BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

* * * * *

RE: IN THE MATTER OF ADVICE LETTER NO. 876-GAS FILED BY PUBLIC SERVICE COMPANY OF COLORADO TO REVISE ITS COLORADO PUC NO. 6-GAS TARIFF TO IMPLEMENT A GENERAL RATE SCHEDULE ADJUSTMENT AND OTHER RATE CHANGES EFFECTIVE ON 30-DAYS NOTICE.	)	**PROCEEDING NO. 15AL-0135G**

REBUTTAL TESTIMONY AND ATTACHMENTS OF AMY STITT

NOTICE OF CONFIDENTIALITY:
PORTIONS OF THIS DOCUMENT HAS BEEN FILED UNDER SEAL

CONFIDENTIAL ATTACHMENT AS-2
CONFIDENTIAL ATTACHMENT AS-3
CONFIDENTIAL ATTACHMENT AS-4

July 20, 2015

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

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ON

BEHALF OF

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July 20, 2015

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SUMMARY OF REBUTTAL TESTIMONY OF AMY STITT

Ms. Amy Stitt is the Senior Director, Financial Planning responsible for the financial accounting and reporting of the General Ledger ("GL") and Work Asset Management ("WAM") replacement projects. Ms. Stitt did not submit Direct Testimony in this case, but as a rebuttal witness will respond to certain issues raised in the Answer Testimony of Mr. Cory Skluzak of the Office of Consumer Counsel ("OCC").

In her Rebuttal Testimony, Ms. Stitt responds to, and rebuts, the recommendation of Mr. Skluzak that 2014 Operations and Maintenance ("O&M") and Capital Additions costs for the GL and WAM replacements should be rejected from the Historical Test Year ("HTY") and the Multi-Year Plan ("MYP"). Ms. Stitt describes the risks with the current antiquated GL and WAM systems, how the Company evaluated alternative solutions, and the advantages of the comprehensive, integrated Enterprise Resource Planning ("ERP") system solution that was selected. Ms. Stitt also provides updated cost estimates for the ERP project. Finally, Ms. Stitt clarifies

that we are requesting recovery only of the gas department costs in this proceeding, not any electric department costs.

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

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REBUTTAL TESTIMONY AND ATTACHMENTS OF AMY STITT

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Confidential Attachment AS-4	Maximo Application Health and Risk Assessment
Attachment AS-5	Enterprise System Selection (ESS) Scoring Results

GLOSSARY OF ACRONYMS AND DEFINED TERMS

Acronym/Defined Term	Meaning
AACE	Association for the Advancement of Cost Engineering
Commission or PUC	Colorado Public Utilities Commission
CPCN	Certificate of Public Convenience and Necessity
ERP	Enterprise Resource Planning
FTY(s)	Forecast Test Years
GL	General Ledger
HTY	Historic Test Year
IT	Information Technology
JDE	Oracle JDE OneWorld XE SP24
Maximo	Maximo 5.2
MYP	Multi-Year Plan period of January 1, 2015 through December 31, 2017, which includes the 2015, 2016, and 2017 test years.
O&M	Operations & Maintenance
OCC	Colorado Office of Consumer Counsel
Passport	Passport 10.0.5
Public Service or Company	Public Service Company of Colorado
RFI	Request for Information
RFP	Request for Proposal

Acronym/Defined Term	**Meaning**
RP	Recommended Practices
Service Company or XES	Xcel Energy Services Inc.
Service Period	The period of time from when the Company receives goods or services and the date the expense is paid
WAM	Work Asset Management
Xcel Energy	Xcel Energy Inc.
XES	Xcel Energy Services Inc.

BEFORE THE PUBLIC UTILITIES COMMISSION
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REBUTTAL TESTIMONY AND ATTACHMENTS OF AMY STITT

I. INTRODUCTION, QUALIFICATIONS, PURPOSE OF TESTIMONY AND RECOMMENDATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Amy Stitt. My business address is 414 Nicollet Mall, Minneapolis, Minnesota, 55401.

Q. BY WHOM ARE YOU EMPLOYED AND WHAT IS YOUR POSITION?

A. I am employed by Xcel Energy Services Inc. ("XES") as a Senior Director in Xcel Energy's Financial Planning Department. 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 utility operating company subsidiaries of Xcel Energy on a coordinated basis.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THE PROCEEDING?

A. I am filing rebuttal testimony on behalf of Public Service.

Q. DID YOU PROVIDE DIRECT TESTIMONY IN THIS PROCEEDING?

A. No.

Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AND QUALIFICATIONS.

A. I am responsible for the financial accounting and reporting of the General Ledger ("GL") and Work Asset Management ("WAM") replacement projects. A description of my qualifications, duties, and responsibilities is included as Attachment A.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. The purpose of my rebuttal testimony is to respond to Office of Consumer Counsel ("OCC") witness Mr. Cory Skluzak's recommendation that the Company not be allowed to recover the costs related to the GL and WAM replacement projects. Mr. Skluzak argues that: the Company's rationale for replacing the existing systems is unconvincing; the Company failed to provide sufficient support for such significant costs; the Company is asking for pre-approval of both electric and gas department costs; and the Company is primarily motivated by the fact that the existing systems are fully amortized. I rebut each of Mr. Skluzak's assertions. I also update the forecasted GL and WAM replacement project costs that were filed in our direct case to incorporate more recent information.

Q. ARE YOU SUPPORTING ANY ATTACHMENTS AS PART OF YOUR REBUTTAL TESTIMONY?

A. Yes. I am sponsoring the following Attachments:

- Attachment AS-1, Current State System Context Diagram;
- Confidential Attachment AS-2, JDE Application Health and Risk Assessment;
- Confidential Attachment AS-3, Passport Application Health and Risk Assessment;
- Confidential Attachment AS-4, Maximo Application Health and Risk Assessment; and
- Attachment AS-5, Enterprise System Selection Scoring Results.

Q. WHAT RECOMMENDATION ARE YOU MAKING IN YOUR TESTIMONY?

A. I recommend that the Commission allow for the costs of the GL and WAM projects to be reflected in our cost of service presented in this case, and reject Mr. Skluzak's proposal to remove the gas department's GL and WAM costs from the HTY and MYP.

Q. WHY DID THE COMPANY NOT INCLUDE MORE DETAILED SUPPORT FOR THE GL AND WAM REPLACEMENT PROJECTS IN ITS DIRECT CASE?

A. The amount of information provided in Mr. Phibbs' Direct Testimony, on pages 18 through 24, describing the need for the GL and WAM replacement projects, is consistent with the level of detailed information we have provided in previous rate cases. The Company believes that the level of information

we provided in our direct case is sufficient to decide the issues related to these projects.

Q. DO YOU AGREE WITH MR. SKLUZAK'S CONCERN THAT THERE SHOULD HAVE BEEN FOREWARNING FROM THE COMPANY, SUCH AS A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY ("CPCN") FILING, BEFORE WE BEGAN THESE INVESTMENTS?

A. This is a legal issue, and if necessary our attorneys will address this issue in our post-hearing Statement of Position. However, I would note that the Company does not believe that a CPCN is required for these types of business systems. Information technology upgrades and replacement investments are necessary to provide electric and gas service and are undertaken in the ordinary course of business. Software is common plant.

