587125	City of Boulder-UG Conver/Rebuilds	12/31/2021	17,506	(10,536)	Asset Health	
11587126	City of Boulder-OH Services	12/31/2021	(34,942)	(36,987)	New Service	
11587129	City of Boulder-UG Reinforcements	12/31/2021	(143,167)	(127,258)	Capacity	
11590238	City of Boulder - SL Recon/Rebuild	12/31/2021	(34,430)	(12,422)	Street Lights	
11598868	City of Boulder Fdr Cable Replaceme	12/31/2020	(34)	(1)	Asset Health	
11599121	City of Boulder URD Cable Replace	12/31/2021	(16,058)	(272)	Asset Health	
11599353	Bldr/ 120th & Perry Conv-Broomfield	7/31/2014	(507,667)		Asset Health	
11618946	2012 Denver Metro 1% Street Lightin	5/31/2014	(563,260)		Mandates	
11647625	Substation Switchgear Replacement	12/31/2018	(4,795,956)	(1,175,060)	Asset Health	
11647634	ELR - Substation Relays - PSCo	12/31/2018	(87,541)	(416,293)	Asset Health	
11647638	Install Fitzsimons 1518	1/31/2014	(185)		Capacity	
11647639	Install Argo #2 transformer	10/31/2015	(617,329)	(4,639,287)	Capacity	
11647640	Install first feeders from Argo #2	5/31/2015	(58,545)	(3,244,893)	Capacity	
11647645	Install new N Brantner Fdr	9/30/2015		(2,290,176)	Capacity	
11647657	Garfield Ops Ctr Wrhse Expansion	1/31/2014	(1,192,726)	,	Other	
11649803	LCU REPL in PSCO various locations	12/31/2018	(136,984)	(538,622)	Asset Health	
11650479	DDII: Purchase ATO-Dter2217 to AHEC	4/30/2014	180,292		Capacity	
11655392	Rebuild LEGG1322-1327 200 A Loop	6/30/2014	(855,666)		Capacity	
11672701	GIS Phasing - PSC	1/31/2014	(257,771)		Other	
	Mayflower CT additions for Climax	1/31/2014	69,579		Asset Health	
11683775	Mayflower Xfmr Relay Replacements	1/31/2014	(2,818)		Asset Health	
	PSCo 3rd Party owned Pole Transfers	12/31/2013	(11,135)		Mandates	
11706326	Edwards Propect Park-Apartment Proj	1/31/2014	(15,308)		Asset Health	

Budget Org ID	Distribution Operations
Func Class Descr	(AII)

