

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
Orange and Rockland Utilities, Inc.
Cases 18-E-0067 and 18-G-0068
May 2018

Prepared Exhibits
[REDACTED] of:

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Supervisor, Utility Accounting
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Office of Accounting, Audits &
Finance
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

Cases 18-E-0067 & 18-G-0068

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Cases 18-E-0067 & 18-G-0068

Relied Upon Orange & Rockland Responses to Information
Requests

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Company Response to Interrogatory:	Exhibit AAM-1 Page Number
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Exhibit __ (AAM-1)

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Exhibit __ (AAM-1)

Company Name: Orange and Rockland Utilities Inc
Case Description: Orange and Rockland Utilities, Inc. Electric & Gas Rate Case
Case: 18-E-0067; 18-G-0068

Response to DPS Interrogatories – Set DPS-4
Date of Response: 2/22/2018
Responding Witness: Accounting Panel

Question No. : 264

Subject: Business Cost Optimization

1. Provide an explanation of the Company's Business Cost Optimization program.
2. Provide all internal documentation, presentations and other communication regarding this program.
3. Has the Company included any savings in the rate year as a result of this program? If so, show where in the filing these savings are reflected and provide all workpapers and calculations supporting the savings. If not, explain why not.
4. Provide a list of initiatives identified in 2017 that are being pursued in this program. For each initiative, provide the following information:
 - a. Timeframe for design;
 - b. Timeframe for implementation;
 - c. Whether this initiative relates to O&R, Con Edison or both;
 - d. The cost to achieve and potential savings of the initiative.

Response

1. Business Cost Optimization (or "BCO") is the name the Company has given to a program that enhances its existing cost optimization efforts. While not new, this program's focus is on a review of business processes to help identify a potential pipeline of O&M and capital cost savings opportunities. This effort will assist the Company in providing a cost-effective level of service to its customers without compromising public or employee safety, adversely impacting legal or compliance requirements, or jeopardizing the Company's significant record of reliability.
2. Please see the attached documents. The savings objectives of the various initiatives described in the attached documents are aspirational. The Company cannot currently forecast which initiatives will proceed, the savings associated with the individual initiatives that do proceed, or the schedule for achieving such savings.
3. The Company has not included any specific level of savings, beyond the customary one percent productivity, in the rate year (*i.e.*, calendar year 2019) as a result of the BCO initiative.

4. Please see the attached documents. The Company would note that the initiatives described in the attached documents are currently at a preliminary, high level stage of development.

FAQs (1 of 2)

Question	Response
<p>What is the aim of the business cost optimization project (BCO)?</p>	<ul style="list-style-type: none"> We're looking for ways to reduce our operations, maintenance, and capital costs throughout every department within Con Edison and O&R. Why? It's all about our customers. They expect us to provide world-class, reliable service at a reasonable rate. We need to do a better job of keeping customers' bills as low as possible. The first thing to do is to look within to see where we can do things smarter and more efficiently, and where we can stop doing things that we don't need to do anymore. All of these savings will end up benefiting the customer. We've started by taking a broad look at our business and identifying places where there are opportunities for improvement. A deeper dive will identify specific efficiencies and ways of working that reduce cost.
<p>Why are we doing this?</p>	<ul style="list-style-type: none"> Cost is a key component to providing a positive customer experience. We must continue to be proactive in the ways that we are monitoring and controlling our costs. Customers will not tolerate an ever-increasing energy bill.
<p>Should we anticipate staff reductions?</p>	<ul style="list-style-type: none"> Our plan is to continue to manage employee levels through attrition, retraining, and reassignment.
<p>Will we continue to hire at historical rates?</p>	<ul style="list-style-type: none"> We want to continue to manage employee levels through attrition, retraining and reassignment. In order to do so, we have to be more prudent and strategic in our approach to hiring. We will continue to hire, but at a slower pace. In recent years, we have grown our workforce, hiring more people than we were losing through retirements and other departures. Last year, for instance, approximately 800 employees left the company but we hired more than 1000 people. We recognize that there will be some areas of the company that may need to grow to support corporate objectives and changing customer expectations. The remaining areas will need to offset this growth. Slowing hiring now will make it easier to retrain and reassign employees in the future.
<p>Will this program consider changes in employee benefits?</p>	<ul style="list-style-type: none"> No, we are not reviewing changes in compensation, pension or healthcare benefits.
<p>Aren't we already working to reduce costs?</p>	<ul style="list-style-type: none"> Yes, but mostly in unrelated efforts in individual departments and in incremental ways. We often see costs creep back in. Now we are taking a long-term look at how we can transform the work we do, and the ways that we do it. Our goal is a meaningful and sustainable change.
<p>How are we approaching our goal?</p>	<ul style="list-style-type: none"> We have started by looking broadly at the business and identifying places where there are opportunities for improvement. A deeper dive will identify specific efficiencies and ways of working that reduce cost. The goal is not to 'do more with less' but to remove or redesign work to be more productive. The focus should be on process improvements and efficiencies gained.
<p>What do we expect to achieve?</p>	<ul style="list-style-type: none"> We have set a provisional enterprise program target to achieve flat (0%) departmental O&M to 2022.
<p>What is the project timeline? When will results be seen?</p>	<ul style="list-style-type: none"> We'll be identifying potential opportunities through the end of 2017. We plan to start implementing changes in 2018. A sustained focus on spending is critical to the future success of our business.
<p>When will we know about the specific changes?</p>	<ul style="list-style-type: none"> Your managers will be briefing you on the discussions happening in your department. As we finalize the initial opportunities for savings, we'll be providing examples of how we'll be working differently. You'll hear more in early 2018.
<p>Will this affect safety, operational excellence, or customer experience?</p>	<ul style="list-style-type: none"> No, in fact many cost leaders outperform peers in safety, reliability and customer satisfaction.
<p>Has our Company ever done this before?</p>	<ul style="list-style-type: none"> Yes. Here are a few examples: <ul style="list-style-type: none"> When sales declined in our steam business, we worked hard to find ways to make our service more efficient and affordable to stay competitive. When we centralized EH&S, HR, and Cost Management, we were able to downsize primarily through attrition, as well as giving employees the opportunity to pursue other positions. When we closed generating plants, we delayed hiring in other organizations to let those groups absorb the remaining plant employees who were looking for jobs. We also retrained plant employees and held job fairs to help them find new roles within the company. We committed to retraining and redeploying our meter readers to other areas of the company after we started installing smart meters.

FAQs (2 of 2)

Question	Response
<p>Are we looking at best practices and benchmarking with other energy companies?</p>	<ul style="list-style-type: none"> • We are. However, while benchmarks can help identify potential opportunities and provide guidance on improving processes, they are not an exact science. Benchmarks tell us where to look more closely but may not provide the specific answers for our company.
<p>Are we looking for savings in both our O&M and capital budgets?</p>	<ul style="list-style-type: none"> • Yes. We recognize that there may be instances where a capital investment can replace or reduce an O&M cost. We'll evaluate the impact of all initiatives.
<p>Are we looking for savings that may be achieved through Con Edison and O&R synergies?</p>	<ul style="list-style-type: none"> • Yes. A merger of the two companies is NOT being considered at this time. But we are looking at ways to achieve savings by consolidating functions or other administrative functions where possible.
<p>Do we look at non-financial impacts of the outcome?</p>	<ul style="list-style-type: none"> • Yes. We're taking a very close look at each opportunity to evaluate the impact to our business and stakeholders and to make balanced decisions. As always, safety, operational excellence, and customer satisfaction come first.
<p>How will this affect the rate case?</p>	<ul style="list-style-type: none"> • Cost savings from the BCO program will be reflected in our test year to the extent that savings opportunities are identified in that period.
<p>How should we be communicating about this process with our employees?</p>	<ul style="list-style-type: none"> • Talk about this openly and honestly! This is a transparent process and it's important for all employees to understand what we're doing and why. The best way to communicate about this is to talk with your teams directly. The talking points and these FAQs can help.
<p>If I have a question, or a good cost savings idea, who can I talk to?</p>	<p>We should all be thinking of ways we can do our work more efficiently. If you have an idea, or a question about this process, let your manager know. If you need more information, reach out to the Business Cost Optimization lead for your area.</p> <ul style="list-style-type: none"> • Customer Ops - Chris Osuji, Michael Falanga • Electric Ops - Michele O'Connell, Joseph Somma, Tim Ryan • Central Ops - Sanjay Bose, Maggie Walters • Gas Ops - Nick Inga, Nickolas Hellen • O&R - Glenn Meyers • Corporate Shared Services - Frank LaRocca, Joanna Wolff • Utility Shared Services - Jason Henry • Finance - Robert Muccilo • Law - Kimberly Strong • Corporate Affairs - Kyle Kimball, Mary McCartney • EH&S - Deanne Ostrowski, Maureen Cullen • Business Cost Optimization - Scott Sanders, Maggie O'Donoghue, Kiley Kemelman

Business Cost Optimization Summary

The case for change: “business as usual” is not sustainable

Large organizations add activities and costs over time
We need to regularly review our costs: It is what healthy companies do
Many of our peers are doing this...we must do the same

Cost escalation can make the challenges we face more difficult to overcome.

Today these challenges include:

- ***Decreasing sales*** (or sales growth) from the adoption of new energy-efficiency and demand response products and services
- ***Evolving customer expectations*** to include cleaner energy sources and more efficient products and services - Customers will not tolerate an ever-increasing utility bill
- ***Current rate structure*** is driven by sales volume and may not change to reflect the rapid pace of change and innovation

Business Cost Optimization

Cases 18-E-0067 & 18-G-0068

Completed the enterprise diagnostic phase



- Enterprise target setting
- Cost assessment and initiative prioritization
- Implementation planning
- Project management

- “Nail the Fundamentals” initiatives (day-to-day ongoing business improvements) being implemented by end of 2018
- 2018 Prioritized initiatives being designed and planned by teams & BCO
- Ongoing development of pipeline initiatives

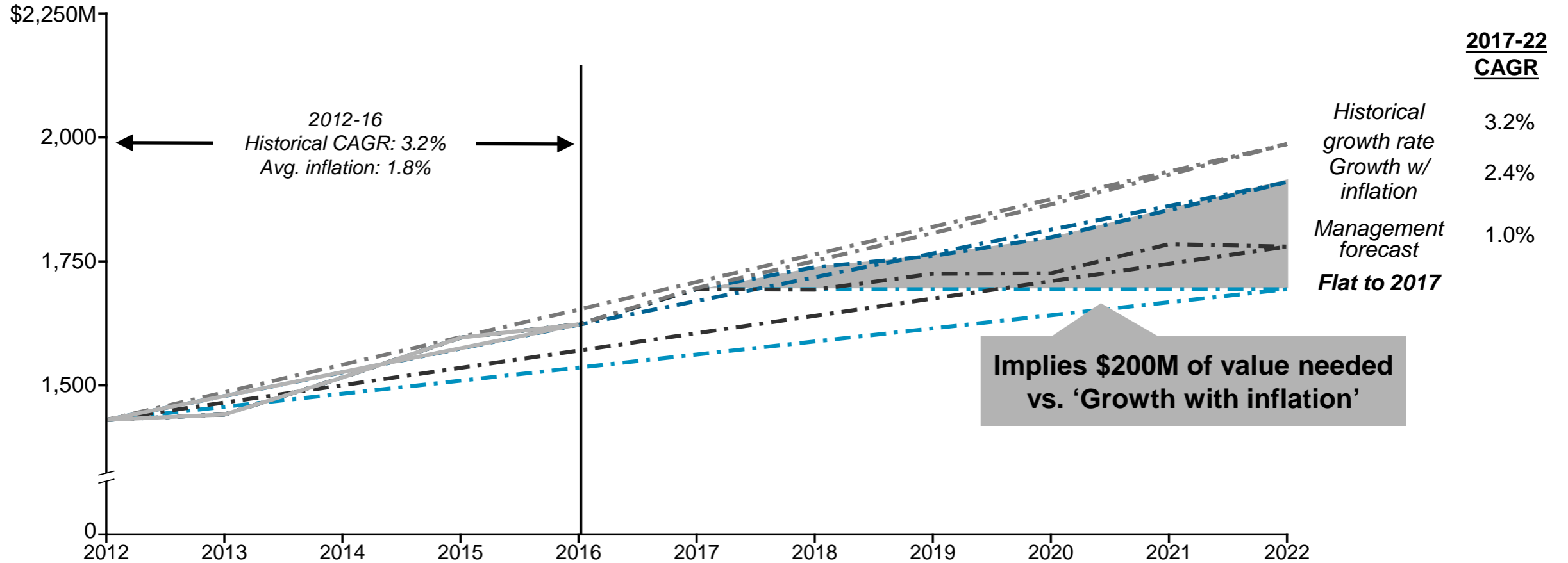
- BCO-supported initiative launches

Business Cost Optimization

Cases 18-E-0067 & 18-G-0068

Set a provisional target: Flat departmental O&M growth to 2022

CECONY and O&R departmental O&M forecast (in millions)



Note: *Inflation calculated as change in expected CPI, labor inflation driven by expected wage increase; O&R forecast excludes Corporate
Source: 2017-2022 CECONY budget; 2017-2022 O&R budget; Economist Intelligence Unit CPI Forecast

Business Cost Optimization

Developed a pipeline of savings initiatives

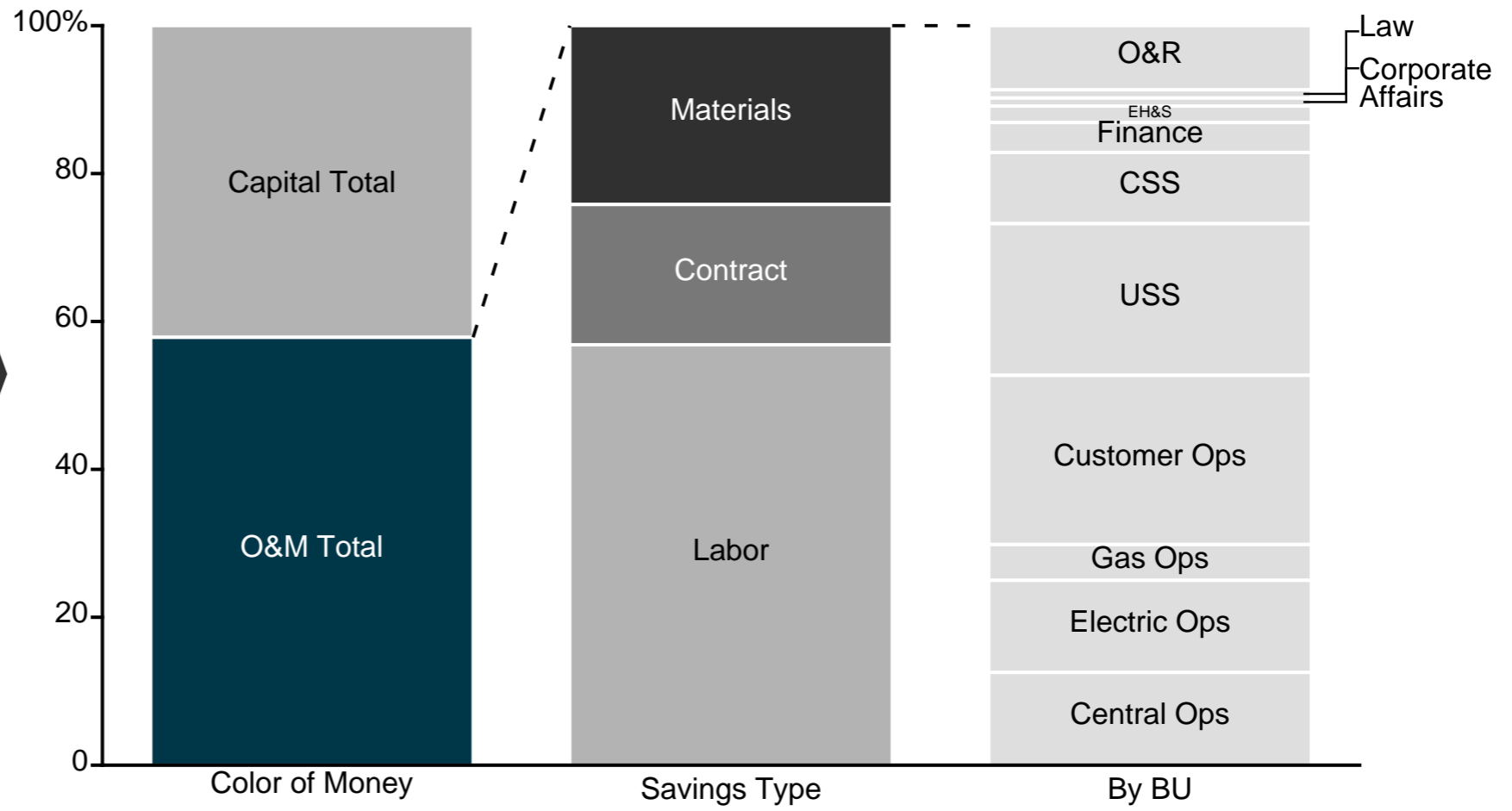
150+
team members engaged
across ConEd and O&R