II. THE CURRENT GL AND WAM SYSTEMS ARE ANTIQUATED, EXPENSIVE TO MAINTAIN, AND HIGH RISK

Q. WHAT ARE THE GENERAL LEDGER AND WORK ASSET MANAGEMENT SYSTEMS THAT ARE BEING REPLACED?

A. We are replacing Oracle JDE OneWorld XE SP24 ("JDE"); Passport 10.0.5 ("Passport"); and Maximo 5.2 ("Maximo"). JDE is the Company's general ledger system, Maximo is the work and asset management system for Energy Supply, Passport is the work and asset management system for Supply Chain and the remaining business areas.

Q. WHY DID THE COMPANY DECIDE TO REPLACE THESE GL AND WAM SYSTEMS?

A. Based on a thorough risk assessment analysis, the Company identified the need to upgrade or replace three interrelated information technology ("IT") systems to maintain, upgrade or replace the functionality: JDE; Passport; and Maximo. Based on the combined timing, risk, and size of the required investment, we were faced with strategic decisions as to how to address most effectively the inadequacies of our current technology portfolio and how to support our critical business operations.

Q. WHAT ARE THE GENERAL DRIVERS BEHIND THE NEED FOR THE COMPANY'S IT SYSTEM INVESTMENTS?

A. Our need for IT investment is driven by factors such as:

- evolving and higher expectations in business demands;
- increasing physical and cyber security risks;

- the complexity and expense of interface capability for different versions of the systems;
- the age and wear and tear on hardware;
- the adequacy and adaptability of the underlying technology (operating systems, code language, security, etc.) that the versions are built upon; and
- the unavailability of support from vendors, which increases maintenance costs and the risks of extended outages that impact customers and business operations.

Based on our risk assessment, we concluded that each of these factors was contributing to the need to upgrade the three interrelated IT systems: JDE, Passport, and Maximo.

Q. WERE THERE OTHER SYSTEM LEVEL CONCERNS WITH OUR ANTIQUATED GL AND WAM SYSTEMS THAT DROVE THE NEED FOR THE COMPANY'S IT SYSTEM REPLACEMENT INVESTMENTS?

A. Yes. Interoperability and lack of vendor support were key drivers of the determination to invest in a comprehensive Enterprise Resource Planning ("ERP") solution. These two problem areas caused substantial risks for reliability and security. Also, these two factors significantly increased the risk of delays and maintenance costs.

Increasing demands for improved data to meet customer, regulatory, and operational requirements drive the need for a high level of interconnection and interoperability between technology systems. This

interconnection creates dependencies between systems, such that replacement and upgrade strategies must take into account the current and forecasted status of all dependent systems. As an example, the high-level current state system context diagram shown in Attachment AS-1 demonstrates the level of interdependence and interconnectivity of the JDE, Maximo and Passport applications. Because of the complex interdependence of the JDE, Maximo and Passport applications and the functional interconnectivity requirements, maintenance requirements such as software upgrades and security patches were starting to require an extraordinary level of coordination.

Also, with ever-evolving cybersecurity threats, systems being maintained under “unsupported” or “limited support” status from the vendor (such as JDE, Passport and Maximo) create the potential for vulnerabilities to cyber breaches. Once an application is in an unsupported status, the Company is dependent on internal and third-party testing to discover potential gaps and develop solutions to remediate these threats. While our testing is robust, the Company does not have the resources to provide this support at the same level as the software vendors themselves, and the impacts of potential breaches are very difficult to quantify. Vendors provide periodic patches and updates to help address identified vulnerabilities and protect against specific threats as they are discovered across their client base, but vendors do not provide these updates once a software version falls out of support.

Q. HAS THE COMPANY CONSIDERED THE USE OF THIRD PARTY SUPPORT FOR APPLICATIONS NO LONGER SUPPORTED BY THE VENDOR?

A: Yes, the Company actively uses third-party vendors for system support and issue resolution when the installed versions become unsupported. This is the model that has been in use with the systems in question since vendor support for these products was curtailed. But leveraging third-party support increases both costs and the time required to resolve issues and is not sustainable in the long-term.

As a case in point, as we were upgrading the Company to Windows 7, it was discovered that our current version of Passport did not function with Windows 7. This is an issue whose resolution would typically fall under the vendor certification of software at no cost to the Company if the software was still supported by the vendor. The Company contacted Sheffield Scientific, a third-party specialist, to correct the problem. It took over two months to establish a statement of work, identify a resource, onboard the resource, and secure access to the system for what amounted to a couple of days' worth of actual coding work. This process delayed the roll-out of the Windows 7 upgrade for the 3,200 Passport users for about two months. The fix would have been the sole accountability of the vendor had the system been on a supported version.

Q. ARE THERE OTHER ISSUES WITH THE COMPANY'S CURRENT IT APPROACH THAT DROVE THE NEED FOR A COMPREHENSIVE REPLACEMENT PROJECT?

A. Yes. Utilities are asset centric entities, and the ability to manage and to maintain effectively a vast asset base directly affects the Company's ability to provide safe and reliable service, recover quickly from unplanned outage events, efficiently plan work, secure materials, and dispatch labor in a cost-effective manner. The Company has historically pursued a "Best of Breed" strategy for its technology footprint, which led to the selection of the existing, disparate systems to support field operations and power generation facilities, as well as numerous bolt-on systems to support specialized tasks.

While this Best of Breed approach met the needs of our individual operating business areas, it also led to many of the challenges referenced earlier in my testimony. Keeping multiple Best of Breed core systems current on software, hardware, and operating systems creates significant challenges and associated costs. It was becoming more burdensome, expensive and inefficient to balance the timelines of patches and upgrades that are offered in differing cycles, redesign interfaces to adapt to new versions, and recertify software within the Company's unique computing environment. We were looking at *ad hoc* and costly remedies for our unsupported systems. The Best of Breed approach also led to significant difficulty in attaining consistent data and analytics (e.g., "one version of the truth") across the Company for operational, financial, and regulatory reporting, and required significant manual

analysis to discover and correct any discrepancies as they arose. In short, the Best of Breed strategy precluded our reaping the benefits of standardization.

Q. WHAT PROCESS DOES THE COMPANY USE TO ASSESS THE HEALTH OF THE CURRENT APPLICATIONS?

A. The Company's IT support organization, Business Systems, periodically prepares an application risk assessment. This assessment includes a review of system statistics (i.e., number of transactions), architecture, hardware and software, interfacing systems, storage and disaster recovery. We perform annual risk assessments that evaluate the needs of the systems and provide recommendations for mitigating actions where possible to maintain system capabilities.

Q. DID THE COMPANY PERFORM A RISK ASSESSMENT FOR EACH OF THE GL AND WAM APPLICATIONS THAT ARE BEING REPLACED?

A. Yes.

Q. PLEASE DESCRIBE THE RESULTS OF THE RISK ASSESSMENT FOR THE JDE APPLICATION.

A. First, I will explain the function of JDE. Oracle JDE is a system that supports the Company's Finance and Controls functions and maintains the core chart of accounts and general ledger. JDE supports approximately 750 users across the Company and processes approximately 34 million transactions annually. Full support for the current version of JDE in use at the Company expired in December 2013. This support formerly included updates, fixes, security alerts, and the upgrading of scripts. JDE, in particular, is highly connected at the

center of core work functions and requires several complex translation mechanisms to interface with existing Work Asset Management systems. Confidential Attachment AS-2, the risk and health assessment for the JDE application, shows the overall system health as "yellow". Oracle has a "lifetime support" policy in place for this application, and will indefinitely provide what they call "Sustaining Support", which includes support for existing patches and issues, but this support does not include any new updates or certifications with any new software. The inability to update or certify the Company's current version of JDE with new software was a critical determinant in the decision to replace JDE in a coordinated manner with the Work Asset Management systems.