			Activit	y Year	
Project ID	Project Nbr Desc	Est ISD	2014	2015	Project Category
11706341	2510-2550 Hwy 6&50 phase III ug con	10/31/2013	(0)		Asset Health
11709217	Peoria Railroad Crossing/City of De	1/31/2014	24,525		Mandates
11710339	Install Sectionalizing Equipment	4/30/2014	(1,212,586)		Asset Health
11715933	PSCo-Dist Sub Communication Equip	12/31/2021	(1,261,435)	(291,562)	Other
11732392	16222 E 45th PI - Data Center - Dua	1/31/2014	(2,158)		New Service
11734759	Colfax/Welton/Galapago Network Rero	1/31/2014	(13,433)		Asset Health
11736866	E&S Electric Distribution	12/31/2021	296,219		Other
11738050	E&S Electric Distribution Substatio	12/31/2021	(153,234)		Other
11743933	1933 Gun Club Rd-Extend UG electric	1/31/2014	(95)		New Service
11746228	Reconfigure Lookout Mountain sectio	2/28/2014	(190,362)		Asset Health
11750259	NMA - 72nd & Raleigh St 1% Conv - B	1/31/2014	(1,642)		Mandates
11750429	Administrative and General Expense	1/31/2014	(6,200)		Other
11757366	Reinforce Ault 1022 from #2ACSR/#6C	1/31/2014	(2)		Capacity
11757376	Two Feeder Level Runs to Xcel Padmo	10/31/2013	(5,465)		New Service
11759912	Front Range OH rebuilds (spring gul	1/31/2014	(78,805)		Asset Health
	Reinforce Peetz 1320H from #4ACSR/#	1/31/2014	(225)		Asset Health
11764227	Replace Arvada #1	5/31/2015	(40,245)	(3,807,388)	Asset Health
	Replace Arvada #2	5/31/2015	(152,165)	(3,815,951)	Asset Health
11765666	Dist Subs Asset Health WCF-PSCO	12/31/2021	` '	(571,917)	Asset Health
11772433	Replace Leetsdale Circuit Switches	7/31/2014	(734,324)		Asset Health
	I3:Picadilly OH Rebuild	8/31/2014	(819,913)		Asset Health
11777102	City of Lakewood 1% Franchise Proje	2/28/2014	(456,380)		Mandates
11782422	MDC Training Center Tools - PSCo	12/31/2021	(74,625)	(74,625)	Other
	City of Lakewood Requested Overhead	2/28/2014	(9,372)		Mandates
	Leyden Rock Filing 3	12/31/2013	(373)		New Service
	Filing 36-Phase II- Street Lights	1/31/2014	(17,883)		Street Lights
	FILING 36 - PHASE III - STREET LIGH	1/31/2014	76,603		Street Lights
11793076	FILING 36 - PHASE IV - STREET LIGHT	4/30/2014	(90,086)		Street Lights
	Fruita 18 Rd 1% conversion project	1/31/2014	(4,895)		Mandates
	Rebuild 2.5 miles of Fruita 1405 to	3/31/2014	(24,122)		Asset Health
11810296	Smith Rd & Ulster St. OH to UG Conv	6/30/2014	(193,126)		Asset Health

Budget Org ID	Distribution Operations
Func Class Descr	(AII)

		Activity Year			
Project ID	Project Nbr Desc	Est ISD	2014	2015	Project Category
11810335	Kipling 1% conversion 32nd - 35th	3/1/2014	(21,275)		Mandates
	Convert Russell #1 to 230 kV	6/30/2015	(991,872)	(1,579,332)	Capacity
11810712	Install DVO systems	12/31/2018	(2,376,089)	(10,927,520)	Asset Health
11811846	Repl Non Groundline Pole Problems	12/31/2018		(223,107)	Asset Health
11811852	FEDE2727: Rebuild #4 ACSR on 88th f	5/31/2015		(468,276)	Capacity
11811859	Install Jewell #3 feeder #3	9/30/2014	(2,836,221)		Capacity
11811864	Extend SULL1808 to relieve 1806	4/30/2014	(740,739)		Capacity
11811866	Install Chatfield 1010	5/31/2015	Ì	(1,402,582)	Capacity
11811871	Install 1000AL along 37th 29-17Aves	5/31/2015		(1,279,463)	Capacity
11812100	Extend BTER1341 to close UG rad	5/31/2015		(540,812)	Capacity
11812103	Rebuild LAFA1575 and ISAB1881	5/31/2015		(502,329)	Capacity
11812106	Install Parachute 2476	5/31/2014	(70,317)	,	Capacity
11813823	Poncha Substation Expansion	1/31/2014	(834)		Capacity
11814211	I3: Rebuild SIMM1029 3/10 CuWd alon	2/28/2014	(137,715)		Asset Health
11814221	108th & Simms relocation	1/31/2014	10		Mandates
11827323	Meridan Filing 7C	1/31/2014	(7)		New Service
11827332	Bldr - Flatiron Meadows Filing #2 -	8/31/2014	(547,833)		New Service
	Filing 36-Phase III-Electric (T4646	1/31/2014	(385,558)		New Service
	Hawthorn second phase; 58th & Hwy 9	4/30/2014	(360,988)		New Service
11829997	40th & Blake 1% Feeder/street light	4/30/2014	(1,156,960)		Mandates
	Substation Land - PSCo	1/31/2014	(3,637)		Capacity
11835615	Rebuild SRDG1284 to serve subdivisi	7/31/2014	(572,516)		New Service
11844222	Leyden RD UG conversion	10/31/2013	(40,344)		Mandates
	Town of Carbondale and CDOT Conv/re	1/31/2014	(164,883)		Asset Health
11844467	Central Platte Valley Metro Dist-St	5/31/2014	(210,860)		Street Lights
	Gateway S/C north gate	9/30/2013	(728)		Other
	M16 Build Network Service-1550 Mark	4/30/2014	(397,859)		Capacity
11859529	E 48th at Colorado Blvd OH feeder r	1/31/2014	(58,376)		Mandates
11859629	Bldr - Hwy 128 Relocation - Broomfi	1/31/2014	(3,385)		Mandates
	120th & Lowell 1% conversion-Broomf	4/30/2014	(643,144)		Mandates
11861618	Heritage Rd 1% underground conversi	11/30/2014	(1,111,201)		Mandates