~1,000
ideas generated by
working teams

70
opportunities identified
for BCO initiatives



BCO savings opportunity pipeline (\$,M)



Source: 2017 BCO Opportunity pipeline

Communication summary

To best compete in the energy business and serve our customers we must reduce our costs

- Safety, operational excellence, and customer experience continue to be our core objectives. Our evaluation of peer utilities clearly indicates that we can accomplish these objectives while reducing costs and working more efficiently
- Our responsibility to our customer includes being responsible cost managers
- We must prepare for an evolving business model, as customer expectations shift, sales growth declines, and new companies compete in the energy industry
- Large organizations add activities and costs over time. We need to regularly review our costs: It is what healthy companies do
- We must maintain competitive pricing for our products. That means mitigating total customer bills
- We can be more aggressive with capital investments that reduce O&M

The cost optimization effort launched in the fall is underway

- Our goal remains to improve the way we work to optimize O&M and capital costs
- The first phase of the BCO - understanding our cost and brainstorming savings opportunities - is complete
- The program was executed with a long-term and sustainable cost management process in mind

We have completed the enterprise diagnostic and will begin to design priority initiatives

- Over 150 employees across organization have worked together over the past 4 months to identify ways to work more efficiently, to increase productivity, and to reduce costs
- Approximately 70 savings opportunities were identified and refined across the enterprise
- The Utility Steering Team (UST) and core teams assessed all the opportunities and agreed on the priority initiatives for 2018
- Priority initiatives will begin being designed in Q1 2018 with the continued support of functional teams as well as a central Program Office that is being put in place to coordinate, support, and track the BCO effort

We will be consistent with our Values

- Through this initiative, we will continue to manage employee levels through reduced hiring, retraining, and reassignment
- We will continue to invest in training and professional development for all employees

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O&R BCO Savings Initiatives

Initiative development workshop

January 31st, 2018

Agenda

- **What** (Opportunities): Recall of the major pain points and opportunities we identified (30 minutes)
- **How** (Approach): Discussion on how to continue developing our opportunities (1 hour)
- *Break (10 minutes)*
- *Exercise (30 minutes)*
- **Who** (Team): Discussion of how to think about the team structure and roles (30 minutes)
- **When** (Timing): Example workplan/timeline for this type of program (20 minutes)

Cost effectiveness goes hand-in-hand with our existing strategic priorities



Many cost leaders also outperform peers in safety, reliability and customer satisfaction



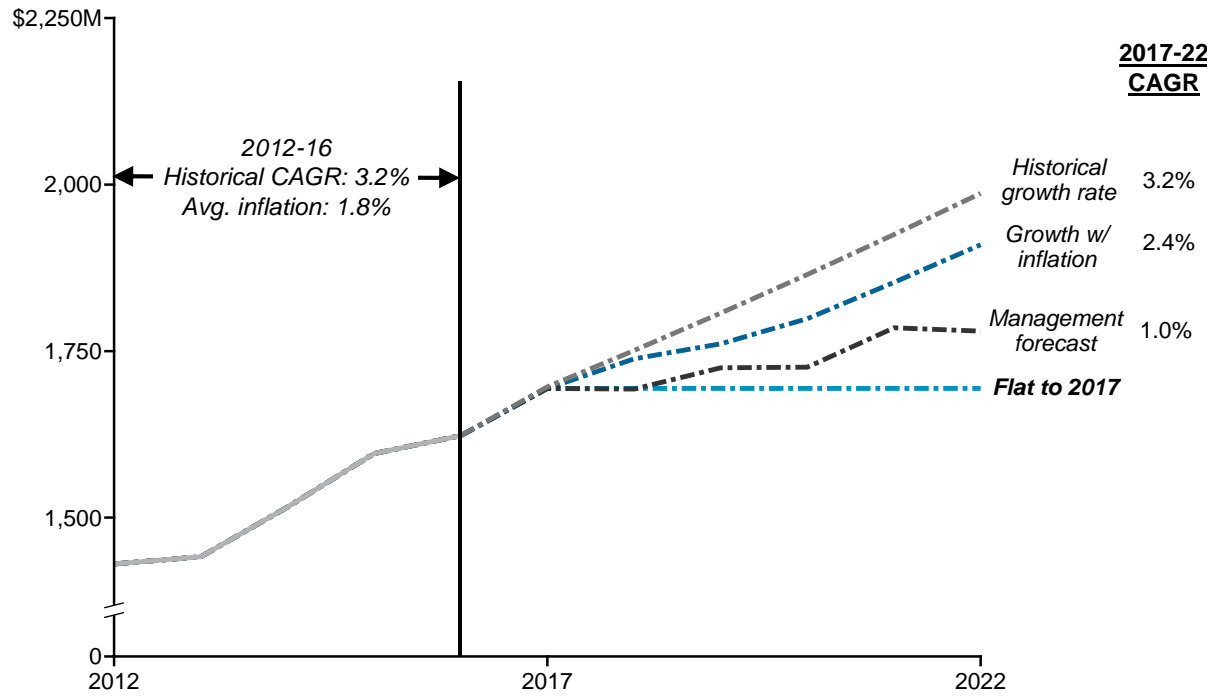
BCO provisional target: Flat O&M growth (0%) to 2022

FLAT O&M TARGET IMPLIES \$200M VALUE NEED VS 'GROWTH WITH INFLATION'

BCO PROGRAM REQUIRES ACTIVE MANAGEMENT OF PUTS AND TAKES

- Target of “flat O&M growth to 2022” also means we need to **cover known investments (e.g. Vision 2030) and future, unknown priorities**
- Identified opportunities that reduce non-value added work and increase productivity also come with a **corporate O&M value opportunity**
- Managing to flat over time requires careful sequencing and **constant refilling of the pipeline**

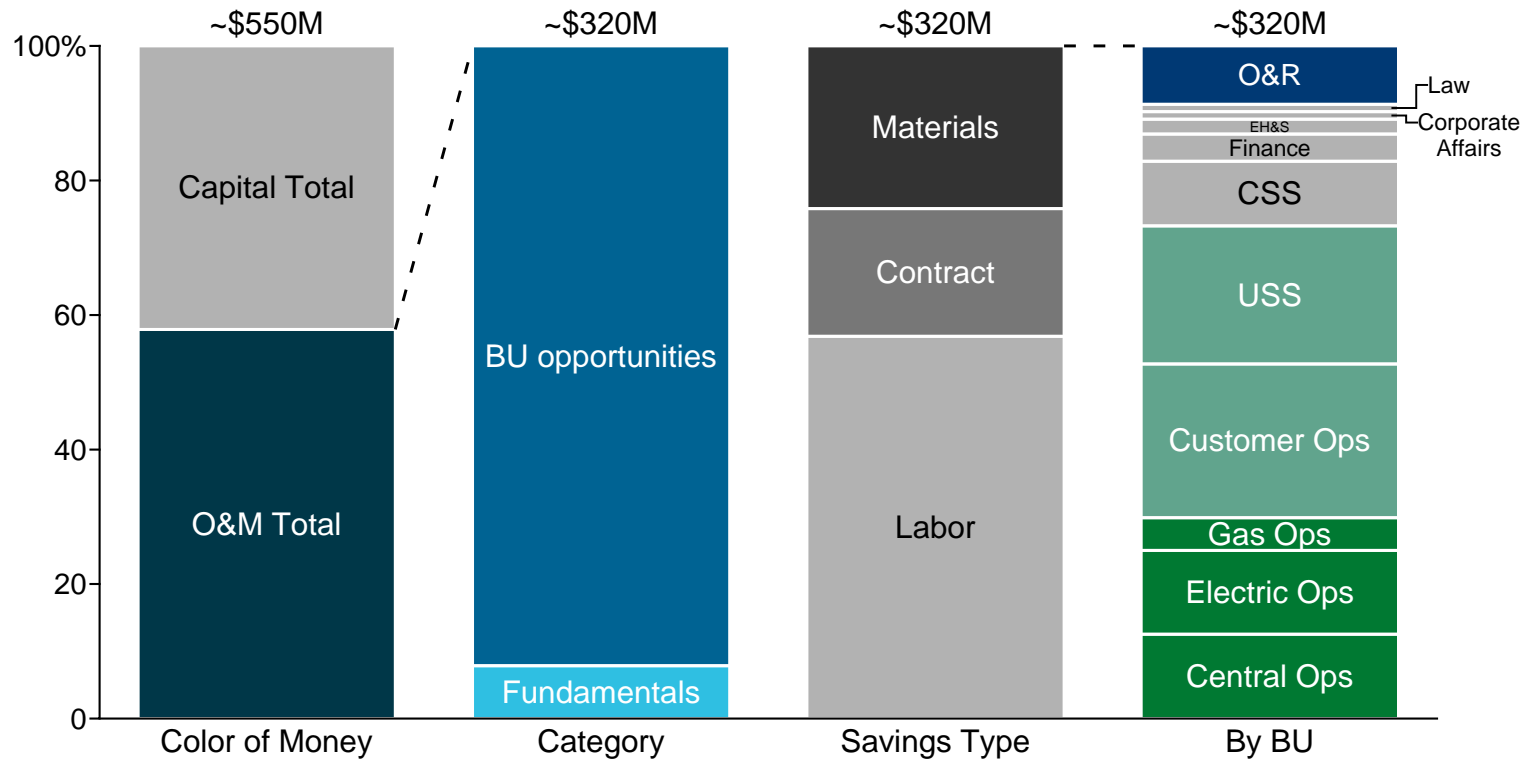
CECONY and O&R departmental O&M forecast (in millions)



Note: *Inflation calculated as change in expected CPI, labor inflation driven by expected wage increase; O&R forecast excludes Corporate
Source: 2017-2022 CECONY budget; 2017-2022 O&R budget; Economist Intelligence Unit CPI Forecast

Current BCO pipeline by category, BU and resource type

BCO savings opportunity pipeline (\$,M)



Source: 2017 BCO Opportunity pipeline

Within O&R, workshops and offline ideation identified over 220 opportunities and pain points

220 PAIN POINTS AND DISCRETE OPPORTUNITIES

Opportunity	Category	Sub Opportunity	Specific Action
1. High capacity, highly levered organizational task	Task Based	Maximize use of existing resources for all activities	Review the current process and identify areas for optimization
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50. High capacity, highly levered organizational task	Task Based	Maximize use of existing resources for all activities	Review the current process and identify areas for optimization



10 SUB-OPPORTUNITIES

- Right-size the activities and functions being performed (e.g. eliminate low yield and redundant work)
- Ensure that A&G functions are optimally resourced
- Automate/Digitize manual administrative processes
- Apply value engineering lens to workplan; optimize cost & TCO using design based criteria
- Align company staffing needs with organizational needs
- Increase execution efficiency through improved scheduling & work processes
- Determine optimal contact center footprint across by CECONY and O&R
- Eliminate redundant activities across CECONY and O&R
- Holistically right-size resourcing across both CECONY and O&R for operations and A&G functions
- Take advantage of scale and merge operations where possible



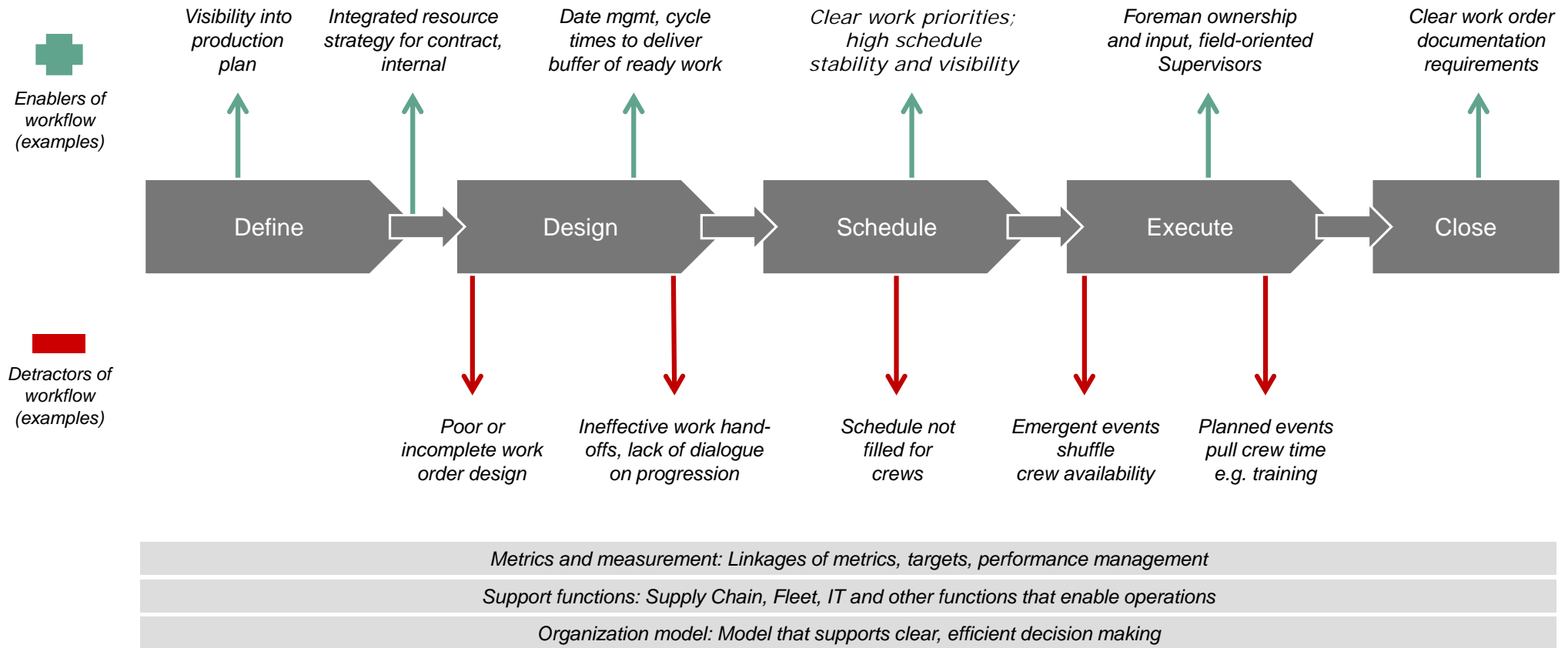
4 MAJOR OPPORTUNITY THEMES

- Right size resourcing across key functions
- Redesign work plan, design, schedule, execute process
- Consolidate Call Centers across CECONY and O&R
- Consolidate Cost Centers across CECONY and O&R

Today's focus

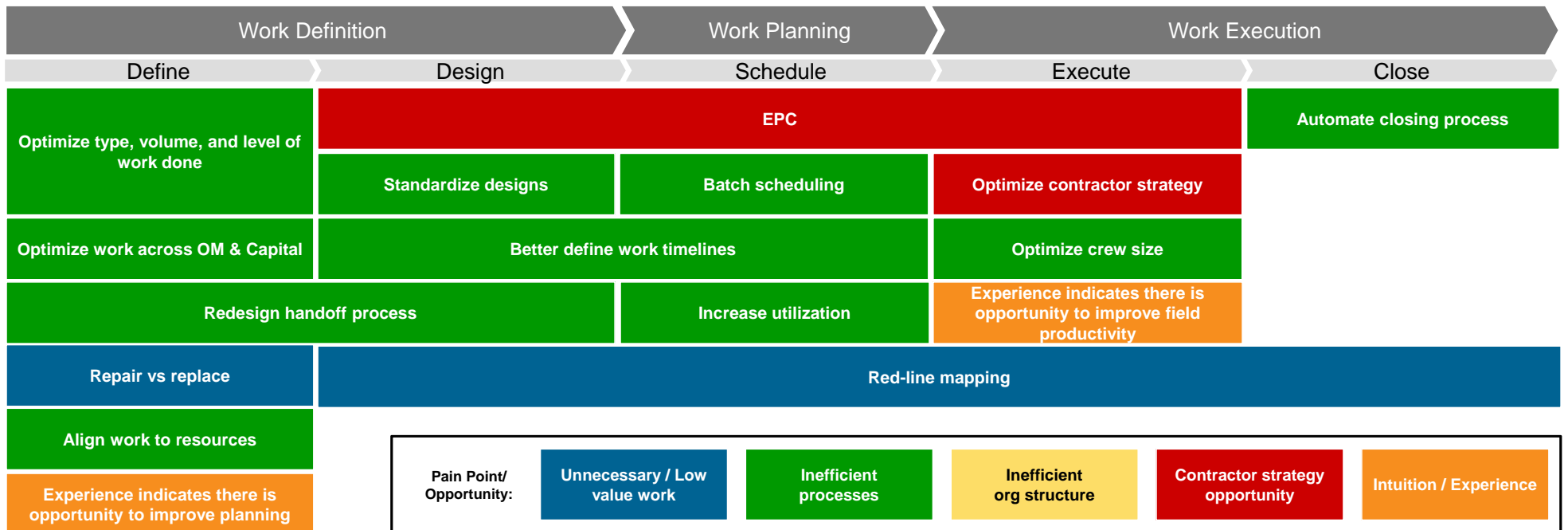


Operations Opportunities can be decomposed into 5 major categories



Opportunities identified across the various stages of the work define-plan-execution process