WAM systems require close integration with General Ledger systems to appropriately track and account for work performed. Therefore, the Company decided to assess the WAM systems concurrently with JDE to develop a coordinated strategy on how to meet the needs of customers, the business, and regulators without creating highly customized code, translation mechanisms, or sunk costs.

Q. PLEASE DESCRIBE THE RESULTS OF THE RISK ASSESSMENT FOR THE PASSPORT APPLICATION.

A. First, I will explain the function of Passport. Ventyx Passport version 10.0.5 is currently used to support electric and gas distribution, transmission, and supply chain functions. Passport version 10.0.5 supports approximately 3,200 users and handles approximately 77 million transactions on an annual basis

across all operating companies. Passport version 10.0.5 is a mission critical application for the Company that manages daily work activity such as preventative maintenance, new construction, and outage response among other critical functions.

Confidential Attachment AS-3, the risk and health assessment for the Passport application, shows the overall system health as "green." But the application's server hardware and software is in a "red" status, which puts the Company in a position where any major outage would require specialized third-party support or sub-optimal hardware sourcing, such as buying used parts on eBay.

This creates an unacceptable, heightened risk of an extended outage. The software application environment is on hardware that was discontinued in early 2009. The operating system is an IBM Unix version that is no longer supported by the vendor under standard agreements. The software code is written in COBOL 4.3, which has been out of standard use for over 10 years. Additionally, no single out-of-life component could be upgraded without a full replacement/upgrade of the suite of hardware, software, and operating systems that make up "the system." Concurrently, Ventyx is in the process of re-platforming their code base to Java and Microsoft.NET languages, which tactically means that an upgrade to the current offered version of the software requires installing a completely new system. As demonstrated in Attachment AS-1, Passport functions are integrally linked with the GL and WAM applications.

Q. PLEASE DESCRIBE THE RESULTS OF THE RISK ASSESSMENT FOR THE MAXIMO APPLICATION.

A. Again, I will first explain the function of IBM Maximo. Maximo version 5.2 is currently used to support work activities at the Company's power generation units. Confidential Attachment AS-4, the risk and health assessment for the Maximo application, shows the overall system health as risk level "red." Maximo is preventing a number of underlying technologies from progressing in their capabilities. Maximo has similar functional capabilities as Passport, and its "red" status and concurrent age were key contributing factors to the decision to implement a consolidated ERP. Per the referenced health assessment, Maximo was -- and is still -- in significant need of upgrade. It has multiple single points of failure and unsupported components. Mr. Skluzak mentions in his Answer Testimony on page 66, line 17, that a search of IBM's website indicated that IBM still supports the Maximo Asset Management program; however, he did not have the information specific to the Company's current version. IBM curtailed support for the Company's current version, version 5.2, in September of 2010. Specialized support is provided for very basic user administration, but critical defects and outage support were curtailed.

Q. WHAT DID THE COMPANY CONCLUDE BASED ON THE RISK ASSESSMENTS YOU DESCRIBE ABOVE?

A. The combination of the system factors described above and the similar timing of the various investment needs drove the Company to conduct a thorough

investigation of the options available to bring these core systems to a current and supported state that leverages common practices and standards across business areas and provides better and more effective linkages for mission-critical financial and operational data. We knew that significant investments were required across the suite of applications.

III. THE COMPANY DEVELOPED AN EFFECTIVE AND REASONABLE ENTERPRISE RESOURCE PLANNING SYSTEM REPLACEMENT STRATEGY

Q. WHY DID THE COMPANY DECIDE TO IMPLEMENT A COMMON PLATFORM ENTERPRISE RESOURCE PLANNING TOOL TO REPLACE ITS EXISTING GL AND WAM APPLICATIONS?

A. Given the need to pursue substantial investments to replace, upgrade, or consolidate these three systems and their similar aging and end-of-life status, the Company was faced with deciding on the best strategic approach for the long-term direction of our core technology footprint. It became clear that maintaining a consolidated system instead of multiple systems would be more efficient and effective. Strategically, a consolidated ERP system is easier to implement, replace and upgrade, and is necessary for technical and operational business requirements. Once the strategic approach was determined, we then worked to develop a robust, effective replacement strategy.

To determine the best strategy beyond "Best of Breed," the Company conducted a peer benchmarking exercise and contacted six peer utilities who had faced similar decisions. Our objective was to understand their drivers for system consolidation, the factors they considered in their decision-making process, and their experiences in implementing solutions. Additionally, the Company leveraged research from industry expert consultants, such as Gartner, to further inform our strategic decision.

One key finding in our initial benchmarking with other utilities was confirmation of the potential for operational benefits associated with

leveraging and consolidating new technologies to standardize process, data, and analytics across the Company. Standardized processes enable the development of metrics to better measure productive efficiency across multiple facets of operations, leverage best practices across a broad employee base, and moderate the reliance on regionally specialized experiential learning often referred to as “tribal knowledge”.

Per Ms. Lowenthal’s Direct Testimony[1], the Company is facing significant workforce retirements over the next ten years. The consolidation of core work management systems and associated work execution processes creates an opportunity to manage that transition more effectively by driving a heavier reliance on process execution as opposed to experiential learning. The potential to achieve these benefits is enhanced with the replacement of the core technology platform. Peer interviews and industry expert advice confirmed that measuring, quantifying and translating the benefits into dollars would be exceptionally difficult. Moreover, migration to a consolidated platform represented the first step in being able to formally quantify the associated process-based productivity benefits.

[1] Lowenthal Direct Testimony p. 7, ll. 19-20.

Q. DO YOU AGREE WITH MR. SKLUZAK'S ALLEGATION THAT THE MOTIVATION FOR REPLACING GL AND WAM IS THAT THE SYSTEMS ARE FULLY AMORTIZED?

A. No, I do not, and Mr. Skluzak has not provided any supporting evidence for his assertion. Depreciable life is a proxy for end-of-life, but not a primary contributor to the decision to replace or upgrade a system. The goal of depreciation is to recover the costs of an asset over the period in which it will provide service to customers. However, in some cases a system is stable and secure, its parts are readily available, it meets the requirements of the customer and business, and it is compatible with dependent systems and their lifecycles. Under these conditions, it is preferable to extend the system's life beyond its depreciable accounting life-span to reduce capital expenditures and to prioritize investments needed in other areas of the portfolio. IT assets tend to age much more rapidly than many typical utility plant assets. As I have explained, we believe the existing applications have exhausted their usefulness; therefore, they should be replaced. The amortization status of the IT systems that are being replaced was not a factor in the decision to choose an ERP.

Q. WHAT PROCESS DID THE COMPANY USE TO SELECT A COMMON PLATFORM ENTERPRISE RESOURCE PLANNING TOOL TO REPLACE ITS EXISTING GL AND WAM APPLICATIONS?

A. Based on the Company's research and findings, we explored further if there were consolidated ERP options that would be appropriate fits for the

enterprise operating environment. The Company assembled a project team to determine if an integrated enterprise planning solution would meet business needs. The Enterprise Solution Selection Project was initiated to: 1) determine if there were consolidated ERP solutions that would meet the requirements of all operating areas of the Company's unique operating environment, 2) issue a Request for Information ("RFI") to evaluate the functionality of the primary options and determine if the Company should pursue a change in strategy from a Best of Breed to a single platform ERP approach, 3) issue a Request for Proposal ("RFP") to select a software solution, and 4) identify a system integrator to provide expertise and leadership in ERP implementation.