	Distribution Operations
Func Class Descr	(All)

			Activity Year		
Project ID	Project Nbr Desc	Est ISD	2014	2015	Project Category
11861623	800 15th St-JBK Hotels-Network Vaul	4/30/2014	(242,359)		Capacity
11864749	1801 Arapahoe-New Network Vault	2/28/2014	(22,940)		Capacity
11866764	Bedrock-Filing 3-Phase 5	3/31/2014	(322,806)		New Service
11871652	80th & Lowell 1% conversion	5/31/2014	(469,200)		Mandates
11879092	Leyden Rock filing 1 phase 2	11/30/2014	(566,957)		New Service
	South Golden Rd 1%	12/31/2014	(946,314)		Mandates
11883235	1% 92nd & Federal east	7/31/2014	(791,972)		Mandates
11883250	1% 92nd & Federal West	5/31/2014	(445,740)		Mandates
11885130	Bldr - 3151 Pearl St - Bus Terminal	10/31/2014	(298,091)		New Service
11885137	Candelas filing 3	1/31/2014	(379,505)		New Service
	Central Park Blvd Extension-Feeder	4/30/2014	(736,904)		Mandates
11885192	Charles Schwab adding new load, new	3/31/2014	(439,611)		New Service
	Bldr - St Anthonys Hosp - 144th & H	2/28/2014	(283,341)		New Service
	Sky Ranch SWGR #1 Replacement	7/31/2014	(236,417)		Capacity
11893969	Breckenridge Breaker project - DCP	11/30/2014	(312,350)		Asset Health
11895009	Bldr - Lowell 1% Conv - 120th-124th	5/31/2014	(385,493)		Mandates
11895506	Install Federal Heights Bank #3	3/31/2014	(536,111)		Capacity
	DCP Midstream - SLW, Sullivan	10/31/2014	(1,296,975)		New Service
11903378	Eldorado 1161: Install hot line rec	10/31/2014	(73,299)		Capacity
11903410	Order new 230/13 kV spare for PSCo	5/31/2014	(1,042,872)		Asset Health
	I3: OH rebuild of DERB1655	9/30/2014	(974,931)		Asset Health
11903559	Lakewood 1% Conversion on W Colfax	3/31/2014	(253,075)		Mandates
	City of Denver 1%-OH to UG Street L	7/31/2014	(1,273,586)		Mandates
	Removal of NCAR #1 transformer	1/31/2014	(152,897)		Asset Health
11912331	HWY 6-Widening road project	5/31/2014	(578,383)		Mandates
	Cherry Creek Bridge Relocate Projec	6/30/2014	(411,221)		Mandates
	STREET LIGHTS AT STAPLETON FILING 4	5/31/2014	(432,971)		Street Lights
	Midtown underground conversion, wes	5/31/2014	(39,877)		Asset Health
	Replacement of NCAR #1 transformer	5/31/2014	(1,007,207)		Asset Health
	Install 50 MVA Glenn #3 - Communic	5/31/2014	(360,822)		Other
	Quincy Ave Feeder Relocation Mitiga	5/31/2014	(435,397)		Mandates