Color coding to make it clear which are the major issues



Agenda

- **What** (Opportunities): Recall of the major pain points and opportunities we identified (20 minutes)
- **How** (Approach): Discussion on how to continue developing our opportunities (30 minutes)
- *Break (10 minutes)*
- *Exercise (30 minutes)*
- **Who** (Team): Discussion of how to think about the team structure and roles (30 minutes)
- **When** (Timing): Example workplan/timeline for this type of program (20 minutes)

In our experience, there are some overarching best practices when designing a solution for utilities

- Important to **think of this program as an integrated solution**, otherwise you risk “squeezing the balloon” (i.e. inefficiencies creep up in areas of less resistance)
- **Practicality is paramount**; don’t fall into the trap of developing complex academic solutions without testing them in the field
- **Develop metrics and KPIs** to measure the impact of your solutions; it’s the only way to know that you’re making progress

Four major steps to further developing these initiatives

Develop Hypothesis

Develop hypothesis for savings opportunities by identifying pain points, assessing vs. best practices, and using external POV

Test with Data

Use internal data to demonstrate the opportunity, build factbase, isolate savings levers, and "size the prize"



Develop and refine solution in a controlled environment

Implement and Scale

Detail the solution and roll-out across the org

Several hypothesized actions have been devised for the broader operations opportunities

	EXAMPLE OPPORTUNITIES FROM EARLIER WORK	HYPOTHESIZED ACTIONS
Develop Hypothesis	<u>Work Definition:</u> Opportunity to reassess the type and level of work defined to optimize for TCO	<ul style="list-style-type: none"> • Optimize Rebuild/Rehab program • Apply value engineering lens to planning function • Optimize O&M/Capital split between Co and Ctr.
Test with Data	<u>Work Planning:</u> Opportunity to improve the scheduling and work plan process to increase execution efficiency	<ul style="list-style-type: none"> • Batch scheduling • Better define work timelines • Increase utilization
Design solution & refine through Pilot	<u>Work Execution:</u> Opportunity to increase execution efficiency through improved work processes	<ul style="list-style-type: none"> • Optimize crew sizes • Automate time reporting
Implement and Scale	<u>Contractor Strategy:</u> Opportunity to better align company staffing needs by designing an optimized contractor strategy	<ul style="list-style-type: none"> • Outsource flagging • Negotiating SLAs to ensure consistent purchasing support
	<u>Planning-Execution Alignment:</u> Opportunity to improve the alignment and communication between planning and execution	<ul style="list-style-type: none"> • Redesign handoff process • Red-line mapping

Exercise: Improve the scheduling and work plan process

Develop hypothesis

Test with data

Design solution and
refine through pilot

Implement and scale

*Opportunity to **improve the scheduling and work plan process** to increase execution efficiency*

- What data could we use to validate / demonstrate this opportunity?
 - External benchmarking
 - Internal comparison across different geographies
 - Internal comparison over time
- What data sources are available?
 - Interviews with front line supervisors
 - Work order data
 - External benchmarks

Utility Co Example: Improve the scheduling and work plan process

Develop hypothesis

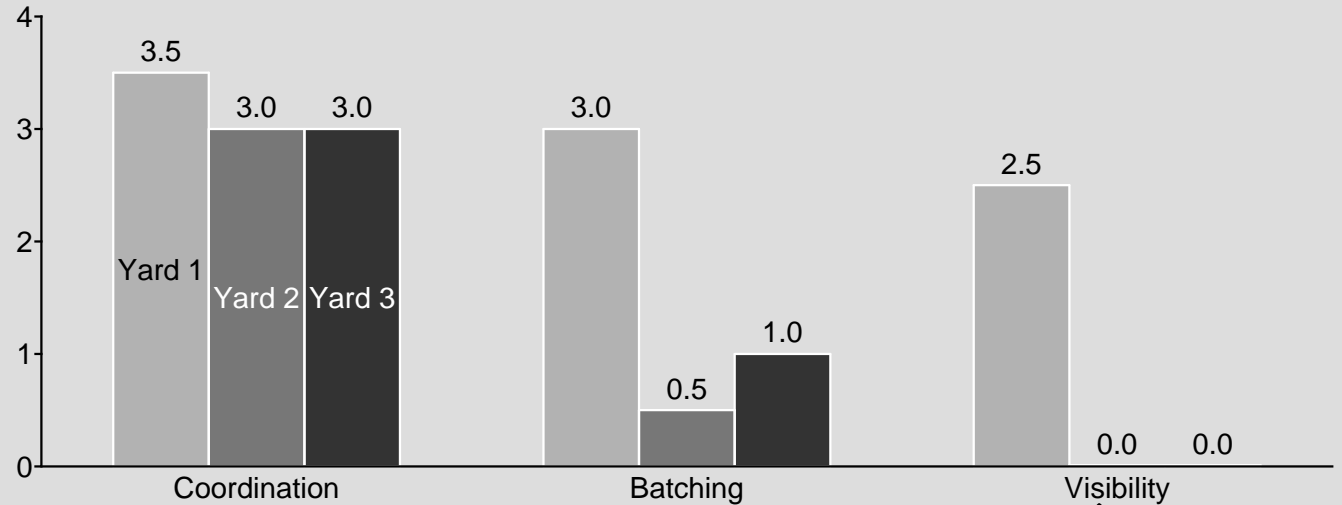
Test with data

Design solution and refine through pilot

Implement and scale

*Opportunity to **improve the scheduling and work plan process** to increase execution efficiency*

of weeks ahead



What details would you want to know?

Utility Co Example: Improve the scheduling and work plan process

Develop hypothesis

Test with data

Design solution and refine through pilot

Implement and scale

Opportunity to improve the scheduling and work plan process to increase execution efficiency

YARD	COORDINATION	BATCHING	VISIBILITY
Yard 1	<ul style="list-style-type: none"> • 3-4 Weeks <ul style="list-style-type: none"> - Strong coordinator with traditional, line background. - Was previously 4+ weeks out in front of the work; however, got behind due to EOY vacation 	<ul style="list-style-type: none"> • ~3 weeks <ul style="list-style-type: none"> - However, process driven primarily by Coordinator (whiteboard in FLS office) - Regular daily churn causes break-downs in process 	<ul style="list-style-type: none"> • 2-3 Weeks <ul style="list-style-type: none"> - Foremen have work, but don't engage actively: limited pre-checking of work prior to construction due to daily churn
Yard 2	<ul style="list-style-type: none"> • ~3 Weeks <ul style="list-style-type: none"> - FLS concerned about coverage (15+ lineman) - Coordinator work closely with FLS during process (regularly weekly hand-off) 	<ul style="list-style-type: none"> • 0-1 week <ul style="list-style-type: none"> - Previously used whiteboard in FLS office to highlight 1-2 weeks of work; however, fell behind over last few months 	<ul style="list-style-type: none"> • N/A <ul style="list-style-type: none"> - Foremen assigned jobs on day of execution– limited opportunities to pre-check
Yard 3	<ul style="list-style-type: none"> • ~3 Weeks <ul style="list-style-type: none"> - Currently 2.5-3 weeks out, but usually ~4 weeks - Biggest challenges are getting job packages printed (central clerk) and jobs estimated 	<ul style="list-style-type: none"> • ~1 week <ul style="list-style-type: none"> - FLS highlights current week (by foremen) on whiteboard in his office – including “go to” work - Regular daily churn during morning “flop” 	<ul style="list-style-type: none"> • N/A <ul style="list-style-type: none"> - Foremen given job packages day of execution - Recently, foremen have had greater opportunities to pre-check work prior to construction

What could a pilot solution look like?

Utility Co Example: Improve the scheduling and work plan process

Develop hypothesis

Test with data

Design solution and refine through pilot

Implement and scale

*Opportunity to **improve the scheduling and work plan process** to increase execution efficiency*

Leveraging supervisor expertise results in more optimal schedule batching

- FLS (Field Level Supervisor) understands the underlying work and can provide valuable input into the creation of full days and weeks of work
 - FLS batches created based on:
 - ▶ Type of job
 - ▶ Time / size of job
 - ▶ Equipment needed
 - ▶ Crew size
 - ▶ Crew expertise
 - Resource supervisor does not have to rely purely on estimated hours to schedule full days
- FLS input can help create more a optimal schedule in Week 6, reducing churn as jobs move through schedule to execution
 - Improves utilization of available resources
 - Increases efficiency of scheduling meetings

Foreman ownership and visibility is increased

- Providing foremen with 2 weeks of work in-hand gives them the ability to fill in 'open' time with upcoming work
 - Pre-check job sites
 - Verify that right materials and equipment are available
 - Preload materials
 - Pull forward upcoming work
- Ability to think ahead about execution strategy
- Opportunity to clarify key questions with coordinator / estimator / FLS prior to morning-of

- Pilot solution designed by:
 - Adopting internal best practices
 - Leveraging an external POV
 - Learning from external best practices

If this pilot were successful, what would have to be designed to bring this to scale?

Utility Co Example: Improve the scheduling and work plan process

Develop hypothesis

Test with data

Design solution and
refine through pilot

Implement and scale

Detailed development of solution elements

*Opportunity to **improve the scheduling and work plan process** to increase execution efficiency*

Updated batching process

New actions and timeline

Meetings and cadence

Metrics

Rollout plan

• ...

• ...

• ...

• ...

• ...

Utility Co Example: Improve the scheduling and work plan process

Develop hypothesis

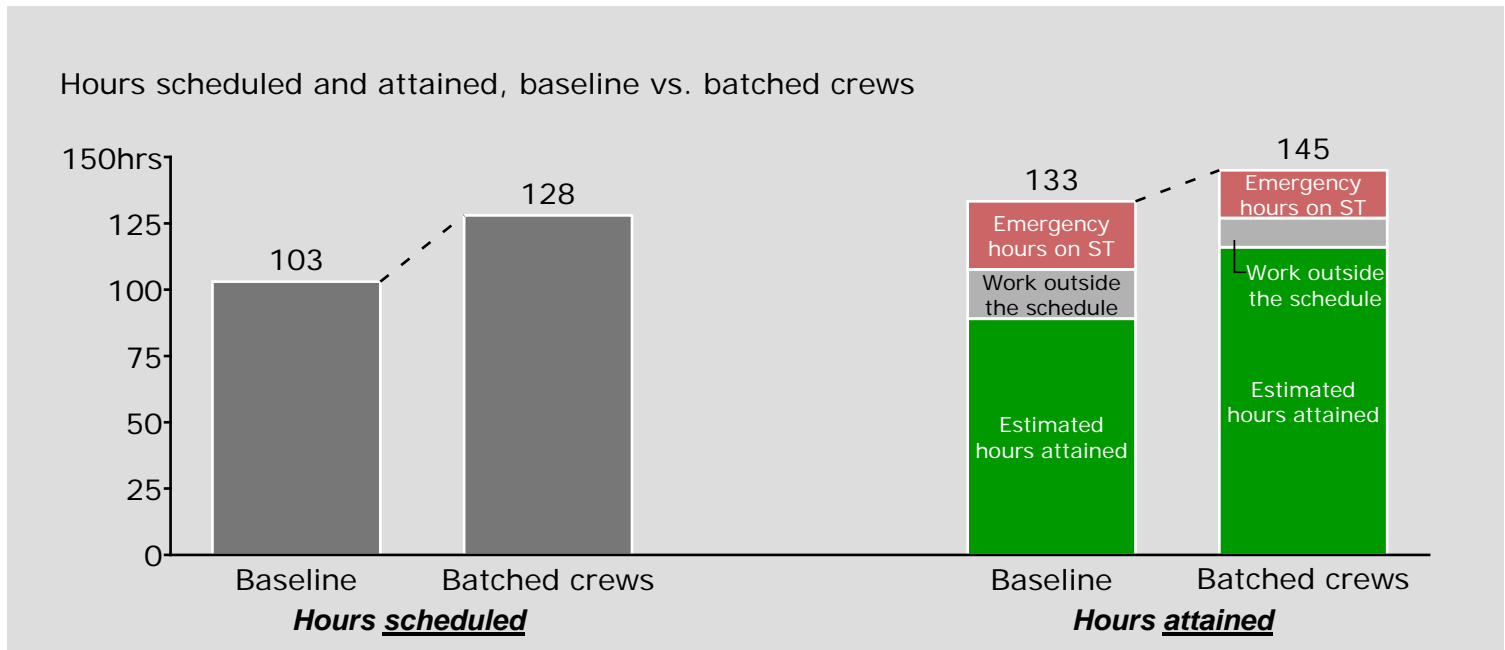
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INSERT TEXT HERE

*Opportunity to **improve the scheduling and work plan process** to increase execution efficiency*



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Exercise: Planning-Execution Alignment

- Develop Hypothesis
- Test with Data
- Design through Pilot
- Implement and Scale

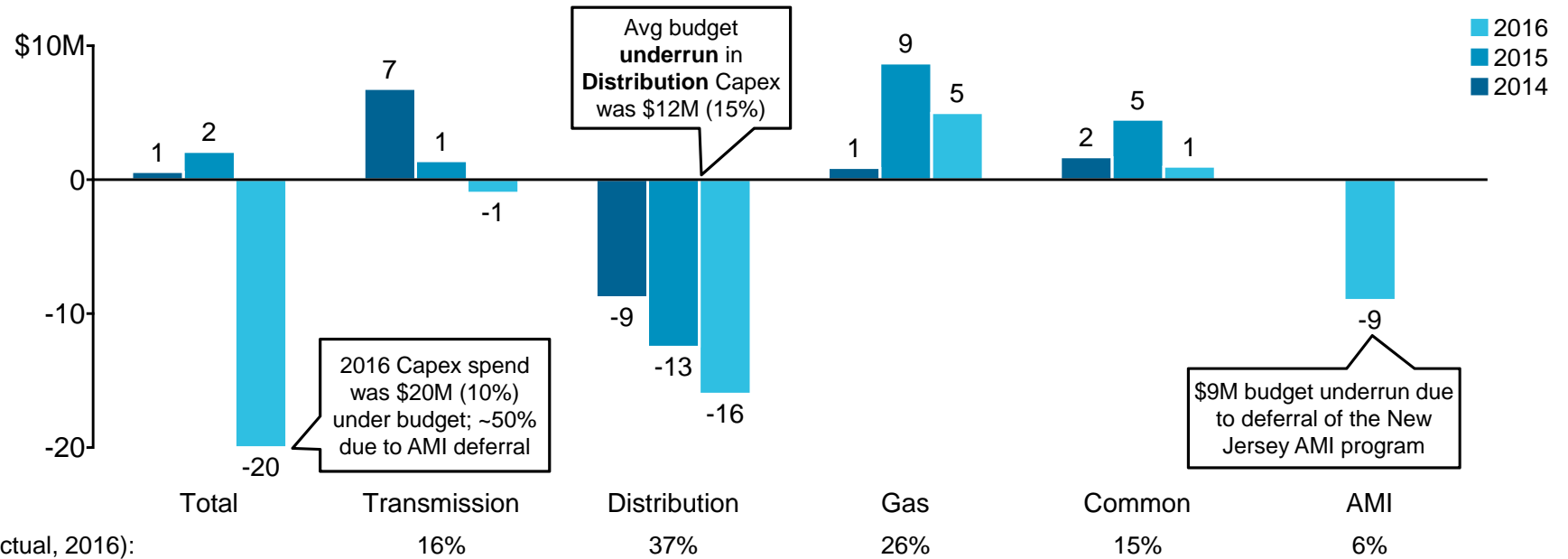
EXAMPLE OPPORTUNITIES FROM EARLIER WORK

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Recall: Early indication that there is an opportunity to improve alignment between planning and execution