Q. PLEASE EXPLAIN IN MORE DETAIL THE ENTERPRISE SOLUTION SELECTION PROJECT AND HOW THE VENDOR WAS SELECTED?

A. The project process consisted of the four distinct phases explained below:

- Phase I: An RFI from various vendors, which consisted of information sharing sessions, understanding the capabilities of a new WAM system, and establishing vendor contacts.
- Phase II: An RFP from vendors, including a demonstration of how their systems would handle various business case scenarios provided by the Company, estimated costs to implement the software, and options for rolling out the new software in phases. Four vendors responded to our RFP: IBM, SAP, Oracle and Ventyx. We ultimately considered the following six options:

- Option 1: SAP only
- Option 2: Oracle only
- Option 3: IBM/Maximo (our current work and asset management system for Energy Supply) paired with SAP
- Option 4: IBM/Maximo paired with Oracle
- Option 5: Ventyx/Passport (our current work and asset management system for all business areas except Energy Supply) paired with SAP
- Option 6: Ventyx/Passport paired with Oracle

- Phase III: An evaluation of the RFP's by the most impacted business areas, including Customer Service, Human Resources, Finance, Supply Chain, WAM Energy Supply, and WAM Energy Delivery (Distribution, Transmission, and Nuclear). In addition, we evaluated each vendor based on four technical criteria: integration; mobility; supportability; and technical vision. An evaluation of the responses to our RFP, provided as Confidential Attachment AS-5, shows the scoring results of the six options mentioned above. Each option was scored on a scale of 1 to 3, with 3 being the most favorable score.
- Phase IV: A recommendation to the Enterprise Solution Selection Project executive sponsors that included a deployment road map, cost implications, potential operational benefits once the projects were placed in service, and the estimated organizational implications. The executive sponsors ultimately approved Option 1, SAP only.

IV. BENEFITS OF GL AND WAM REPLACEMENT PROJECT

Q. WHAT ARE SOME OF THE BENEFITS THE COMPANY EXPECTS TO ACHIEVE BY REPLACING GL AND WAM?

A. Utilities are responsible for managing a large number of electric and gas transmission systems and power generation facilities. To manage these assets effectively, a utility must employ a diverse workforce with varying skill sets and experience levels, and have the necessary equipment and tools to manage its workforce and infrastructure effectively and efficiently. Most of the electric and gas utilities in the United States use some form of an ERP to manage these assets effectively and efficiently, which translates directly into safer, more reliable service for customers and an overall lower cost of service.

The benefits we expect to realize from the implementation of an ERP include the following:

- We can gather better asset information. This better information allows us to tailor our maintenance efforts to what is actually needed for a particular asset, thereby improving system reliability. Moreover, with better asset information we can manage aged assets more proactively, thereby allowing costs to be spread more evenly over the life of an asset.
- We can employ a more digital data model that supports the migration from manual, outdated, paper-based records management.

- Our inventory planning can be more efficient, which reduces the storage, security, insurance, handling, and scrap management requirements associated with excess inventory.
- We can automate work crew scheduling processes, resulting in more wrench time in the field.
- We can employ common processes and standards across operations, which mitigates the risks from an aging workforce where institutional knowledge can be lost as employees retire. Standardized training can in some cases reduce experience requirements.
- We can leverage best practices from utility industry peers by replacing three systems with one Enterprise Resource Planning solution, thereby reducing the Company's technology footprint.
- We can integrate operations and financial data, which allows us to identify cost drivers with more transparency and better analyze costs per unit.

Q. WHAT COST SAVINGS DOES THE COMPANY EXPECT TO ACHIEVE AS A RESULT OF THE BENEFITS DESCRIBED ABOVE DURING THE MYP?

A. It is difficult to quantify cost savings. Any and all forecasted savings from the system replacements have been included within each business area's operating assumptions and integrated with existing, continuous

improvement initiatives to develop the area's O&M budgets. The Company's proposed O&M expenses for the 2015, 2016 and 2017 Test Years are based on historical levels of O&M expenses with limited adjustments for known and measurable changes. One reason the Company was able to propose modest increases to O&M expenses in this case is our expectation that we can avoid significant increases in our baseline O&M expenses through 2017. Efficiency improvements attributable to initiatives such as the WAM and GL projects contribute to this expectation. We will continue to assess the savings attributable to the GL and WAM replacement project and incorporate those anticipated savings into future budgets.

V. UPDATED ESTIMATES OF ERP REPLACEMENT PROJECT COSTS

Q. FIRST, IS THE COMPANY ASKING FOR PRE-APPROVAL OF THE ELECTRIC DEPARTMENT'S COSTS FOR THE GL AND WAM PROJECTS?

A. No. OCC witness Mr. Skluzak, on pages 64 through 72 of his Answer Testimony, alleges that by our including information in Mr. Phibbs' Direct Testimony about the electric portion of the costs related to the GL and WAM replacement project in this case, we are effectively asking the Commission for pre-approval of both the electric and gas departments' total costs.

Mr. Skluzak's interpretation is incorrect. The Company provided the total cost of the ERP project for informational purposes only. The ERP costs proposed for inclusion in the HTY and MYP test years are limited to gas department costs. It should be noted that because the GL and WAM projects are shared assets that will be implemented across all Operating Companies through XES, reference materials and supporting attachments will frequently include the total, unallocated operating company costs and risks of these assets.

Company witness Ms. Alice Jackson addresses Mr. Skluzak's and Ms. Cindy Schonhaut's allegations that the Company is attempting to obtain pre-approval of, and the establishment of a presumption of prudence for, the reasonableness of the Company's decision to undertake these (and other) capital projects.

Q. WHAT ESTIMATED CAPITAL ADDITIONS FOR THE GL AND WAM REPLACEMENTS WERE INCLUDED IN THE ORIGINAL COST OF SERVICE?

A. The Company estimated GL replacement capital additions of $22 million for total Public Service, of which $5.9 million was assigned to the gas department.

The Company estimated WAM replacement capital additions of $78.2 million for total Public Service, of which $21.5 million was assigned to the gas department.

Q. WHAT ARE THE CURRENT COST ESTIMATES FOR THE GL AND WAM REPLACEMENT PROJECTS?

A. The current estimated Capital Additions for the GL and WAM replacements are listed in the table below:

Table AS-R-1
GL & WAM Replacement Project Capital Additions
Public Service – Gas Utility

(dollars in millions)

Cost Type	2015	2016	2017	Total
GL Replacement	$7.6	$0.6		$8.2
WAM Replacement		$2.6	$34.5	$37.1
Total PSCo Gas Utility	**$7.6**	**$3.2**	**$34.5**	**$45.3**

Q. WHY HAVE THE CAPITAL ADDITIONS ALLOCATED TO THE PUBLIC SERVICE GAS DEPARTMENT INCREASED FROM $27.4 MILLION TO $45.3 MILLION?

A. There are six key phases in a technology project: 1) blueprint (architectural design); 2) design (detailed design and schematics); 3) build (construction); 4) testing; 5) training and deployment; and 6) sustaining and improving the systems and associated processes.

Each phase in a project of this nature has corresponding risk allowances or contingencies for inherent uncertainties associated with the project estimates. The estimates are refined as each phase is completed and more information becomes available. The combined estimate of $27.4 million was developed at the end of phase 2 (design) for GL (also known as the "budget authorization" phase), and the concept or pre-blueprint phase for WAM. Cost estimates at these stages of project development are subject to significant contingencies or uncertainties. But we did not include a corresponding contingency in our cost estimate at that time. As explained below, as we reached latter stages of project development our cost estimates increased.