	Distribution Operations
Func Class Descr	(AII)

			Activit	y Year	
Project ID	Project Nbr Desc	Est ISD	2014	2015	Project Category
11936504	Sierra Ridge Phase 1	8/31/2014	(379,734)		New Service
11936649	Porteos Park Garage-Feeder Extensio	8/31/2014	(995,114)		New Service
Grand Total			(236,608,509)	(233,439,521)	

Type of Cost	Operating & Maintenance
CC25	(All)
Business Unit	(All)
FERC Account	(All)
FERC Description	(All)
Sub-Business Area	(All)

Sum of Total PSCo Electric		
Business Area	Object Account	Total
Distribution Operations	711142 Productive Labor	\$21,638,161
-	711143 Reg Labor Loading-NonProductiv	\$4,381,995
	711150 Premium Time	\$374,419
	711190 Overtime	\$5,219,532
	711230 Incentive	\$7
	711270 Other Compensation	\$123,498
	712110 Contract Labor	\$382,653
	713000 Consulting/Prof Svcs-Other	\$236,064
	713050 Contract LT Outside Vendor	\$43,515,988
	713050.4073 Reg Debit	\$444,306
	713050.4074 Reg Credit	-\$621,321
	713055 Outside Srvcs-Cust Care	\$120
	713100 Consulting/Prof Svcs-Legal	\$125
	713150 Consulting/Prof Svcs-Acctg	\$22
	714000 Materials	\$7,993,715
	714050 M&S Inventory Adj-Obsolete Mat	\$894,276
	714100 Print/Copy-Other	\$82,003
	715400 Software - term lic purch	\$0
	715600 Personal Communication Devices	\$298,337
	715720 Network Data	\$4,848
	721005 EE Exp Airfare	\$92,330
	721010 EE Exp Car Rental	\$24,798
	721015 EE Exp Taxi/Bus	\$3,889
	721020 EE Exp Mileage	\$28,337
	721025 EE Exp Conf/Semnrs/Trng	\$77,611
	721030 EE Exp Hotel	\$168,347
	721035 EE Exp Meals/EE's	\$194,365
	721040 EE Exp Meals/Incl.Non-EE's	\$8,076
	721045 EE Exp Parking	\$16,921
	721050 EE Exp Per Diem	\$26,035
	721055 EE Exp Safety Equip	\$320,375
	721060 EE Exp Other	\$101,037
	721500 Office Supplies	\$185,383
	721700 Workforce Admin Expense	\$428
	721800 Safety Recognition	\$164,171
	721810 Life Events	\$2,284
	722000 Transportation Fleet Cost	\$7,519,051
	723031 Electric Use Costs	\$2,524
	723036 Trash Removal Costs	\$80,674
	723037 Water Use Costs	\$1,759
	723040 Moves/Adds/Changes	\$21,966
	723060 Non-Energy	\$433,798
	723130 Equipment Rental	\$27,314

Type of Cost	Operating & Maintenance
CC25	(All)
Business Unit	(All)
FERC Account	(All)
FERC Description	(All)
Sub-Business Area	(All)