O&R deviation from budgeted Capex by function and year



Source: Internal O&R data – “Capital and Removal Expenditure Performance 2014-2016”

Exercise: Improve the scheduling and work plan process

Develop hypothesis

Test with data

Design solution and
refine through pilot

Implement and scale

“There is an opportunity to improve the alignment and communication between planning and execution”

Exercise: Improve the scheduling and work plan process

Develop hypothesis

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refine through pilot

Implement and scale

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Exercise: Improve the scheduling and work plan process

Develop hypothesis

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Design solution and
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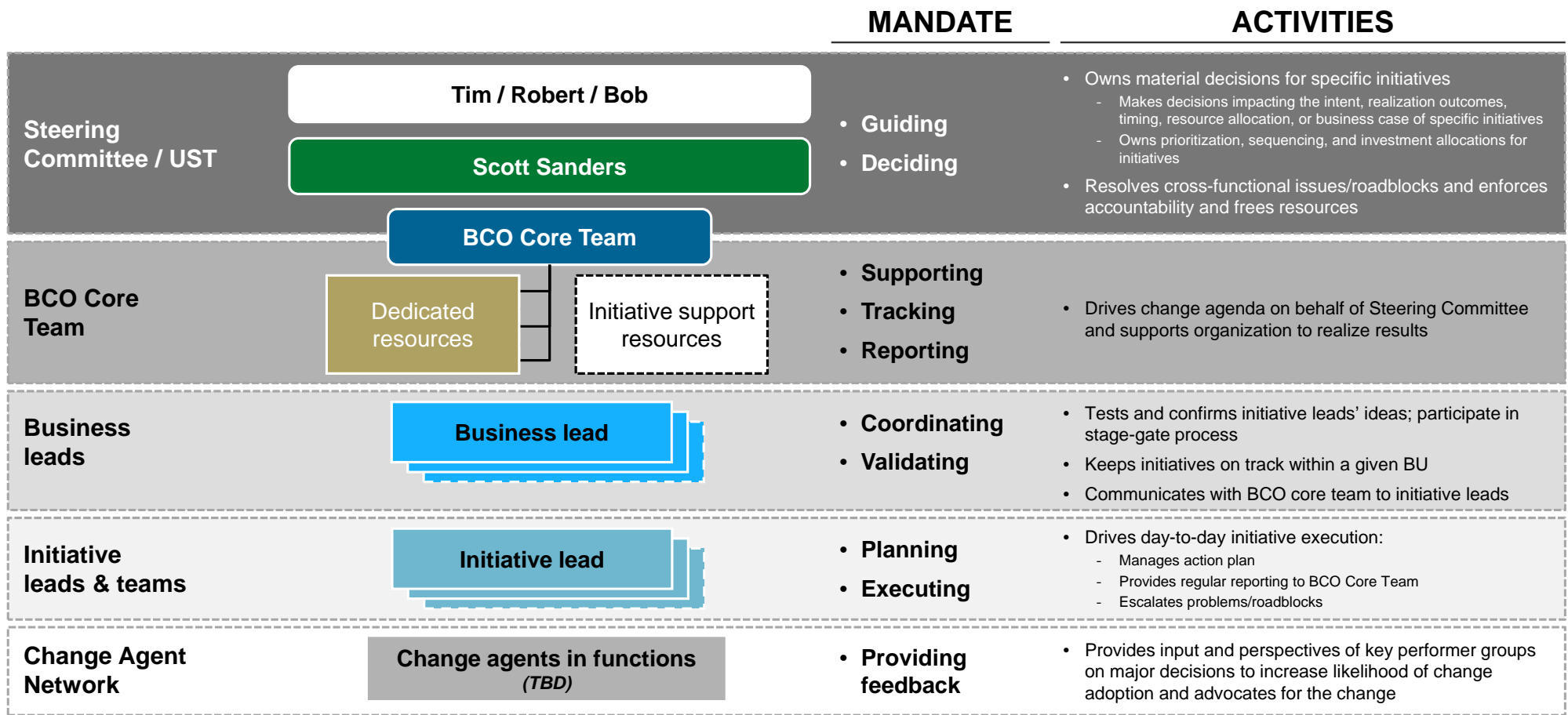
Implement and scale

- If this pilot were successful, what would have to be designed to bring this to scale?
- What metrics would we use to determine if it were successful

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BCO Core Team structure



The BCO Core Team critical responsibilities and link to the organization

BCO Core Team *Critical responsibilities*

- Support initiative leads and teams to execute on plans and build capacity
- Report to UST on regular basis - flag initiatives for additional support when required
- Manage centralized tracking program and day-to-day realization of BCO program target
- Coordinate engagement from UST on critical decisions and roadblocks
- Design progress to keep BCO pipeline evergreen and integrate into existing planning processes

Support provided to the organization

- Acts as a “**thought partner**” and **builds capabilities** through training, coaching, and advising
- Provides a **voice for initiative leads** to the UST on critical requests and decisions
- Ensures **teams have the right resources** and the **freedom needed to achieve their goals**
- Enables fast pace through ensuring timely **decisions** are made and engaging at a **defined cadence**

Support needed from the organization

- **Provide resourcing** to initiative teams
- **Focused attention** and **willingness to engage on critical decisions** for initiative programs
- Clear direction and approval on **prioritization, sequencing, and investments**
- Support to provide resolution to **cross-functional roadblocks** and **enforcement of accountabilities**

Roles and accountabilities have been defined at three levels

ROLE

RESPONSIBILITY

Business Leads



- Remains the **single point of contact** between the BCO Core Team and the BCO initiatives occurring with their respective function
 - Likely will also include semi-frequent updates at staff meetings and/or coordination with initiative sponsor(s)
- Provides a high-level review to ensure solutions **remain targeted** and **realizable** for defined initiatives
- Provides **assistance in solution creation** to initiative teams

Initiative Leads



- Oversees initiative team, execution, and overall **solution design**
- **Puts forward initiative-level recommendations** (e.g., decisions within the scope, milestones, and deliverables of the initiative)
 - Works with Sponsor to make decisions and then cascade and communicate appropriate actions
- Serves as the **“knowledge expert”** for initiative-related issues
- Communicates **stage-gate requirements** within initiative team and to Business Lead

Initiative Teams




- Adopt **“red is good”** mentality
- Use **tracking tool and health checks** to ensure effective progression
- **Communicate effectively** within initiative team and across teams
- **Actively build capabilities** for peers and reports through on-the-job training

IT BCO Resourcing

PRELIMINARY

Role	Work Definition	Work Planning	Work Execution	Contractor Strategy	Planning Execution Alignment
------	-----------------	---------------	----------------	---------------------	------------------------------

 Business Lead

 Sponsor

 Initiative Lead

Initiative Team


• *To be identified:*

- *Initiative leads are typically motivated leaders who are respected in the org, and have a track record of getting things done.*

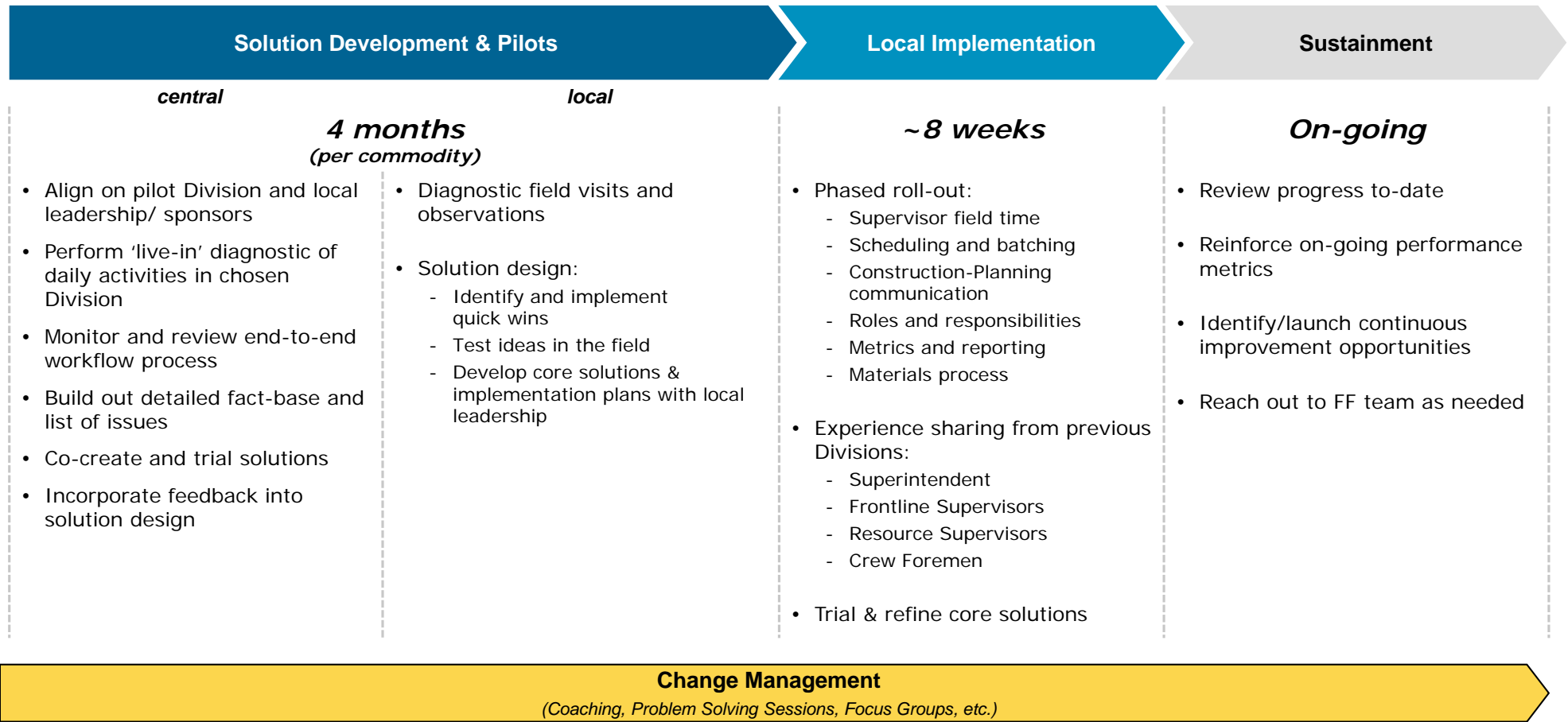
Iterate on this with Glenn; want to make sure we focus on the higher level savings initiatives, not the discrete actions

Agenda

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Field Force Program: Work Approach

ROUGH GUIDE

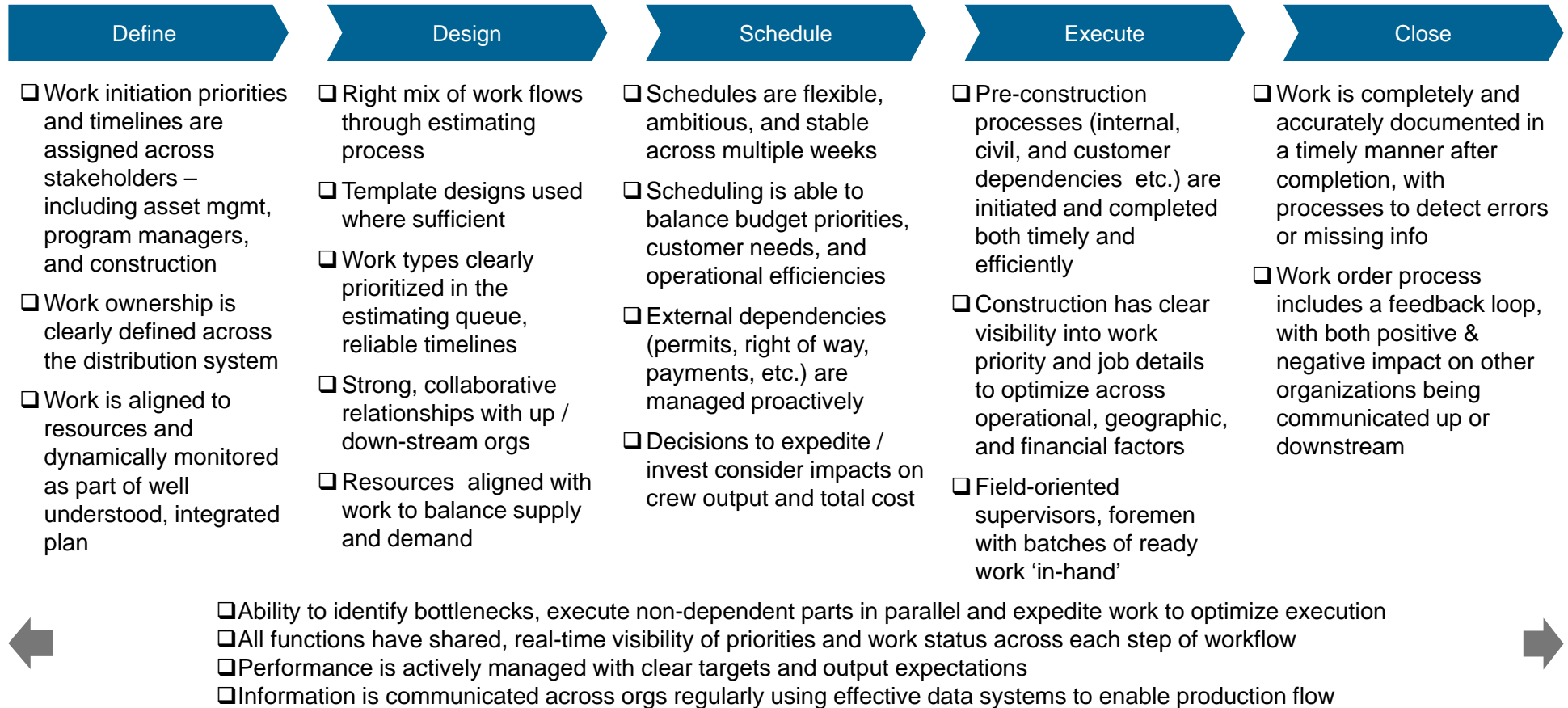


Questions?

Appendix

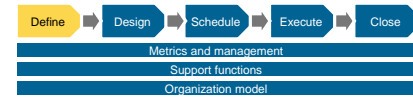
Formatting

Assess vs. best practices at each stage



Issues and implications - Definition

Formatting



TYPICAL ISSUES

- ❑ Planning process timelines and integration with resource plans
 - ❑ Lack of robust decision criteria to assign work to internal or external resources
- ❑ Work visibility
 - ❑ Unclear where work is in the pipeline from initiate to close
- ❑ Workplan stability
 - ❑ Frequent and/or significant changes in funding or approval in-year
 - ❑ Poor communication of changes and re-prioritization of downstream work
- ❑ Work cycle times / t-minus times
 - ❑ Disconnect between desired vs. actual T-minus dates impacting estimating and construction
 - ❑ Inability to 'triage' work as it progresses, separate fast flow processes as needed
- ❑ Aligned work priorities / quality of work definition
 - ❑ Many orders created that are re-classified, modified, or are canceled

EXAMPLE DIAGNOSTICS

Workplan: Rebalancing opportunities across work groups

INTERNAL VS. CONTRACTED WORK

Potential hrs shifted: 1.6, 2.6, 3.1, 2.1, 2.9, 2.5, 3.4, 2.6, 2.6, 1.4, 0.8, 0.8

and outputs for Distribution Operations

OUTPUTS

- **Scope release:**
 - Confirmed Scope Release Calendar with scope leveled across work types to provide reasonable flow of work into planning.
- **Initation to Planning prioritization:**
 - Prioritized list of projects from sponsors for planning based on reliability rating (or risk assessment) and size, filtered for specific regions.
- **Triaging:**
 - Potential immediate cross function bottlenecks to address.
 - Across projects ranked by size and reliability impact by region and PM group for follow up.