Q. ARE THERE ANY INDUSTRY GUIDELINES FOR ESTABLISHING CONTINGENCY AMOUNTS FOR CAPITAL PROJECT ESTIMATES?

A. Yes. The Association for the Advancement of Cost Engineering ("AACE") is the leading professional society for cost estimators, cost engineers, schedulers, project managers, and project control specialists. The AACE

issues Recommended Practices ("RPs"), which are a series of technical documents containing reference information that has been subjected to a rigorous review processes and recommended for use by the AACE Technical Board. AACE International classifies project estimates based on the level of Project Definition and Technology Status.

Project Contingency is defined as the degree of project definition available at the time the estimates are developed. This type of contingency covers expected omissions and unforeseen costs caused by a lack of complete engineering. Project contingency compensates for the inherent inaccuracy of cost estimates at each phase of the project.

Process Contingency is defined as the degree of uncertainty caused by use of new technology. It is used in an effort to quantify uncertainty in performance because of limited technical data. For those areas with greater risk, the process is designed to compensate for the inherently greater inaccuracy associated with the cost elements.

The AACE recommends combining project and process contingencies for capital project estimates. Major changes and upgrades to enterprise IT systems, such as the GL and WAM projects, are some of the most complex and unpredictable types of projects. As such, these systems deserve the highest degree of contingency. This is particularly true during the early stages of the project, prior to when requirements are fully understood and vetted, and prior to when intra-system interfaces are fully understood and developed.

Q. PLEASE SUMMARIZE THESE GUIDELINES.

A. The level of project definition determines the estimate class and sets the expected accuracy range for each class, and the standard for project contingency. The more defined the project, the higher the confidence level in that estimate. The programmatic or technical uniqueness and complexity of the project determines the process contingency, which remains the same throughout the project. See Tables AS-R-2 and AS-R-3 below for the AACE Standards.

Table AS-R-2

AACE Standards for Project Contingency[2]

Design Stage	Level of Project Definition	AACE Estimate Class	Project Contingency
Concept Screening	**0-2**	**5**	**50%**
Feasibility Study	**1-15**	**4**	**40%**
Budget Authorization	**10-40**	**3**	**30%**
Project Control	**30-70**	**2**	**15%**
Bid Check	**50-100**	**1**	**5%**

[2] AACE, Quality Guidelines for Energy System Studies, February 24, 2004, pp. 30-31.

Table AS-R-3

AACE Standards for Process Contingency[3]

Technology Status	Process Contingency
New technology, little or no test data	**40%+**
New technology, protype test data	**20-35%**
Modifications to commercial technology	**5-20%**
Commercial technology	**0-5%**

Q. BASED ON THESE STANDARDS, WHAT CONTINGENCY RANGES WOULD HAVE APPLIED TO THE GL COST ESTIMATES PROVIDED IN THE COMPANY'S DIRECT CASE?

A. The GL project had just completed the design phase, and the level of project definition was a "Class 3." This status correlates to a 30 percent project contingency and 5-20 percent process contingency, or a total recommended contingency of 35-50 percent.

[3] AACE, Quality Guidelines for Energy System Studies, February 24, 2004, pp. 30-31.

Q. PLEASE EXPLAIN WHY THE ESTIMATED CAPITAL COSTS FOR THE GL PROJECT ARE NOW HIGHER THAN WHEN THE COMPANY PREPARED ITS DIRECT CASE?

A. The increase in GL project capital additions costs from $5.9 to $8.2 million reflected in Table AS-R-1 are due to having more updated information from the build phase of the project; requirements are now more fully understood and developed. While SAP is a widely used commercial technology, the completion of the build phase is critical to refine the legacy application remediation costs -- as the nature, extent and sophistication of the existing infrastructure, and the number of users and interfaces, varies widely among companies. We now know there are 24 legacy applications that have to be remediated for the GL phase, and we now have signed contracts to do this remediation work through project completion. As explained above, the GL project cost estimate for the direct case was prepared during the design phase, which had more cost uncertainty at this stage of the project (+/- 35 to 50 percent project and process contingency). None of this uncertainty or contingency was included in the estimate. Now that the build phase is completed, we have a more refined project cost estimate.

Q. WERE THE GL COST ESTIMATES THE COMPANY PROVIDED IN ITS DIRECT CASE REASONABLE BASED ON THESE UNCERTAINTIES?

A. Yes. It has not been our practice to included contingencies in our IT projects, as we believe this approach “incentivizes” project teams to complete the projects at the lowest possible cost. Cost increases are

managed through our existing governance processes on capital projects as referenced in Mr. Phibbs' Direct Testimony. However, the Company believes there is value in balancing this incentive with the risk of cost increases that are reflected in the AACE standards for large IT projects that span multiple years. Now, according to AACE standards, we have included contingencies in our rebuttal case estimates.

Q. ARE YOU NOW INCLUDING THE RECOMMENDED STANDARD CONTINGENCY FOR THE GL REPLACEMENT IN THE MYP COST OF SERVICE?

A. Yes. As there is still some risk at this stage, we have included a 12 percent contingency, five percent for project contingency and seven percent for process contingency, which is on the low end of the AACE standard of 10-25 percent.

Q. DO YOU EXPECT FURTHER SIGNIFICANT INCREASES IN THE GL CAPITAL REPLACEMENT COSTS?

A. At this stage of the project, we have signed contracts with the third-party vendors providing support for the project through March 2016, which is the end of the three-month post go-live hyper support period. The go-live date for GL replacement is December 31, 2015. If our go-live date is pushed back, there would be a significant increase in the estimate, which we have not factored into the contingency. We did not factor this risk into the contingency because we believe this is highly unlikely.

Q. BASED ON THE AACE STANDARDS WHAT CONTINGENCY RANGES WOULD HAVE APPLIED TO THE WAM COST ESTIMATE PROVIDED IN THE COMPANY'S DIRECT CASE?

A. The WAM estimate was developed before the blueprint phase. The level of project definition was still in the concept screening or "Class 5" stage, which correlates to a 50 percent project and 5-20 percent process contingency, or a total recommended contingency of 55-70 percent.

Q. PLEASE EXPLAIN WHY THE ESTIMATED CAPITAL COSTS FOR THE WAM PROJECT ARE NOW HIGHER THAN WHEN THE COMPANY PREPARED ITS DIRECT CASE?

A. We have completed the blueprint phase and now have a higher level of project definition. We have signed vendor contracts for the next two phases of the project, design and build, and we have purchased most of the needed hardware and software. We now know there are 50+ legacy applications that have to be remediated for the WAM phase. We have determined our deployment strategy, which identifies the sequence in which employees will begin using SAP and determines the length of the project. All of these updates, and the inclusion of a contingency appropriate for this phase, are driving the increase in WAM project capital additions costs from $21.5 to $37.1 million -- as reflected in Table AS-R-1.

Q. WERE THE WAM COST ESTIMATES THE COMPANY PROVIDED IN ITS DIRECT CASE REASONABLE BASED ON THESE UNCERTAINTIES?

A. Yes, for the same reasons explained above for the GL project.

Q. ARE YOU NOW INCLUDING THE STANDARD AACE CONTINGENCY FOR WAM IN THE MYP COST OF SERVICE?

A. No, we are choosing to use a smaller contingency estimate. As there is still a high level of inherent risk at this stage, we have only included a 33 percent contingency. This is well below the recommended AACE standard of 45-60 percent. The Company is using a lower contingency of 33 percent because we performed a detailed analysis of legacy remediation costs during the blueprint phase, which has been reflected in the current cost estimate.