Sum of Total PSCo Electric		
Business Area	Object Account	Total
	723136 Elec Distribution Rents	\$268,226
	723300 Lease Costs	\$282,100
	723400 Postage	\$27,129
	723480 Injuries & Damages	-\$18,123
	723810 Professional Association Dues	\$7,782
	723820 Utility Association Dues	\$2,646
	723821 Electric Util Assoc Dues	\$38,240
	723833 Charitable Contributions	\$7,359
	723854 Deductions-Corp Tickets	\$495
	723855 Other Deductions	\$6,033
	723860 Bank Charges	\$1,396
	723890 Environmental Permits & Fees	\$6,664
	723895 License Fees & Permits	\$426,261
	723897 Penalties	\$9,956
	724100 Misc O&M Credits	\$0
	724170 Misc O&M Crd-Tarrif Trip Chrg	\$0
	724175 Disc-recont Non-Grat Elec Dist	\$37,184
	725000 Other	\$39,683
	725000.11 TriState Offsets-ADE	-\$2,864
	725005 Online Information Services	\$9,293
Distribution Operations Total		\$95,619,683
Gas Systems	711142 Productive Labor	\$339,726
	711143 Reg Labor Loading-NonProductiv	\$61,160
	711150 Premium Time	\$11
	711190 Overtime	\$2,182
	711270 Other Compensation	\$0
	712110 Contract Labor	-\$16,976
	713000 Consulting/Prof Svcs-Other	\$54,655
	713050 Contract LT Outside Vendor	\$4,848,633
	713055 Outside Srvcs-Cust Care	\$17,274
	714000 Materials	\$16,052
	714100 Print/Copy-Other	\$1,236
	715600 Personal Communication Devices	\$5,757
	715800 Mainframe Services	\$0
	721005 EE Exp Airfare	\$15,468
	721010 EE Exp Car Rental	\$983
	721015 EE Exp Taxi/Bus	\$2,235
	721020 EE Exp Mileage	\$2,249
	721025 EE Exp Conf/Semnrs/Trng	\$13,640
	721030 EE Exp Hotel	\$15,043
	721035 EE Exp Meals/EE's	\$8,056
	721040 EE Exp Meals/Incl.Non-EE's	\$3,714
	721045 EE Exp Parking	+ - /

Type of Cost	Operating & Maintenance
CC25	(All)
Business Unit	(All)
FERC Account	(All)
FERC Description	(All)
Sub-Business Area	(All)

Sum of Total PSCo Electric		
Business Area	Object Account	Total
	721050 EE Exp Per Diem	\$0
	721055 EE Exp Safety Equip	\$68
	721060 EE Exp Other	\$22,628
	721500 Office Supplies	\$4,515
	721700 Workforce Admin Expense	\$0
	721800 Safety Recognition	\$0
	721810 Life Events	\$86
	722000 Transportation Fleet Cost	\$11,610
	723031 Electric Use Costs	\$1,570
	723032 Gas Use Costs	\$33,111
	723036 Trash Removal Costs	\$0
	723037 Water Use Costs	\$0
	723040 Moves/Adds/Changes	\$117
	723130 Equipment Rental	\$15,975
	723142 Gas Transmission Rents	\$0
	723144 Equip Rental-Cust Care	\$0
	723300 Lease Costs	\$0
	723400 Postage	\$343
	723720 Advertising - General	\$0
	723810 Professional Association Dues	\$1,032
	723820 Utility Association Dues	\$4,739
	723822 Gas Utility Assoc. Dues	\$0
	723834 Community Sponsorships	\$15,976
	723854 Deductions-Corp Tickets	\$832
	723855 Other Deductions	\$1,825
	723890 Environmental Permits & Fees	\$0
	723895 License Fees & Permits	\$0
	724030 IMP Assessments	\$0
	724100 Misc O&M Credits	\$0
	725000 Other	\$2,742
	725005 Online Information Services	\$5
Gas Systems Total		\$5,510,828
Grand Total		\$101,130,511

Mountain Pine Beetle Amortization is \$5.7M

Type of Cost	Operating & Maintenance
CC25	(AII)
Business Unit	(AII)
Sub-Business Area	(AII)
Object Account	(All)