Unit Cost Performance: performance by job across work groups

WORK TYPE 1 >200 HRS

WORK TYPE 2 <200 HRS

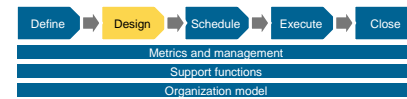
Impact on work priorities

Operations Planning Forum

- Quarterly updated Scope Release Calendar with leveled scope across work groups
- Focused list of WOs to triage with PMs and RSMs
- Prioritized list of WOs from sponsors to feed to Hub Managers for planning completion

Issues and implications - Design

Formatting



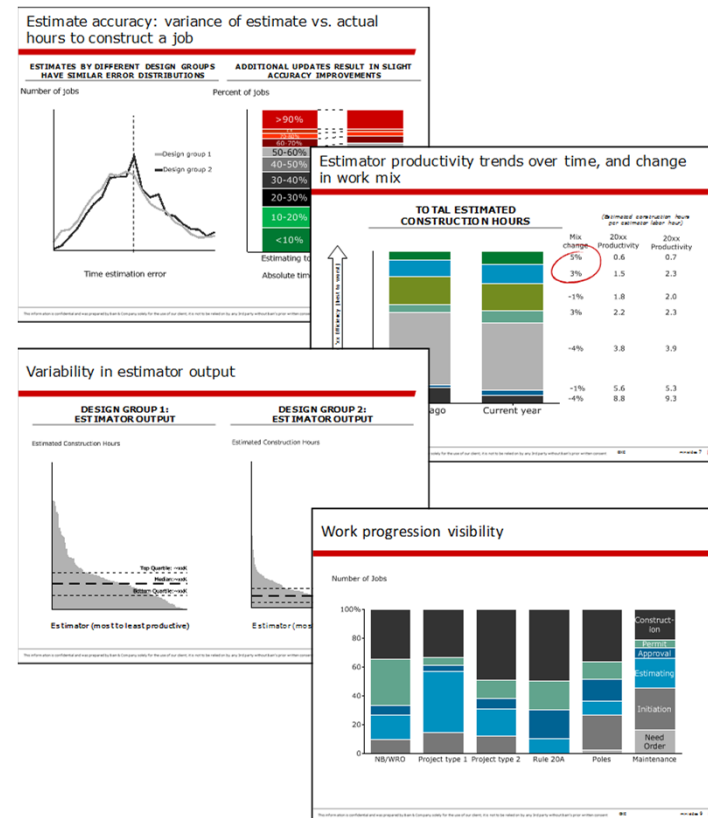
TYPICAL ISSUES

- ❑ Design efficiency
 - ❑ Significant variation in Throughput by work type, location, specialization, designer, internal/contract, etc.
 - ❑ Low utilization – decreasing time spent designing vs. other activities
 - ❑ Low design yield – significant volume of work designed but deferred or canceled
 - ❑ Increasing design function cost – for internal designers, support infrastructure, contract design

- ❑ Design quality
 - ❑ Significant discrepancy between estimates vs. actuals at the order level
 - ❑ Lax internal design review /audit, high redline rates and job delays due to design
 - ❑ Lack of construction feedback (formal and informal)

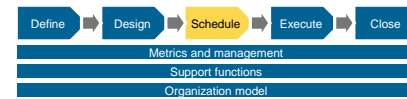
- ❑ Delivery vs. compliance, customer, construction dates
 - ❑ Unclear T-minus progression & impact on construction

EXAMPLE DIAGNOSTICS



Issues and implications - Scheduling

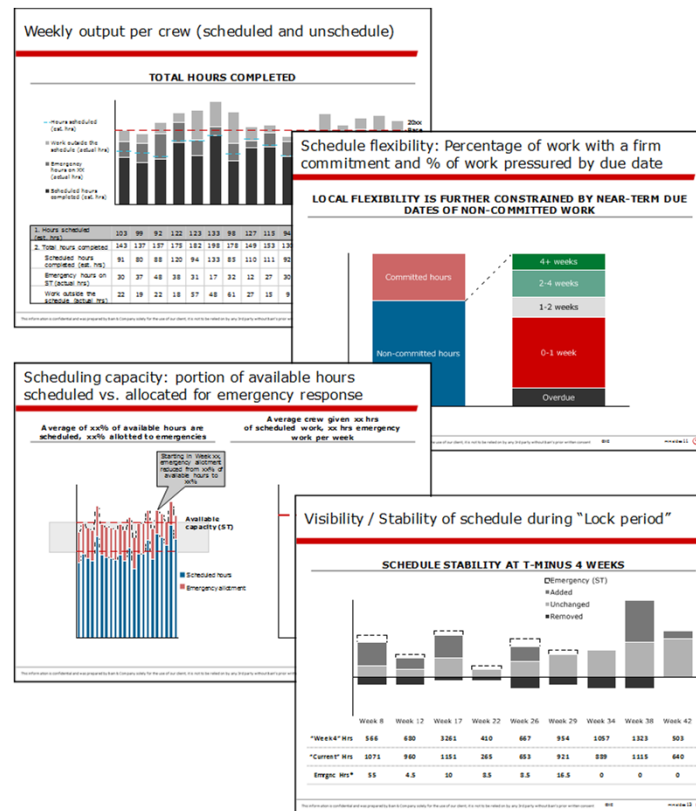
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TYPICAL ISSUES

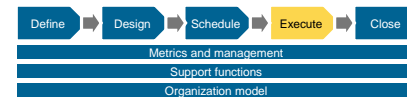
- ❑ Scheduled work vs. available capacity
 - ❑ Inaccurate capacity planning assumptions
 - ❑ Average % schedules full well below capacity
 - ❑ Low average volume of work completed – inside and outside schedule
- ❑ Schedule visibility and stability
 - ❑ Low levels of scheduled work relative to available capacity
 - ❑ No/limited ready work in hand for construction
 - ❑ Many schedule changes and break ins
 - ❑ Many same day changes and emergent work
- ❑ Scheduling methods
 - ❑ Schedules create high drive time
 - ❑ Limited to no bundling of work by geography or by circuit
 - ❑ Limited to no consideration for occasions to use dedicated vs. generalist crews
- ❑ Hand-offs and dependencies between design and execution

EXAMPLE DIAGNOSTICS



Issues and implications - Execution

Formatting



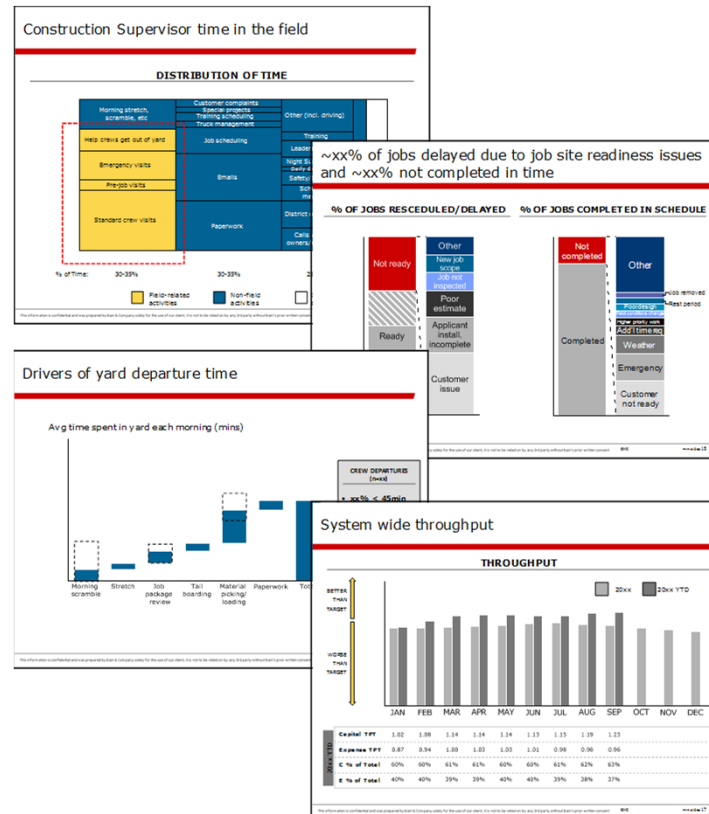
TYPICAL ISSUES

- ❑ Crew throughput versus full potential
 - ❑ High hours per unit for discrete commodities – flat / decreasing trend over time, by location, by foreman
 - ❑ Low output over time, per crew and per dollar
 - ❑ Productive time being reduced, non-productive categories increasing
 - ❑ Limited to no linkage to change in performance with operational changes

- ❑ Field operational processes
 - ❑ Low supervisor time in the field
 - ❑ Low 'wrench time per day'
 - ❑ Yard departure times significantly
 - ❑ Frequency of false starts / job sites not ready
 - ❑ Crews not sized appropriately to jobs
 - ❑ Materials stock outs, rushes and returns common
 - ❑ Vehicles overloaded with rolling warehouse of materials

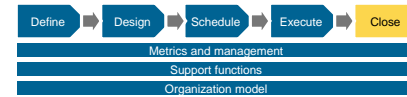
- ❑ Alignment of work and resource types/locations

EXAMPLE DIAGNOSTICS



Issues and implications - Order close

Formatting



TYPICAL ISSUES

- ❑ Order close efficiency
 - ❑ Significant variation in output by location, specialization, clerk, etc.
 - ❑ High clerical function cost – high number of clerks and clerical cost per work order and per construction dollar relative to benchmarks
 - ❑ Poor performance vs. benchmarks on cost and output vs. peer utilities, with consideration for tools/automation of close process
 - ❑ Large number and high complexity of forms, signatures, etc. in job packages

- ❑ Order close quality
 - ❑ Long cycle times to close orders – by work type, location, trend over time
 - ❑ High number of returns or re-work to close
 - ❑ Limited and / or ineffective construction feedback, whether formal or informal

EXAMPLE DIAGNOSTICS



Additional Exercise: Gas Ops Example

Develop Hypothesis

Test with Data

Design through Pilot

Implement and Scale

*Per diem labor for Gas Ops was brought on during a period of high growth and now makes up a major portion of spend.
Opportunity to reduce spend on per diem labor.*

What data could we use to validate / demonstrate this opportunity?

Additional Exercise: Gas Ops Example

Develop Hypothesis

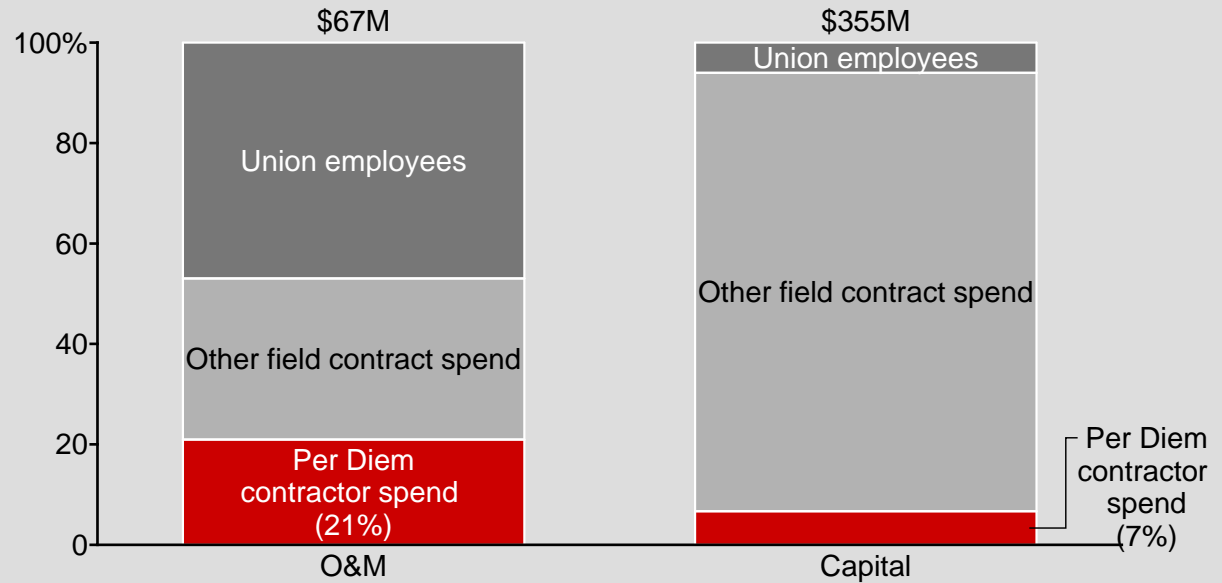
Test with Data

Design through Pilot

Implement and Scale

Per diem labor for Gas Ops was brought on during a period of high growth and now makes up a major portion of spend

2016 field labor spend

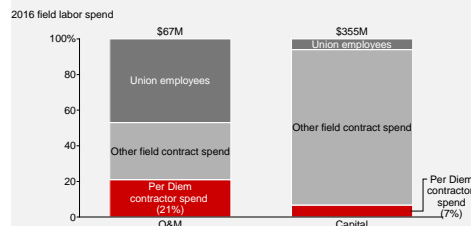


Additional Exercise: Gas Ops Example

Develop Hypothesis

Per diem labor for Gas Ops was brought on during a period of high growth and now makes up a major portion of spend

Test with Data



Design through Pilot



- Improved employee mix (contractor vs internal); instituted a mandatory furlough and reduced the overall quantity of work

Implement and Scale



- Achieved ~25-30% O&M savings from reduced spend on external labor

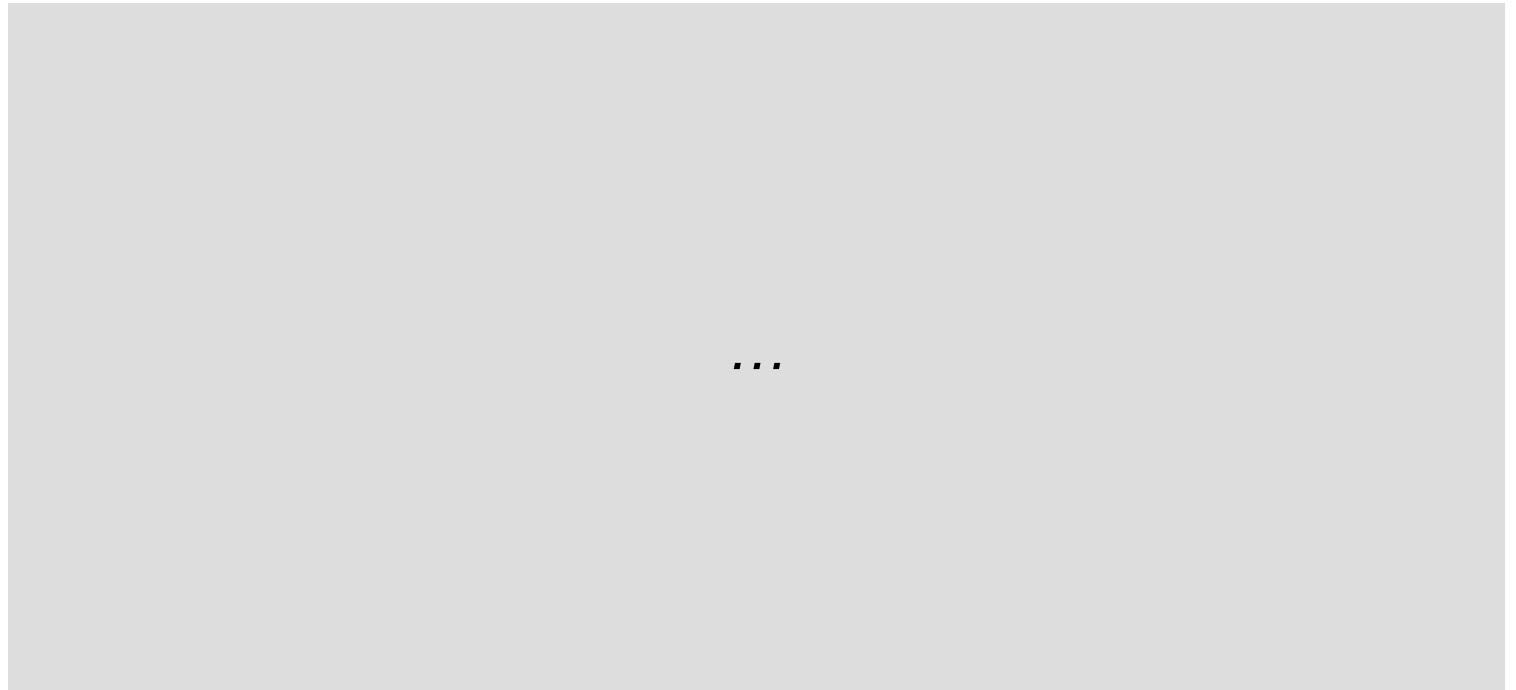
Utility Co. Example: Planning-Execution Alignment