Q. DO YOU EXPECT FURTHER SIGNIFICANT INCREASES IN THE WAM CAPITAL REPLACEMENT COSTS?

A. Yes, that is possible. The project is still in the early stages, where there is a moderate level of uncertainty and risk. The WAM implementation is much broader in scope than the GL, as it impacts many more employees, requires significantly more testing and training, and requires a phased deployment strategy. At this stage of the project, we have signed contracts. We have also updated internal resource requirements through March 2016 for work to be completed on the design and build phases of the project. We will further refine our costs estimates in March 2016 as we prepare to enter the testing and deployment phases, and will update our cost estimate and contingency accordingly.

Q. WHAT CONTINGENCIES ARE THE COMPANY INCLUDING IN REBUTTAL TESTIMONY FOR THE GL AND WAM ESTIMATED CAPITAL ADDITIONS?

A. There is a contingency of approximately $10 million included in the $45.3 million rebuttal cost estimate for the GL and WAM projects. This $10 million conservatively accounts for risk allowances of +/- 12 percent and 33 percent, respectively, for inherent uncertainties associated with the current phases of these projects. The Company has included the low end of the 10-25 percent range recommended for the GL project and has not included the full range of project and process contingency recommended for WAM of 45-60 percent as explained above.

Q. ARE THE COST INCREASES ASSOCIATED WITH THE GL AND WAM PROJECTS REASONABLE IN THE CONTEXT OF THE AACE PROJECT AND PROCESS CONTINGENCY GUIDELINES?

A. Yes. The AACE project and process contingency guidelines -- to account for the inherent risks at the projects' phase of project development at the time the direct case was filed; -- were 30 percent for the GL project risk, 50 percent for the WAM project risk, and 5-20 percent for both the GL and WAM process risk. The total risk for WAM and GL was then 51-66 percent. The updated cost estimates for the GL and WAM projects are approximately 65 percent higher than what was filed in our direct case, which is within the contingency range guidelines.

Q. WHAT IS THE CORRESPONDING CHANGE IN THE REVENUE REQUIREMENT FOR THE PROJECTS FROM WHAT WAS FILED IN DIRECT TESTIMONY?

A. As calculated in Ms. Deborah Blair's Rebuttal Testimony, the impact of the updated cost estimates on the 2015, 2016 and 2017 test-year revenue requirements are shown in Table AS-R-4 below:

Table AS-R-4

GL & WAM Replacement Project Revenue Requirement
Public Service – Gas Utility
Increase (Decrease) by Year

(dollars in thousands)

Project	2015	2016	2017
GL	($12.7)	$219.5	$190.1
WAM	($157.4)	$10.4	$798.7
Total PSCo Gas Utility	**($170.1)**	**$229.9**	**$988.8**

Q. WERE THE TOTAL O&M COST ESTIMATES THAT MR. SKLUZAK INCLUDED IN HIS ANSWER TESTIMONY CORRECT?

A. No. The total O&M amounts for the gas department that Mr. Skluzak listed, $2.7 million, are inaccurate. The correct amount provided in our Direct case in the cost of service was $2.3 million. Also, his estimate of the amount allocated to the GL project is inaccurate. In 2014, 2015 and Q1 2016, approximately 40 percent of the O&M costs are for the GL project, with the remaining 60 percent charged to the WAM project. Beginning in April 2016, 100 percent of the O&M costs will be charged to the WAM project.

Q. HAVE THE O&M COST ESTIMATES BEEN UPDATED SINCE THE ORIGINAL FILING DATE?

A. Yes. Since the O&M expenses are in support of the capital additions, the O&M expenses have also increased. The current estimate of $3.0 million, is derived in Table AS-R-5 below:

Table AS-R-5

GL & WAM Replacement Project O&M Expenses
Public Service – Gas Utility

(dollars in thousands)

Cost Type	2014	2015	2016	2017	Total
Labor	$52.3	$90.3	$75.7	$78.0	$296.3
ContractLabor/Consulting	$398.3	$762.5	$867.8	$576.3	$2,604.8
Legal/Professional Services	$8.7	$2.4	$0	0	$11.1
Employee Expenses/Other	$12.2	$22.1	$22.7	$23.1	$80.1
Total PSCo Gas Utility	**$471.5**	**$877.3**	**$966.2**	**$677.4**	**$2,992.3**

Q. ARE THESE UPDATED O&M COSTS INCLUDED IN THE REVISED REVENUE REQUIREMENT CHANGES EXPLAINED ABOVE?

A. No, we did not include them in the updated costs of service, as the changes were considered immaterial.

Q. DO YOU AGREE WITH THE OCC'S RECOMMENDATION THAT THE 2014 O&M COSTS FOR THE GL AND WAM REPLACEMENT PROJECTS BE ELIMINATED FROM THE 2014 HISTORICAL TEST YEAR (HTY)?

A. No. I do not. Mr. Skluzak recommends that the GL and WAM project costs be excluded from both the MYP and HTY. I recommend that the Commission approve the Company's gas department's GL and WAM costs included in the MYP. However, if the Commission rejects the MYP, the GL and WAM replacement O&M expenses of approximately $471,500 in the 2014 HTY are reasonable and prudent costs that have already been incurred, as I have explained in my previous testimony. I believe the Company should be permitted to recover these O&M costs.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

Attachment A

Statement of Qualifications

Amy Stitt

I received my Bachelor of Business Administration degree in Accounting in 1998 from St. Edward's University in Austin, Texas, and have an Inactive CPA certificate from the State of Minnesota.

My current position with Xcel Energy Services Inc. ("XES") is Senior Finance Director responsible for the accounting and reporting for the Enterprise Resource Planning project.

I have been employed by XES since November 2002, first as Principal Technical Accounting Analyst, then as Manager, Corporate Accounting, then as Director, Financial Process and Controls, then as Director, Financial Performance and Reporting, then as Managing Director, Financial Performance and Planning.

I worked for Land O'Lakes Inc., KPMG, DTM Corporation and High End Systems in various accounting roles before coming to work at XES.

I have previously submitted testimony for Public Service Company of Colorado in its electric rate cases in Docket No. 08S-520E, and Docket No. 09AL-299E and its gas rate cases in Docket No. 10AL-963G and Proceeding No. 12AL-1268G.

Xcel Energy — DRAFT — EPM Systems and Process Overview

Dates
- **ESD** Estimated Start Date
- **EISD** Estimated In-Service Date
- **ECD** Estimated Completion Date
- **AISD** Actual In-Service Date
- **ACD** Actual Completion Date

Key data flows:
- RED=Parent
- BLUE=Child
- GREEN=Forecast
- PURPLE=Xcel Labor

Capital Expenditures and the WBS:
- Materials or Goods
- Services or Labor (Xcel Employee labor+benefits, Contract labor)
- Indirects

Key Object Accounts (F0911.GLOBJ):
- CWIP (730000-733998, 733999=CWIP clearing) *FERC install=010700*
- RWIP (740000-743998, 743999=RWIP clearing) *FERC removal=010800*
- O&M (700000-729999)
- Deferred (748000-748998, 748999=Deferred clearing)
- AFUDC (733500=Debt, 733600=Equity)
- Overheads (733200=CWIP, 743200=RWIP)

Other Information:
- Capital projects are **budgeted** at the **parent** project level
- **Actuals** are posted to the **child**ren
- Installation (CWIP) and Removal (RWIP) can be tracked using the same parent work order

Corporate A/P and Non Energy Supply Work Management, Purchasing, Inventory

Key: *Passport WO# is the Subledger#*

*A **Standard PO** can have partial payments (not releases) A **Blanket PO** can have recurring **releases**, which are child PO's. A release PO belongs to a blanket PO; you can't have a release without a blanket.*

Passport is the Corporate Accounts Payable system and contains Purchase Orders (material), Contracts (services), work orders, vendor invoices.