Business Area	FERC Account	FERC Description	Total
Distribution Operations	407.3	Regulatory Debits	\$444,306
·	407.4	Regulatory Credits	-\$621,32°
	426.1	Donations	\$7,359
	426.3	Penalties	\$9,950
	426.4	Expenditures for Civic,	\$6,53
	426.5	Other Deductions	\$6,52
	502	Steam Expenses Major	\$60
	506	Misc Steam Pwr Exp	\$37,12
	509	SO2 Allowances	\$18
	554	Oth Mtc Misc Gen Plt Mjr	\$25
	560	Trans Oper Super & Eng	\$1,46
	562	Trans Oper Station Exp	\$13
	563	Trans Oper OH Lines	\$20,46
	564	UG Line Exp	\$71,16
	566	Trans Oper Misc Exp	\$458,34
	570	Tran Mnt of Station Equip	\$305,72
	571	Trans Mt of Overhead Line	\$9,439,01
	580	Dist Oper Sup & Eng	\$4,307,002
	581	Dist Load Dispatching	\$2,496,82
	582	Dist Op Station Exp	\$221,56
	583	Dist Oper Overhead Lines	\$5,780,90
	584	Dist Op UG Elec lines	\$3,193,68
	585	Dist Oper Streetlight	\$2,995,67
	586	Dist Oper Meter Exp	\$3,589,99
	587	Dist Oper Cust Install	\$2,770,06
	588	Dist Oper Misc Exp	\$12,811,19
	589	Dist Rents	\$338,75
	590	Dist Mtc Super & Eng	\$250,63
	592	Dist Mt of Station Equip	\$331,24
	593	Dist Mtc of Overhead Lines	\$25,754,00
	594	Dist Mt of Undergrnd Line	\$13,652,772
	595	Dist Mt of Line Transform	\$510,85
	596	Dist Mtc of Streetlights	\$4,338,56
	597	Dist Mtc of Meters	\$276,71
	598	Dist Maint of Dist Plant	\$521,89
	902	Cust Acct Meter Read	\$6,04
	903	Cust Acct Recrds &Coll	\$89,67
	904	Cust Acct Uncollect	\$433,79
	908	Customer Asst Expense	\$41
	920	A&G Salaries	\$383,57
	921	A&G Office & Supplies	\$119,42
	923	A&G Office & Supplies  A&G Outside Services	\$232,942
	925	A&G Outside Services  A&G Injuries & Damages	-\$18,12
	930.2	A&G Misc General Exp	\$40,880

Type of Cost	Operating & Maintenance
CC25	(AII)
Business Unit	(AII)
Sub-Business Area	(AII)
Object Account	(All)

Sum of Total PSCo Ele	ectric		
Business Area	FERC Account	FERC Description	Total
	932	A&G Maint of Structures	\$0
	935	A&G Maint of Gen PLT	\$1,373
<b>Distribution Operations</b>	\$95,619,683		
Gas Systems	426.1	Donations	\$15,976
	426.5	Other Deductions	\$2,657
	560	Trans Oper Super & Eng	\$40,999
	566	Trans Oper Misc Exp	\$294
	580	Dist Oper Sup & Eng	\$98,390
	584	Dist Op UG Elec lines	\$4,909,505
	588	Dist Oper Misc Exp	\$19,533
	592	Dist Mt of Station Equip	\$244
	593	Dist Mtc of Overhead Lines	\$865
	594	Dist Mt of Undergrnd Line	\$426
	595	Dist Mt of Line Transform	-\$56
	903	Cust Acct Recrds &Coll	\$465
	920	A&G Salaries	\$244,792
	921	A&G Office & Supplies	\$139,240
	923	A&G Outside Services	\$32,643
	930.1	A&G General Advertising	\$0
	930.2	A&G Misc General Exp	\$4,739
	931	A&G Rents	\$0
	932	A&G Maint of Structures	\$0
	935	A&G Maint of Gen PLT	\$117
Gas Systems Total			\$5,510,828
Grand Total			\$101,130,511

Mountain Pine Beetle Amortization is \$5.7M