Develop Hypothesis

Test with Data

Design through Pilot

Implement and Scale



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Utility Co. Example: Planning-Execution Alignment

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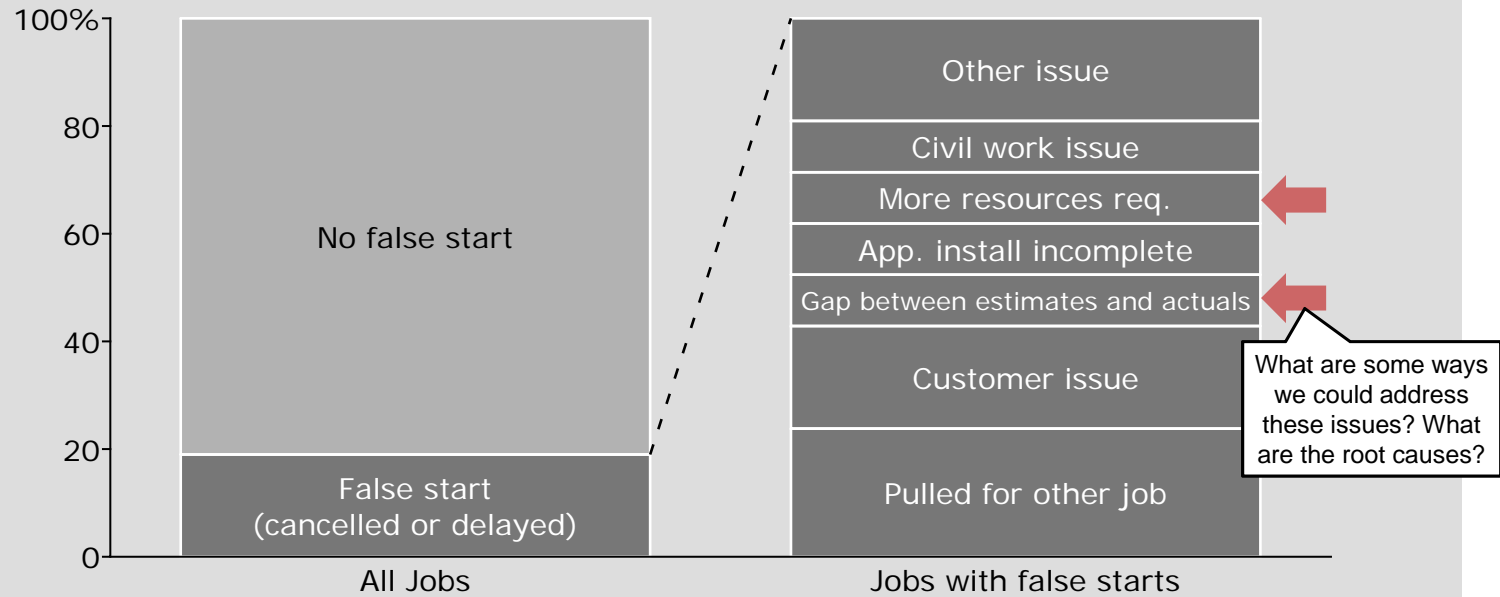
Design through Pilot

Implement and Scale

EXAMPLE

Potential data points: False Starts | Jobs with high hours or cost variance | Jobs with design or materials deviations

Jobs in an average day n=10 days (~100 jobs) observed



Utility Co. Example: Planning-Execution Alignment

COMMUNICATION BETWEEN PLANNING AND EXECUTION IMPROVED THROUGH QUARTERLY ALIGNMENT MEETING

Develop Hypothesis

Test with Data

Design through Pilot

Implement and Scale

AS-IS PROCESS

- Estimating feedback forms are included in job packages, but foremen rarely fill them out
- When they do, it can take months to get back to estimating and the feedback only goes to the estimator on the job
- There is limited broader formal learning or tracking of systemic issues

TO-BE PROCESS

- Jobs with significant difference between estimate and construction will be examined in a quarterly meeting between Construction, Planning, and other relevant groups
- This will help identify common issues and pinpoint areas for improvement to avoid similar issues in the future

Results: Improve job estimates/design and increase crew productivity

Utility Co. Example: Planning-Execution Alignment

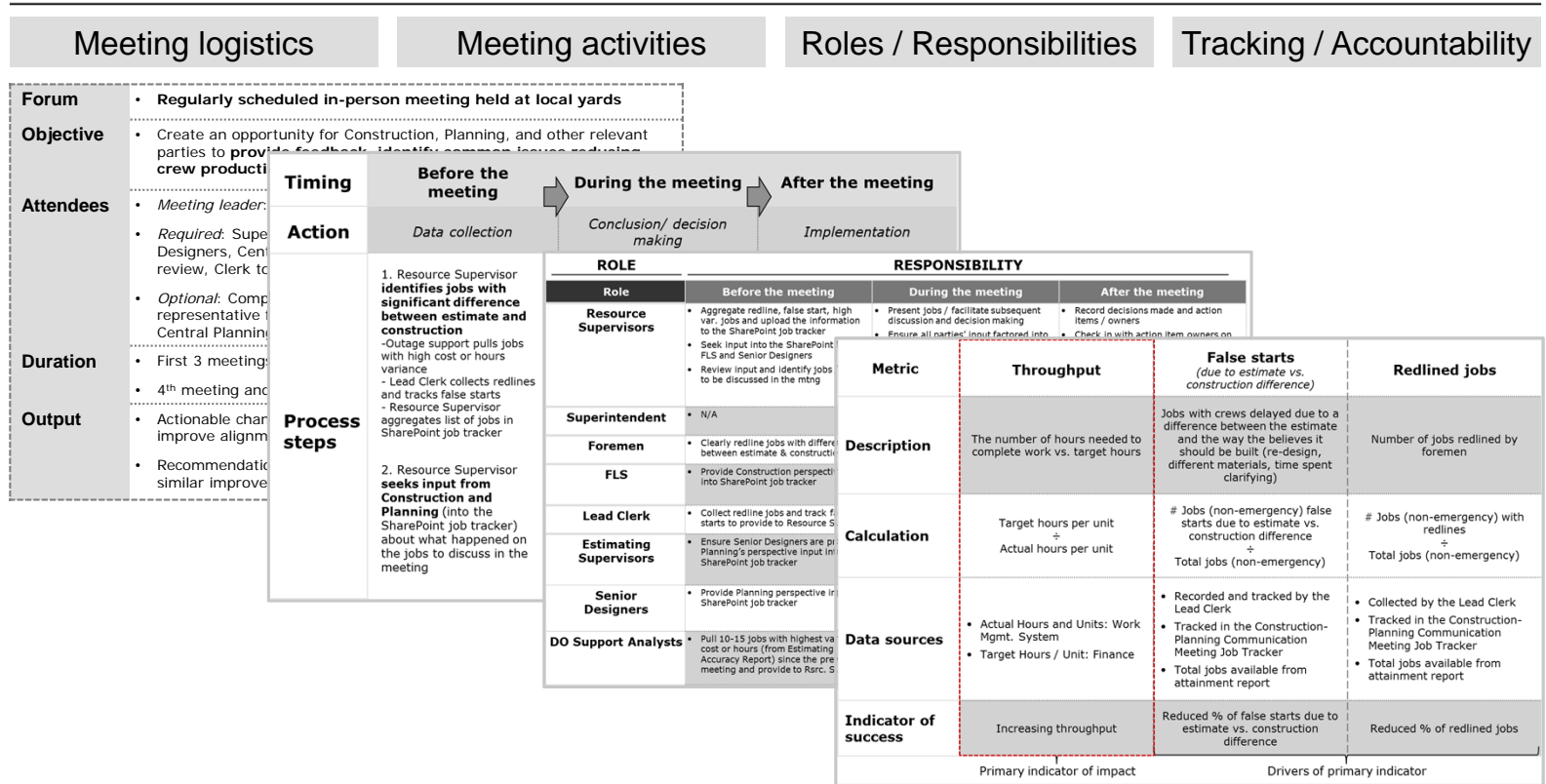
Develop Hypothesis

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PROCESS DEVELOPED AND REFINED IN PILOT



All of Glenn's Opportunities

Theme	Column1	O&M Low	O&M High	Capital Savings	Implementation Year	Time to Realize	Up Front Investment	Difficulty	Notes
Consolidate cost centers	Optimize compliance functions (potentially shared services)	300	500	0	2019	2 years	None	Easy/Medium	2 FTE
	Leverage CECONY by consolidating cost centers (GCC, GERC, Engineering, EH&S, Finance)	400	1000	0	TBD	TBD	None	Medium	
	Centralize permitting process	10	50	0	2019	1 year	None	Easy	
	CONSOLIDATE SUBTOTAL	710	1550	0					
Right Size	Optimize training program	200	500	0	2019	2 years	None	Easy/Medium	Savings and productivity
	Right size exercise for all O&R groups	1000	2000	0	2018	4 years	None		Optimize upstream processes
	Better systems for tracking equipment & usage	10	20	20	2021	1 year	TBD		
	Reduction to vehicle fleet	150	450	1000	2019	1 year	None	Medium	May be able to realize some benefit on sale of excessed vehicles.
	USS and CSS savings pass through	TBD	TBD	0	TBD	TBD	None		
	RIGHT SIZE SUBTOTAL	1360	2970	1020					
Re-design	Extended inspection intervals	100	300	0	2019	1 year	None	Easy/Hard	where we exceed mandate, need analytics
	Optimize scheduling to increase efficiency	150	450	0	2018	1 year	None	Easy	
	Restructure joint use agreements	100	600	0	2020	2 years	None	Hard	
	Take advantage of what's in CBA	50	100	0	2018	1 year	None		
	Change design operating ranges of gas distribution system	5	10	0	2020	1 year	None	Easy	
	Reinforce mounting of Pad Mount transformers	20	40	0	2018	1 year	TBD	Easy	Band after incident
	Optimize Rebuild/Rehab program	600	600	0	2019	5 years	8250	Easy	
	Apply value engineering lens to planning function	300	500	0	2019	2 years	None	Easy/Medium	Reduce write-offs
	Apply value assessment to bid checks			100	2019	1 year	None		
	Optimize O&M/Capital split between Co and Ctr.	350	750	-100	2019	1 year	None	Easy	Won't meet performance targets
	Expand geographic bundling for CAG work			100	In flight	1 year	None	Easy	In Progress
	Standardize how evidence for 3rd party damages is collected and who repairs	10	100	0	2018	1 year	None	Easy	Train the trainer
	For small new business jobs , 12 hours or less , requiring just a section of secondary or a transformer be held until the cut-in is received and both sent to the field to be done with one trip by the crew.			50	2018	1 year	None	Easy	Customer Satisfaction? Initially productivity
	Outsource Flagging	400	750	100	2021	1 year	None	Easy/Medium	start with contractors 3rd flagger
	DP specialty contractors for difficult locates	160	160	0	2018	1.5 years	None		
Red-lne Module of NRG	100	200	0	2020	1 year	TBD	Medium		
Mobile offices (fit vehicles to become mobile office)	20	50	0	2020	1 year	TBD		Spend capital to save space and increase efficiency	
	REDESIGN SUBTOTAL	2365	4610	250					
Other	Reorganize and combine Joint Use and LTS departments	150	300	0	2020	1 year	None		2 FTE and vehicle
	Replace High Maintenance GTO equipment	25	50	0	2020	1 year	TBD		
	Automate time reporting	150	300	0	2021	3 years	TBD		reduce clerical staff
	Data visibility, transparency, and analytics	10	50	0	2018	1 year	TBD		analytics is an enabler
	Negotiating SLAs to ensure consistent purchasing support	150	300	0	2019	1 year	None	Medium	
	Verizon to share costs of inspecting and treating wood poles.	0	100	0	2021	1 year	None		
	OTHER SUBTOTAL	485	1100	0					

Response to IR DPS-264 Supp has been redacted as CONFIDENTIAL
(Pages 63-104 redacted)

Company Name: Orange and Rockland Utilities Inc.
Case Description: Orange and Rockland Utilities, Inc. Electric & Gas Rate Case
Case: 18-E-0067; 18-G-0068

Response to DPS Interrogatories – Set DPS-14
Date of Response: 3/19/2018
Responding Witness: Accounting Panel

Question No. : 391

The response to pre-filed IR DPS-33 states that the Company “recently engaged a consultant to assist the Company in identifying and executing on cost efficiency efforts.”

Regarding this statement, provide the following information:

- a. An explanation of the program/process for which a consultant has been engaged;
- b. Documentation supporting the consultants work (i.e. an RFP, bid, contract);
- c. All internal documentation, presentations and other communication regarding this program/process;
- d. A timeline of the work product the consultant has proposed.

Response

- a. As discussed in the Company’s response to DPS-264, the Company has retained a consultant to assist in the Company’s Business Cost Optimization (“BCO”) initiative.
- b. Please see the attached documentation, several of which are confidential.
- c. Please see the Company’s response to DPS-264, including the various attachments to that response.
- d. Please see the Company’s response to DPS-264, including the various attachments to that response.

**CONSOLIDATED EDISON COMPANY OF NEW YORK AND ORANGE AND ROCKLAND
UTILITIES, INC.**

**Cost Reduction Program Request for Proposal
("RFP")**

May 2017



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1 Introduction

The purpose of this RFP is to solicit bids for a single vendor to provide professional services to design and implement a cost reduction program at Con Edison.

1.1 Background

Con Edison Company of NY (“Con Edison”), a regulated utility, provides electric service in New York City and most of Westchester County. The company provides steam and natural gas service in Manhattan, Bronx, and parts of Queens and Westchester. Located in the northwestern suburbs of New York City, Orange & Rockland Utilities (“O&R”), a regulated utility, provides electric and gas service to customers in seven counties in New York and northern New Jersey. Con Edison and O&R are subsidiaries of Consolidated Edison, Inc., one of the nation’s largest investor-owned energy Companies’, with approximately \$12 billion in annual revenues and \$48 billion in assets.

Con Edison and Orange & Rockland Utilities will here forth be referred to as “Con Edison” or “The Company”.

1.2 Project Overview

Con Edison is currently operating under a three-year rate agreement for its electric and gas services. We expect to seek approval for new rates in early 2019 for new rates effective in early 2020. As the Company continues to improve on its ability to manage costs, it is seeking a vendor that will provide an effective and carefully structured approach to: 1) complete an enterprise-wide assessment to identify viable short, medium and long term O&M and Capital cost reduction opportunities, including “quick hits” that can be implemented immediately; 2) identify a plan for implementing these opportunities; 3) develop a sustainable process for an ongoing cost reduction program that the company can manage independently, and 4) provide support for ongoing implementation efforts, as identified by the Company during the course of this program.

Con Edison is requesting specific information, descriptions of services, and price quotes as they relate to the above project.

2 Scope of Work

This section identifies the scope of this RFP. The following requirements listed are not intended to be exhaustive, but are the major areas of information that must be addressed by the respondent’s proposal. Respondent’s proposal should clearly identify any deviations from Scope in its Proposal, along with rationale for why modification(s) better achieve project goals.

2.1 General Approach/Milestones

Phase	Key Deliverable
1. Planning/Initiation	Project plan and schedule, identification of Con Edison resources needed
2. Cost Assessment	<p>Identification and quantification (by year) of all enterprise-wide: Short Term (“Quick Hits”), Medium Term, and Long Term O&M and Capital cost reduction opportunities.</p> <p>Identification of costs to achieving reductions and other non-quantifiable impacts to the organization.</p> <p>Determine the feasibility of implementation of the above while maintaining the culture of the company.</p> <p>Develop a prioritized list of recommended enterprise-wide cost reduction opportunities to formally pursue.</p>
3. Process and Approach Design	<p>Documented and approved sustainable process for an ongoing enterprise-wide cost reduction program.</p> <p>Alignment with organizations (i.e. Business Organizations, Finance, Accounting, etc.) within Con Edison to ensure viability of approach.</p>
4. Implementation Planning	<p>Schedule and plan for implementation of recommended cost reduction initiatives.</p> <p>Demonstrate implementation process on “Quick Hits” and provide tools needed to implement long term strategies.</p> <p>Provide guidance on structure of team to manage the full program implementation.</p> <p>Develop communications and change management plan.</p>
5. Project Management	Perform project management activities related to the effort.

The Company expects the respondent to provide a detailed project plan, including assumptions regarding respondent deliverables.