Vendor — Enter Time — Outside contractor — Enter Time — Labor (hours) — Xcel Employee (Not ES) — Enter Time — Labor (hours)

1 PO — Create PO & send to vendor

2 Receive product or service & enter invoice

Ship product or perform service & send invoice — Product — Service — invoice

3 Pay invoice — payment

Vendor info

Task# *(00-99)*

Send vendor data to Maximo

Receive A/P data from Maximo

Receive time from IQN

Accounts payable Transaction *And all charges*

Labor (hours) Weekly feed

WebMethods (WBI, MQ Series, EAI) to distribute next WO#

GetNextWO Number 1xxxxxxx

Facilities, Transmission, or Distribution may request project number from Powerplant, not CBS.

Nuclear Passport *(future)* *Material, PO*

Passport Project *every minute*

Request Child# — Receive Child#

Request Parent# — Receive Parent#

Passport Staging table

HR, Payroll, Time, Expenses

HRIS and Time Tracking

Clarity *Time entry by IBM*

IQN *Time entry*

PTRS *Time entry*

Concur *employee expenses*

batch

Peoplesoft department number contains employees and their labor costs.

Realtime CICS

Time data sent to JDE on last working day of month

Labor (hours)

Peoplesoft HR, Payroll — pay

Time *Labor costing and distribution*

REQ# 14.7 ACR# 1202564

GL Time is linked to JDE at a higher level because we can't show costs by employee.

***GL Time** contains: Maximo WO# in Cost Object 1 Subledger and Cost Object 1*

BO — Time reports

Labor at Maximo work order level, not detail level *batch file monthly*

ES Account String Child (not parent) WO#

Maximo

Maximo contains Work orders, Purchase Orders/Contracts, Vendors (from Passport)

No parent numbers in Maximo. Only Child numbers in Maximo. Contracts put "M" in front of PO#

Key: *Maximo WO#*

Receive vendor data from Passport

Send A/P data to Passport

Realtime interface (via WebMethods): *Upon action, transfer Maximo Account String+data to ES JDE.*

Actions: A/P Data

Receipt: upon save
Material: upon save
Labor: upon approval

Vendor Data

Enter Time — Xcel Employee (ES) — Labor (hours)

Approve

Labor hours Realtime TCP/IP

Material use tax? (MATUSETRANS)
Material Receipts (MATRECTRANS)
Service Receipts (SERVRECTRANS)
Invoice Receipts (INVOICETRANS)
Invoice Transactions (INVTRANS)
Labor Transactions (LABTRANS)

Save — Staging table — Maximo Database

Assign *object account*

Chart of Accounts

Unix script (every 2 secs)

5 *Perform work & collect Actuals*

Energy Supply Work Management, Purchasing, Inventory

FERC Uniform System of Accounts

2 Budget & Forecast

Create and validate Parent

Key: *Parent ID, Budget Combo Number*

CBS (Budget and Forecast) — ALS

CBS contains 6 years of forecast data, current year YTD actuals and remaining months forecast.

*Typically a few minutes from **REV** to **VAL**. Once in **VAL** status, can create Child in Powerplant.*

Need to set up combo in CBS manually because CBS validates the combo against corporate JDE

1 UNA ES Create Parent — Get project ID

2 REV ES Submit Parent for validation — VAL

ES Financial Analyst (or Project Lead)

Automatically Email project lead if errors from Powerplant

2c REJ ES fix errors

2a ES enter data into Unifier

2b ES create budget combos *Any time after parent created*

3 SUB CAA validate Parent and send to Powerplant *Many (e.g. 20) times per day*

Send to Powerplant — CAA

Parent# ESD EISD ECD

Create (real time) *Update (batch 7 pm daily)*

CBS Staging table

Batch Monitor — Validate parent — Errors? — No — Convert Powerplant to JDE data and send to JDE — Validated parent

Open

Corp Fin Import forecast *Update*

ES Import forecast *Proof*

Errors? — yes — no

Project data — Budget Combo data — Fixed forecast — Unifier forecast — CBS forecast

Update dates — Updated dates

New Staging table — New Process — Errors? — no — yes

When dates are updated in Powerplant, they get pushed to JDE and then CBS

Actuals (rolled to Parent) From JDE to CBS

3 Fixed Assets

Create Child(ren)

Key: *Parent ID or Child ID*

Powerplant (Fixed Asset Accounting – Subledger)

***Powerplant** is the system of record for corporate assets.*
***Capital Asset Accounting (CAA)** performs the Capitalization Policy Test to ensure a project meets criteria for capitalization and calculates AFUDC.*
***Powerplant calculates:** plant additions, book and tax depreciation, equity and debt AFUDC, deferred income tax expense.*

1a ES complete **Preliminary Unit Estimate** — 1b Initiated — ES Create ES Financial (or fix) Child Analyst (or Project Lead)

2 CAA Validate Child — Errors? — Open — No — CAA Set status to Open and send to JDE — *Typically a few minutes for CAA to validate child*

Yes *(status remains 'Initiated')* — CAA

complete — *Later, upon receipt of **In Service Unit Estimate**, CAA change status of Child to 'Complete'*

Error table — Yes

ESD, EISD, ECD — *To JDE Via EAI every 10 minutes* — JDE Staging table

Passport Details Data feed

Pending — *Create child in Powerplant automatically creates child in JDE with estimated dates and status='pending'.*

Active/ Approved — *Later, when child is validated by CAA in Powerplant, status changes to 'Active/Approved'.*

Next: create Maximo Account Strings (after 10 am, 1 pm, 4 pm, 10 pm)

Active/ Approved — Send 'VAL' to CBS — ESD, EISD, ECD

Upon arrival of Parent from Powerplant (status was automatically set to 'Active/ Approved'), send 'VAL' status to CBS.

1 ES Create Journal Entries / accruals as needed — ES Financial Analyst (or Project Lead)

Send update to CBS

WO Control — TBD?

REQ# 14.6 ACR# 1202567

G/L

Corporate JDE (General Ledger)

Summarized Passport Transactions, (PO, WO, etc) Payment Details

***JDE** contains all actuals transactions and Journal Entries which are entered directly into JDE*

Employee Name + Title

Staging tables

Cost Object 1 (F0911T.GLABR1) contains Maximo WO#

Good transactions *nightly*

Doc Type (GLDCT non-labor):
JE=Journal Entry (Manual adjustments, accruals)
PP=Prior Period Journal Entry
OB=SC Misc Expense Allocations
XB=ES-JDE (Maximo) Materials
XD=Time
XE=Passport A/P
XH=FleetAnywhere
XI=Powerplant (AFUDC, overhead)
XK=Passport Materials
XL=Concur (Xcel employee expenses)
XU=Nuclear Passport A/P (future)
XV=Nuclear Passport Materials (future)

4 Translate account string

Create Maximo Account Strings

ES JDE

"**Bolt-On**" connector to JDE P5548201 — 1 *Create new ES Account Strings (manual batch process)*

Child Data sent from JDE to ESJDE 4x per day at 10 am, 1 pm, 4 pm, 10 pm. After these times, ES Financial Analyst creates Maximo Account strings using the Bolt-On.