3 Respondent Qualifications

Contract will be awarded to Respondent who is able to demonstrate top-tier capabilities on cost reduction program development and implementation. Respondent will be evaluated based on the following criteria:

1. Relevant experience
2. Utility-specific experience
3. Availability of team
4. Strength of team
5. Project execution plan
6. Tools

7. Timeline
8. Progress tracking and reporting
9. Implementation plan and training

4 Instructions

4.1 General Guidelines

Contact by Respondent firms regarding this RFP with any Con Edison employee, contractor or consultant, other than the individual(s) designated herein, prior to finalization of a Purchase Agreement is prohibited and may constitute grounds for disqualification. Respondent firms will have adequate opportunity to obtain any reasonably necessary information.

Con Edison reserves the right to make changes to this RFP by issuance of one or more addenda or amendments and to distribute additional clarifying or supporting information relating thereto.

Con Edison may ask any or all respondent firms to elaborate or clarify specific points or portions of their submission. Clarification may take the form of written responses to questions or phone calls or in-person meetings for the purpose of discussing the RFP and/or responses thereto.

It is solely the responsibility of any respondent to ensure that all pertinent and required information is included in its submission. Failure to adhere to the described format and to include the required information could result in disqualification of responses to the RFP. Con Edison reserves the right to determine at its sole discretion whether a submission is incomplete or non-responsive.

If a respondent makes assumptions about the meaning or accuracy of information contained herein, the respondent should state the assumptions in the submission. If the respondent does not ask questions or clarify any assumptions, Con Edison will assume that the respondent agrees with and understand the requirements in the RFP.

While Con Edison has endeavored to provide accurate information to respondent firms, Con Edison makes no such warranty or representation of accuracy.

Con Edison reserves the right, but does not have the obligation, to verify all information provided by a respondent firm by any means it deems reasonable, including direct contact of prior clients of a respondent firm as well as its past employees. Respondent firms must agree to provide and release necessary authorizations for Con Edison to verify any of such respondent firm's previous work, except where it is contractually prohibited from doing so pursuant to customer agreements. Misstatements of experience and scope of prior projects may be grounds for disqualification from this RFP process.

Respondent firms will not issue any public statements or otherwise disclose any information concerning this RFP, this RFP process or their participation in the process without prior written approval of Con Edison.

This RFP shall not be construed in any manner to create an obligation on the part of Con Edison to enter into any contract, or to serve as a basis for any claim whatsoever for reimbursement of costs for efforts expended by respondent firms. Furthermore, the scope of this RFP may be revised at the option of Con Edison at any time, or this RFP may be withdrawn or canceled by Con Edison at any time. Con Edison shall not be obligated by any responses or by any statements or representations, whether oral or written, that may be made by the Firm or its employees, principals or agent and reserves the unqualified right to reject any or all submissions submitted hereunder for any reason whatsoever.

Any exceptions to the terms, conditions, provisions, and requirements herein must be specifically noted and explained by a respondent firm in its response to the RFP. Con Edison will assume that any response to this RFP expressly accepts all the RFP terms, conditions, provisions and requirements, except as expressly and specifically stated by a respondent firm in its response to the RFP.

Participating respondent firms agree to keep confidential all information provided by Con Edison in connection with this RFP.

It shall be the respondent's responsibility to advise Con Edison before the proposal response deadline of conflicting requirements or omissions.

4.2 RFP Schedule

Below is the expected schedule to be followed for this solicitation.

Milestone	Date*
RFP Issued	Monday, May 15, 2017
Last Day To Submit Clarification Questions	Tuesday, May 30, 2017
Respondent Proposals Due	Friday, June 9, 2017
Conduct On Site Meeting	Tuesday, June 20, 2017 – Friday, June 23, 2017
Conduct Pre-Award Meeting	Monday, July 17, 2017
Agreement(s) Signed	tbd
Work Begins	tbd

*This schedule is tentative and is subject to change based on the actual timing of events. Not all steps are mandatory and are subject to change.

4.3 Instructions to Respondent

The Respondent is instructed to prepare the proposal response in accordance with the instructions outlined in this section. Respondents are required to submit their bid response through the Con Edison Oracle system. Any limitation regarding the Respondent's ability to supply information requested in this RFP (or to support or perform a particular function or service) should be explicitly stated in the proposal response. Any partnering with third-party Respondent to support or perform a particular function or service must be explicitly stated.

4.3.1 Contact Information

All Respondents shall direct questions via email to Elena Gutu at gutue@coned.com. All questions and answers deemed essential for the viable submission of a bid response will be forwarded to all Respondents through the Oracle RFQ. The cutoff time period for all Respondent questions shall be indicated in the Oracle RFQ.

4.3.2 Proposal Response and Submittal Instructions

All proposals shall be submitted through the Con Edison Oracle RFQ system by the due date and time. Respondents who fail to submit their response by the due date and time will be locked out of the Oracle system, and unable to submit a response. Therefore, it is recommended Respondents upload their responses well in advance of the closing time, to avoid any potential issues that often occur due to Respondents' unfamiliarity with Oracle or other system constraints.

Con Edison shall not be responsible for late submissions. No Respondent may withdraw its proposal and said proposal will remain in effect for a period of one hundred eighty (180) calendar days from the bid due date.

4.3.3 Proposal Response

The response should include an un-priced proposal and a separate proposal including price. The unpriced proposal shall include all technical elements as referenced herein, however no pricing shall be included.

Please Note: The Oracle system is only capable of accepting individual documents no larger than 5MB in size. Respondents may find it necessary to split up large documents into smaller files due to these system constraints.

The technical proposal response for this RFP should be submitted in either a power point or word document and organized as follows:

Table 1: Proposal Format

Proposal Section	Proposal Section Title	RFP Description of Proposal Section Title
N/A	Cover Letter	4.3.3.1
1	Executive Summary	4.3.3.2
2	Proposal	4.3.3.3
3	Respondent Qualifications	4.3.3.4
Separate Document	Pricing Proposal	4.3.3.5

4.3.3.1 Cover Letter

The cover letter shall include the following:

- The legal name and address of Respondent;

- The name, title and telephone number of the individual authorized to negotiate and execute the Agreement;
- A signature of a person authorized to contractually bind the Respondent's organization;
A statement that the Respondent has read, understands, and agrees to all provisions of the RFP; or alternately, indicating exceptions will be taken to the RFP.

4.3.3.2 Executive Summary

This section is for the Respondent to provide an executive overview and summary of your general description of the key features of your solution. In addition, you should provide the following:

- **Company Profile** - Please provide a brief profile of your firm(s) including organizational history, size and dollar volume of work completed in the last five (5) years.
- **Other Relevant Information** - Any other relevant information that you deem appropriate and noteworthy that warrants why the respondent should be selected

4.3.3.3 Proposal

This is a response to the Scope of Work in Section 2. This section should include:

- Approach to identifying cost reduction opportunities
- Approach to identifying a sustainable cost reduction program, including a description of the tool(s) and framework(s) to be provided
- Approach to structuring and facilitating senior executive workshops
- Approach to ensuring there is buy in at all levels for this program
- Approach to measuring cost savings achieved and providing transparency on budgetary impact
- Identify any deviations from Scope in its Proposal, along with rationale for why modification(s) better achieve project goals.
- A detailed project plan and
- A detailed project schedule with highlighted milestones
- Identify the most significant challenges of this Project and how your firm (or firms, if a joint venture) proposes to address and resolve them. Identify the key reasons why your firm is most qualified for this assignment.

4.3.3.4 Respondent Qualifications

The Respondent should include:

- A general description of the company's qualifications relating to items in section 2 above.
- Examples of at least five (5) projects that best demonstrate your firm's experience, particularly with projects of similar size and complexity. For all projects, please provide the name and location of the project, the owner of the project and his or her contact information, and a brief description of the project, including size, value and duration, and any distinguishing characteristics of the project.
- Table of Organization for the proposed Project Management Team with resumes for all members of the Management Team. Please identify the proposed role and scope of responsibility for each Manager and the percentage of time dedicated to the Project. Please provide a description of the last three (3) projects each of these individuals worked on, identifying the role (title, scope of responsibility, reporting structure) each individual played and what firm they were affiliated with. If your firm is selected, there will be no substitution of the proposed Project Management Team without the permission of the Owner.

4.3.3.5 Separate Pricing Proposal

The Respondent should include separate proposal which includes price of project.

5 Terms and Conditions

Con Edison's Standard Terms and Conditions will be included in the Oracle RFQ. If the Respondent plans to take exception to any of these terms, they are to clearly indicate their intent to do so within the Pricing Proposal. For purposes of this proposal, the Respondent is not required to redline these T&C's as part of your initial bid response. However, please note that these terms shall be used as the basis for any T&C negotiations or award as the procurement process proceeds.

Partial Response to IR DPS-391 has been redacted as CONFIDENTIAL
(Pages 115-248 redacted)

Company Name: Orange and Rockland Utilities Inc.
Case Description: Orange and Rockland Utilities, Inc. Electric & Gas Rate Case
Case: 18-E-0067; 18-G-0068

Response to DPS Interrogatories – Set DPS-44
Date of Response: 4/30/2018
Responding Witness: Accounting Panel

Question No. : 641

1. Has the Company entered into or does the Company plan on entering into any IS partnership agreements between the end of the historic test year and the end of the Rate Year? If so, provide all information on any such agreements, including the agreement date, terms and copies of contracts.
2. Is the answer to #1 is yes, does the Company's filing reflect any cost savings associated with such a partnership agreement? If so, show how and where the savings are reflected and provide all calculations and workpapers supporting such savings.
3. If the answer to #2 is no, explain why no savings have been reflected. Additionally, provide the Company's estimate of such savings, including all calculations and workpapers supporting the amounts.

Response

1. Consolidated Edison Company of New York Inc. (CECONY) is currently considering a strategic partnership agreement with Oracle Corporation which would give Consolidated Edison Inc. and its subsidiaries access to Oracle's catalog of utility and business software and certain cloud applications at discounted prices. The proposed agreement would give the Company unlimited use of installed software, discounts on technical support and cloud subscription services, and credits for training and consulting services. The proposed agreement will facilitate portfolio standardization and contract simplification and also provide flexibility to shift from on-premise to cloud solutions for future projects. The fees under the proposed agreement cover on-premise software licenses in perpetuity, technical support fees for ten years, and cloud subscription fees for generally seven years.

The terms and conditions of the proposed agreement are still being negotiated. Accordingly, copies of the signed contracts are not available.

2. The Company's filing did not reflect any estimated effects of the proposed partnership agreement.
3. At the time of the Company's filing, contract negotiations were still at an early stage. In the event CECONY and Oracle Corporation execute a contract prior to May 15, 2018, the terms of the agreement will be addressed in the Company's rebuttal presentation.

The accounting and cost allocations across subsidiaries are yet to be finalized. Based on current estimates, the Company expects O&M savings in the range of \$200,000 in RY1, and incremental costs in the range of \$100,000 in RY2 and \$400,000 in RY3. The higher costs reflect the acquisition of software products which were not contemplated at the time of the rate filing, as well as a shift to cloud-based applications which are treated as O&M expense under US GAAP.

In the Company's rate filing, Oracle software support costs are generally included in EOE Intercompany Shared Services. The estimated allocation of the Strategic Partnership Agreement costs to O&R is based on expected product usage and the shared services percentage allocations.

Company Name: Orange and Rockland Utilities Inc.
Case Description: Orange and Rockland Utilities, Inc. Electric & Gas Rate Case
Case: 18-E-0067; 18-G-0068

Response to DPS Interrogatories – Set DPS-44
Date of Response: 5/18/2018
Responding Witness: Accounting Panel

Question No. : 641-Supp1

1. Has the Company entered into or does the Company plan on entering into any IS partnership agreements between the end of the historic test year and the end of the Rate Year? If so, provide all information on any such agreements, including the agreement date, terms and copies of contracts.
2. Is the answer to #1 is yes, does the Company's filing reflect any cost savings associated with such a partnership agreement? If so, show how and where the savings are reflected and provide all calculations and workpapers supporting such savings.
3. If the answer to #2 is no, explain why no savings have been reflected. Additionally, provide the Company's estimate of such savings, including all calculations and workpapers supporting the amounts.

Response

The Company wishes to supplement its response to subpart 3 of this interrogatory. Please see the calculations within Attachment DPS-44-641-Supp1 supporting the projected changes in the Company's O&M costs associated with the proposed Strategic Partnership Agreement.

Orange & Rockland Utilities~~Cases 18 E 0067 & 18 G 0068~~\$ in thousands Exhibit __ (AAM-1)
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	2018	2019	2020	2021
Estimated Oracle O&M expense included in rate filing as part of EOE Intercompany Shared Services	713.7	728.0	742.5	757.4
O&R's share of estimated Oracle O&M expense under proposed Strategic Partnership Agreement	493.4	498.4	868.3	1,145.5
(Savings)/Incremental cost	(220.3)	(229.6)	125.7	388.1

No.	List of products	Existing/ New	Type	Users
1	PeopleSoft Financials	Existing	On Premise	CEB
2	CECONY Outage Management	Existing	On Premise	CECONY
3	CC&B -Steam	Existing	On Premise	CECONY
4	Technology/databases	Existing	On Premise	CECONY,ORU
5	Primavera	Existing	On Premise	CECONY, ORU
6	Peoplesoft HR/Payroll	Existing	On Premise	CECONY, ORU,CET
7	Oracle Finance and Supply Chain ERP (Ebusiness Suite), BI and Hyperion	Existing	On Premise	CECONY, ORU,CET
8	O&R Outage Management System	Existing	On Premise	ORU
9	Opower DCX/First Fuel	Existing	Cloud	CECONY, ORU
10	Customer Care & Billing (CC&B)	New	On Premise	CECONY, ORU
11	MDM Wholesale Settlements	New	On Premise	CECONY, ORU
12	Advanced Distribution Management System - ADMS	New	On Premise	CECONY, ORU
13	Outage Analytics	New	On Premise	CECONY, ORU
14	Business Intelligence Updates	New	On Premise	CECONY, ORU,CET
15	Technology - Consolidation and Standardization	New	On Premise	CECONY
16	Enterprise Performance Management	New	Cloud	CECONY, ORU, CET, CEB
17	Oracle EBS (shift to cloud)	New	Cloud	CECONY, ORU,CET
18	Human Capital Management (shift of HR/payroll to cloud)	New	Cloud	CECONY, ORU,CET
19	Customer Experience Suite (CX)	New	Cloud	CECONY, ORU
20	Oracle Field Service Scheduling	New	Cloud	CECONY, ORU
21	Primavera (shift to cloud)	New	Cloud	CECONY, ORU
22	Opower BEE (Behavioral Efficiency) Expansion	New	Cloud	CECONY

Proposal 10-yr price allocated to product	Shared Service Allocations				
	CECONY	O&R	CET	CEBs	
1,711,839	0.00%	0.00%	0.00%	100.00%	
6,847,357	100.00%	0.00%	0.00%	0.00%	
855,920	100.00%	0.00%	0.00%	0.00%	
14,550,633	96%	3.78%	0.00%	0.00%	
1,078,459	92.45%	7.55%	0.00%	0.00%	
11,126,955	91.41%	7.46%	1.13%	0.00%	
48,564,879	91.41%	7.46%	1.13%	0.00%	
855,920	0.00%	100.00%	0.00%	0.00%	
21,866,742	92.45%	7.55%	0.00%	0.00%	
110,362,181	92.45%	7.55%	0.00%	0.00%	
16,282,945	92.45%	7.55%	0.00%	0.00%	
5,427,648	92.45%	7.55%	0.00%	0.00%	
1,809,216	92.45%	7.55%	0.00%	0.00%	
1,809,216	91.41%	7.46%	1.13%	0.00%	
45,230,402	100.00%	0.00%	0.00%	0.00%	
2,803,875	86.62%	7.08%	1.06%	5.23%	
8,048,017	91.41%	7.46%	1.13%	0.00%	
5,839,165	91.41%	7.46%	1.13%	0.00%	
5,665,660	92.45%	7.55%	0.00%	0.00%	
1,253,880	92.45%	7.55%	0.00%	0.00%	
9,656,520	92.45%	7.55%	0.00%	0.00%	
10,851,681	100.00%	0.00%	0.00%	0.00%	
332,500,000	92.83%	6.32%	0.27%	0.58%	

Each company's allocation **309,437,852** **20,320,466** **883,116** **1,858,566**

Notes:

- List of products reflect (1) Oracle products currently in use, (2) On-premise products from Oracle catalog expected to be implemented over 10 year period, (3) Cloud products specified in the draft Oracle partnership agreement documents.
- Users reflect the expected usage by company based on discussions and validations with IT department and business users at each company.
- Allocation of total price of proposal to each on-premise product is computed as follows: (1)pro-rated current pricing for existing products, (2)pro-rated expected quantities/usage and market prices for new on-premise products, and (3) specific cloud prices for cloud products per Oracle draft partnership agreement documents.
- Shared Services allocations are the current allocation percentages of shared services costs across CEI subsidiaries. For item 4, technology/databases, it is assumed that O&R uses 50% of these software applications, and therefore will get 50% of its shared services percentage allocation.
- Opower BEE is treated as a regulatory asset at CECONY. It is directly assigned to CECONY and excluded from calculation of the weighted average allocation percentages.

Strategic Agreement Proposal							
Year	License Fees	New Support	Existing Support	Total OnPrem	Cloud Credits	Cloud Services	Net Cloud
2018	\$ 2,610,760	\$ 391,614	\$ 630,608	\$ 3,632,982	\$ (117,375)	\$ 8,148,945	\$ 8,031,570
2019	\$ 18,275,319	\$ 3,132,912	\$ 5,329,039	\$ 26,737,269	\$ (1,052,815)	\$ 12,609,573	\$ 11,556,758
2020	\$ 27,412,978	\$ 7,244,858	\$ 7,329,039	\$ 41,986,876	\$ (2,245,615)	\$ 9,489,797	\$ 7,244,182
2021	\$ 24,671,680	\$ 9,371,677	\$ 10,329,039	\$ 44,372,396	\$ (2,331,865)	\$ 9,891,673	\$ 7,559,808
2022	\$ 19,737,344	\$ 9,371,677	\$ 10,329,039	\$ 39,438,060	\$ (3,501,354)	\$ 12,480,818	\$ 8,979,464
2023	\$ 11,842,407	\$ 9,371,677	\$ 10,329,039	\$ 31,543,123	\$ (4,938,189)	\$ 16,245,068	\$ 11,306,879
2024	\$ -	\$ 9,371,677	\$ 10,329,039	\$ 19,700,716	\$ (4,938,189)	\$ 16,245,068	\$ 11,306,879
2025	\$ -	\$ 9,371,677	\$ 10,329,039	\$ 19,700,716	\$ -	\$ -	\$ -
2026	\$ -	\$ 9,371,677	\$ 10,329,039	\$ 19,700,716	\$ -	\$ -	\$ -
2027	\$ -	\$ 9,371,677	\$ 10,329,039	\$ 19,700,716	\$ -	\$ -	\$ -
Total	\$ 104,550,488	\$ 76,371,121	\$ 85,591,961	\$ 266,513,570	\$ (19,125,402)	\$ 85,110,941	\$ 65,985,540

Proposed Accounting Treatment				
Capital		Reg Asset (CECONY only)*		Total
\$ 3,002,374	\$ 4,321,506	\$ 4,340,673	\$ 11,664,552	
\$ 20,326,574	\$ 11,456,444	\$ 6,511,009	\$ 38,294,028	
\$ 33,200,697	\$ 16,030,360		\$ 49,231,057	
\$ 31,700,259	\$ 20,231,945		\$ 51,932,204	
\$ 26,648,340	\$ 21,769,184		\$ 48,417,524	
\$ 11,842,407	\$ 31,007,595		\$ 42,850,001	
\$ -	\$ 31,007,595		\$ 31,007,595	
\$ -	\$ 19,700,716		\$ 19,700,716	
\$ -	\$ 19,700,716		\$ 19,700,716	
\$ -	\$ 19,700,716		\$ 19,700,716	
\$ -	\$ 19,700,716		\$ 19,700,716	
\$ -	\$ 19,700,716		\$ 19,700,716	
\$ 126,720,651	\$ 194,926,776	\$ 10,851,682	\$ 332,500,000	

Total Support	Capitalized support for new customer service system	Support - O&M
\$ 1,022,222	100.0% \$ 391,614	\$ 630,608
\$ 8,461,951	65.5% \$ 2,051,256	\$ 6,410,695
\$ 14,573,897	79.9% \$ 5,787,719	\$ 8,786,179
\$ 19,700,716	75.0% \$ 7,028,579	\$ 12,672,137
\$ 19,700,716	73.7% \$ 6,910,996	\$ 12,789,720
\$ 19,700,716	\$ -	\$ 19,700,716
\$ 19,700,716	\$ -	\$ 19,700,716
\$ 19,700,716	\$ -	\$ 19,700,716
\$ 19,700,716	\$ -	\$ 19,700,716
\$ 19,700,716	\$ -	\$ 19,700,716
\$ 19,700,716	\$ -	\$ 19,700,716
\$ 161,963,082	\$ 22,170,164	\$ 139,792,919

* Cloud services for Opower is treated as a regulatory asset at CECONY.

Strategic Agreement										
Year	CapEx	New Support	Existing Support	Total OnPrem	Cloud Credits	Cloud Services	Net Cloud	Capital	O&M	Total
2018	\$ 164,937	\$ 24,741	\$ 39,839	\$ 229,517	\$ (7,415)	\$ 240,592	\$ 233,176	\$ 189,678	\$ 273,016	\$ 462,694
2019	\$ 1,154,562	\$ 197,925	\$ 336,668	\$ 1,689,155	\$ (66,513)	\$ 385,283	\$ 318,770	\$ 1,284,152	\$ 723,773	\$ 2,007,925
2020	\$ 1,731,843	\$ 457,701	\$ 463,020	\$ 2,652,564	\$ (141,869)	\$ 599,528	\$ 457,659	\$ 2,097,488	\$ 1,012,735	\$ 3,110,223
2021	\$ 1,558,659	\$ 592,065	\$ 652,548	\$ 2,803,272	\$ (147,318)	\$ 624,917	\$ 477,599	\$ 2,002,697	\$ 1,278,174	\$ 3,280,871
2022	\$ 1,246,927	\$ 592,065	\$ 652,548	\$ 2,491,540	\$ (221,202)	\$ 788,489	\$ 567,287	\$ 1,683,537	\$ 1,375,291	\$ 3,058,827
2023	\$ 748,156	\$ 592,065	\$ 652,548	\$ 1,992,769	\$ (311,975)	\$ 1,026,299	\$ 714,324	\$ 748,156	\$ 1,958,937	\$ 2,707,093
2024	\$ -	\$ 592,065	\$ 652,548	\$ 1,244,613	\$ (311,975)	\$ 1,026,299	\$ 714,324	\$ -	\$ 1,958,937	\$ 1,958,937
2025	\$ -	\$ 592,065	\$ 652,548	\$ 1,244,613	\$ -	\$ -	\$ -	\$ -	\$ 1,244,613	\$ 1,244,613
2026	\$ -	\$ 592,065	\$ 652,548	\$ 1,244,613	\$ -	\$ -	\$ -	\$ -	\$ 1,244,613	\$ 1,244,613
2027	\$ -	\$ 592,065	\$ 652,548	\$ 1,244,613	\$ -	\$ -	\$ -	\$ -	\$ 1,244,613	\$ 1,244,613
2028	\$ -	\$ 592,065	\$ 652,548	\$ 1,244,613	\$ -	\$ -	\$ -	\$ -	\$ 1,244,613	\$ 1,244,613
Total	\$ 6,605,085	\$ 4,824,825	\$ 5,407,361	\$ 16,837,271	\$ (1,208,267)	\$ 4,691,406	\$ 3,483,139	\$ 8,005,708	\$ 12,314,701	\$ 20,320,410

Proposal O&M on a calendar year basis 7/1/18	
2018	136,508
2019	498,394
2020	868,254
2021	1,145,454
2022	1,326,732
2023	1,667,114
2024	1,958,937
2025	1,601,775
2026	1,244,613
2027	1,244,613
2028	1,263,282
	\$ 12,955,677

Total Support	Estimated Support capitalized during implementation period	Net Support
\$ 64,580	100.0% \$ 24,741	\$ 39,839
\$ 534,593	65.5% \$ 129,590	\$ 405,002
\$ 920,721	79.9% \$ 365,645	\$ 555,076
\$ 1,244,613	75.0% \$ 444,038	\$ 800,575
\$ 1,244,613	73.7% \$ 436,609	\$ 808,004
\$ 1,244,613	\$ -	\$ 1,244,613
\$ 1,244,613	\$ -	\$ 1,244,613
\$ 1,244,613	\$ -	\$ 1,244,613
\$ 1,244,613	\$ -	\$ 1,244,613
\$ 1,244,613	\$ -	\$ 1,244,613
\$ 1,244,613	\$ -	\$ 1,244,613
\$ 1,244,613	\$ -	\$ 1,244,613
\$ 1,244,613	\$ -	\$ 1,244,613
\$ 10,232,186	\$ 1,400,623	\$ 8,831,563

check \$ -
 check \$ (56)

Oracle Existing Support

CEI currently pays Oracle \$10.3m for annual support and maintenance. Below is an estimated breakdown by product and O&R's share of the cost.

Estimated allocations by product		Total CEI	O&R's current share (approx)
PeopleSoft Financials	2.00%	205,668	-
CECONY Outage Management	8.00%	822,671	-
CC&B -Steam	1.00%	102,834	-
Primavera	1.26%	129,571	9,783
Peoplesoft HR/Payroll	13.00%	1,336,841	99,742
Oracle Finance and Supply Chain ERP (Ebusiness Suite), BI and Hyperion	56.74%	5,834,797	435,334
O&R Outage Management System	1.00%	102,834	102,834
Other technology - databases*	17.00%	1,748,177	65,994
	100.00%	10,283,392	713,686

** These costs relate to Oracle technology/databases used for non-Oracle software applications. It is assumed that O&R uses 50% of these software applications, and therefore will get 50% of its shared services percentage allocation.*

Company Name: Orange and Rockland Utilities Inc.
Case Description: Orange and Rockland Utilities, Inc. Electric & Gas Rate Case
Case: 18-E-0067; 18-G-0068

Response to DPS Interrogatories – Set DSP-48
Date of Response: 5/16/2018
Responding Witness: Accounting Panel

Question No. : 661

The following questions reference the Company's responses to IRs DPS-4-264 and DPS-14-391.

1. Provide all invoices received to date from the Consultant retained by the Company related to the BCO Program ("the Consultant").
2. Were any expenses associated with the Consultant's work included in the historic test year? If so, provide the amount and where the costs were included.
3. If the answer to #2 is yes, were the expenses normalized out of the historic test year? If so, show where in the Company's filing the normalization was reflected. If not, explain why the Company expects the costs to recur in the Rate Year.
4. In the attachments to the Company's responses to IR DPS-4-264 and IR DPS-14-391, there are multiple references to the Company's commitment to a "flat O&M growth (0%)" from 2017-2022, including on slide 4 of attachment "180131-OR Working session" and on slide 4 of attachment "BCO Communications Materials." How did the Company reflect this commitment to flat O&M in its filing? If it did not reflect this commitment, explain why not.
5. Define "Departmental O&M," as shown on page 1 of attachment "BCO Communications Materials FAQ."
6. Provide departmental O&M for the 12 months ending 12/31/15, 12/31/16, 9/30/17 and 12/31/17, broken down by the cost categories shown on AP-E3 and AP-G3, Schedule 6.
7. Provide a detailed list of all cost savings initiatives the Company is pursuing. For each initiative, provide the companies that it is related to, the timeframe for implementation, the estimated savings and the benefit cost analysis to support the initiative.
8. Given the Company's commitment to "flat O&M growth" and the savings initiatives proposed in the BCO, provide the Company's best estimate of O&M savings for the RY, as well as calendar year 2020 and calendar year 2021. Include all workpapers and calculations supporting the estimate.

Response

1. There were no invoices received by O&R from Bain Consultants. Please see the confidential attachments labeled "CONFIDENTIAL - Bain Invoices – August 2017 – December 2017" and "CONFIDENTIAL Bain Invoices – January 2018 – March 2018" for all invoices received to date by Consolidated Edison Company of New York, Inc.

- (CECONY), from the Consultant related to the BCO Program. . Orange and Rockland will only be charged for its portion, which is not expected to be material
2. There were no consultant costs associated with the BCO initiative incurred in the historic test year.
 3. N/A
 4. The Company's commitment to flat O&M is aspirational and was not reflected in the filing because the BCO Program was in its early stage and it would have been premature to reflect any savings. All estimates to date continue to be aspirational, which need to be fully vetted, and individual initiatives need to be identified in order to realize the savings.
 5. Departmental O&M includes expenses for Operations, Customer Service, Corporate Affairs, Facilities, Information Technology and Support Operations.
 6. Please see the attachment labeled "Departmental O&M".
 7. Please see the response to subpart 4 above and the materials that have been provided pursuant to DPS-4-264.
 8. Please see the response to DPS-4-264. The Company has not identified savings associated with individual initiatives or a schedule for achieving these potential savings. At a high level, in order for the Company to achieve flat O&M growth, the Company would have to absorb its expenses that are subject to escalation (*e.g.*, labor and material) in addition to program changes required as the result of increased work activity. Based on the Departmental O&M amounts from item #6 above, the potential savings for electric and gas are \$1.7 million and \$0.8 million, respectively. These savings amounts are based on what would be required to keep O&M expenses flat given an estimated two percent escalation rate applied to the twelve months ended December 31, 2017

<u>EOE</u>	<u>2015</u>	<u>2016</u>	<u>TME 9/30/17</u>	<u>TME 12/31/17</u>
Company Labor - Corporate & Shared Services	5,510,766	5,679,848	6,096,709	6,353,647
Company Labor - Customer Operations	13,038,427	13,495,520	13,758,549	13,813,986
Company Labor - Electric/Gas Operations	23,095,908	24,326,720	25,689,962	25,292,822
Company Labor - Engineering	3,147,839	3,521,356	4,167,001	4,252,285
Company Labor - Substation Operations	4,511,315	2,930,720	3,837,791	3,927,875
Employee Welfare Expense		55,615	97,014	97,330
Facilities	520,650	707,737	843,750	662,333
Information Technology	3,772,487	4,394,109	4,550,696	4,275,416
Informational Advertising	211,375	396,140	353,606	383,189
Ops - Corporate & Shared Services	1,025,772	1,166,856	1,449,279	1,233,115
Ops - Customer Operations	3,128,363	3,754,141	4,389,332	4,155,407
Ops - Electric/Gas Operations	17,808,122	19,722,847	17,452,906	17,546,921
Ops - Engineering	1,025,023	1,857,740	1,487,869	1,249,349
Ops - Substation Operations	1,341,871	1,713,521	2,088,483	1,823,329
Rent	117,129	189,647	31,589	176,140
Research and Development	488,662	623,485	525,710	612,789
Uncollectible Reserve - Customer	2,706,952	1,956,561	1,832,264	1,693,572
Uncollectible Reserve - Sundry	256,006	458,876	611,364	564,873
Grand Total	81,706,667	86,951,441	89,263,875	88,114,379

<u>EOE</u>	<u>2015</u>	<u>2016</u>	<u>TME 9/30/17</u>	<u>TME 12/31/17</u>
Company Labor - Corporate & Shared Services	2,956,691	2,597,538	2,923,169	3,083,196
Company Labor - Customer Operations	4,239,305	4,477,021	4,605,582	4,688,211
Company Labor - Electric/Gas Operations	13,970,603	16,017,751	16,862,162	16,713,884
Company Labor - Engineering	1,626,061	1,694,736	1,767,492	1,671,122
Company Labor - Substation Operations	4	4	7	55
Employee Welfare Expense		22,605	41,388	42,538
Facilities	216,330	292,672	348,854	273,875
Fuel and Purchased Power	125			
Information Technology	1,559,113	1,816,385	1,881,287	1,767,617
Informational Advertising	139,336	183,599	120,062	143,757
Ops - Corporate & Shared Services	388,493	453,690	498,804	466,937
Ops - Customer Operations	1,092,321	1,365,419	1,502,518	1,448,423
Ops - Electric/Gas Operations	5,164,509	7,891,964	8,506,876	8,414,566
Ops - Engineering	497,535	856,474	1,033,038	952,696
Ops - Substation Operations	2,504	1,699	2,863	14,893
Rent	32,767	32,857	29,992	29,352
Research and Development	(243,843)	674,626	272,460	777,433
Uncollectible Reserve - Customer	1,154,623	699,096	682,462	645,616
Uncollectible Reserve - Sundry	105,840	189,712	252,755	233,534
Grand Total	32,902,317	39,267,851	41,331,771	41,367,705

Partial Response to IR DPS-661 has been redacted as CONFIDENTIAL
(Pages 261-268 redacted)