ES Financial Analyst (or Project Lead) — 2 *Email project lead to start charging in Maximo*

PO and WO info only, not labor

Maximo Account string + data

Fix errors — Error report

3-Transfer (R550911i73) *Started by #2* — 3 — Posted transactions

2-Validation (R550911i72) *Started by #1 or manual* — 2 — Detail table

1-Translation (R550911i71) *started manually* — 1 — Staging table

Concatenate JDE Description

Unvalidated account — Validated account

Validate account — Send COA to ES JDE

Nightly load

ES to JDE codes

Maximo Details Data feed

1. Batch process: nightly unix script
2. Posting process (R09801): scheduled job every morning 7:30 am
3. Transfer non-error transactions to Corp JDE (nightly)

Translations for Capital:
Capital: ESBU (CO4) = Corp BU
ES Obj + Cost Category (CO2) = Corp Obj (O&M: ESBU (CO4) + FERC (CO3) = Corp BU)
Cost Categories:
PC = Project Capital (CWIP)-most common
PR = Project Removal (RWIP)-most common
OC = Overhaul Capital (CWIP)-rare
OR = Overhaul Removal Capital (RWIP)-rare
PY=CWIP & RWIP-rare
All other codes are typically O&M which is not in current scope.

Corporate Financial Systems

1 Initiate Ideas and projects

Skire Unifier

Budget Combo data — ES Fix forecast — **CBS Interface** — **Powerplant Interface** — Fixed dates — ESD EISD ECD — ES Fix dates

Unifier forecast — ES update dates to Powerplant first, then forecast to CBS. *Because dates can affect forecast. For example, if estimated completion date moves up, can't forecast beyond this new date.*

6 *Update Dates & Forecasts*

Update Forecast *On demand* — REQ# 14.5, 14.5.1 ACR# 1368994

6a **Update Dates** *On demand* — *As-built (future)* — ESD, EISD,ECD *As-built (future)*

6b

REQ# 14.8, 14.9, 14.10

Data Warehouse Interface

Receive Actuals — **Create Estimate** — Estimates

E&C PPM Tool User

7 *Report results* — *Unifier uses Crystal and Xcelsius for reporting*

Crystal, Xcelsius *Run reports* — Reports

REQ# 14.12 ACR# (n/a)

Actuals to Unifier Via Web Service

PPM Tool

Scope TBD

LDAP Interface — **MS-Outlook Interface** — **Document Interface**

***Documentum** for plant-related document management, **Sharepoint** for collaboration and document management **Projectwise** for drawings*

Primavera Interface *(included)*

Project & Portfolio Management

Data Warehouse — Skire Data

CBS Data — **Powerplant Data** — **Passport Data** (REQ# 14.2, 14.3 ACR# 1202569) — **Peoplesoft Data** — **JDE Data** — **GL Time Data**

report — **Compare Forecast** — *As-built (future)*

report — **Compare Dates** (REQ# 14.4 ACR# 1196519) — *Feedback from Powerplant to ensure dates in Unifier match Powerplant. Ref REQ 14.4*

Retirement unit data

JDE Transactions (from Maximo, Passport)

Actuals, Retirement units

Provide actuals & retirement unit data

report — **Compare actuals to estimates**

REQ# 14.1 ACR# (n/a) — PMP universe

REQ# 14.11 ACR# (n/a) — **Business Objects** *Run reports*

Total Cost Report (exists) — SOX Compliance Report (new) — Estimates to Actuals Report (new)

Reporting & Analytics

Accounting String Hierarchy for ES:
JDE Parent Project Number (G/L string)
Subledger (a.k.a. "JDE Child Work Order")
Maximo Work Order

REQ# 14.2 ACR# 1196521 — **Maximo Data**

JD Edwards Account String (a.k.a. Corporate Account String) – 3 Segments:
[JDE Business Unit] (Always Required)
[JDE Object Account] (Always Required)
[Subsidiary] (often blank or '000')
Subledger (when necessary; not considered part of account number)

Capital uses subledger number
O&M has no subledger number
"From" or "providing" or "performing" department
"To" or "receiving" department. The "receiving" department should always be the same as the "providing" department in Corp JDE for Energy Supply.

ESBU (a.k.a. "Financial center") translation only occurs if O&M (subledger is 05xxxxxx). If Capital, (subledger is 1xxxxxxx), then the non-labor performing department maps directly to the Corp JDE BU.

BU.ObjAcct.Subsidiary Subledger

JDE Account String - 3-segments:

230290.730400.000.W.10899135

Non-unitized Property

In-Service Date:
- When the commercial operation begins, such as when the line is energized or main pressurized. (CBI p. 20)
- The asset is in use or producing revenue – move the constructed asset from CWIP to Plant in-service
- AFUDC stops
- Book Depreciation begins
- Start testing
- Turn over construction project from construction manager to operations manager
- Estimated in-service date for forecasting and budgeting

Per FERC: Not to exceed 90 days 120 days (Nuclear)

Completion Date:
- After the In-Service Date (can't be earlier than in-service date)
- All costs are recognized to a [JDE Parent] work order
- "closing a work order"
- Project is done
- Ready for unitization
- Auto-unitizable assets for Distribution
- Manual unitizable assets for ES
- Review final As-Built

Per Xcel 1 day to 1 year Typically 6 months

Unitized Property

"Unitize" Date:
- As-Built form
- Turn Corp JDE Child WO into an asset
-

A **project** is defined as a **"funding parent", "funding work order" or "parent work order".** Projects are work orders that generally have one or more "child work orders" that roll up into the project. *(REF: CBS p. 6)*

Maximo Account String (a.k.a. ES Account String) - 13-segments:

230190.701500.000.W.10899135.A.AAA.P.PC.E.010800.S.230290

#	Maximo	ESJDE	JDE
13	Performing Department *(non labor)*	?	Business Unit (Cost Object 4)
12	Convenience Pmt	Cost Type 4	CT4 not used (F1620.CTABT1)
11	FERC Account (WOEQ9)	Cost Object 3	FERC Account
10	Utility Type	Cost Type 3	CT3 not used (F1620.CTABT1)
9	Cost Category (WOEQ8)	Cost Object 2	CO2 not used
8	Budget Category (WOEQ7)	Cost Type 2	CT2 not used (F1620.CTABT1)
7	Activity	Cost Object 1	CO1=Maximo/Passport WO#
6	Activity Type	Cost Type 1='A'	Cost Type 1='E' (F1620.CTAB1)
5	JDE Work Order (WOEQ6)	?	Child Work Order
4	JDE WO type	WO Type?	WO Type?
3	Subsidiary	Subsidiary?	Subsidiary?
2	Resource	Object Account?	Object Account
1	Financial Center (WOEQ5)	?	Business Unit

O&M

CONFIDENTIAL ATTACHMENT NO. AS-2

HAS BEEN FILED UNDER SEAL WITH THE COLORADO PUBLIC UTILITIES COMMISSION

CONFIDENTIAL ATTACHMENT NO. AS-3

HAS BEEN FILED UNDER SEAL WITH THE COLORADO PUBLIC UTILITIES COMMISSION

CONFIDENTIAL ATTACHMENT NO. AS-4

HAS BEEN FILED UNDER SEAL WITH THE COLORADO PUBLIC UTILITIES COMMISSION

Enterprise System Selection Results

Implementation Options	Customer	Human Resources	Finance	Supply Chain	WAM Energy Supply	WAM Energy Delivery
1. SAP only	2	3	3	3	3	3
2. Oracle only	2	2	3	3	1	2
3. SAP & Maximo	2	2	2	3	3	3
4. Oracle & Maximo	2	2	2	3	3	3
5. SAP & Passport	2	2	2	1	1	1
6. Oracle & Passport	2	2	2	1	1	1