



# Transformation & Restructuring of the Puerto Rico Electric Power Authority

*April 29, 2015*

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## Discussion Topics

▸ Introduction– Lisa Donahue

▸ PREPA Background

▸ CRO Mandate

▸ PREPA Challenges

▸ PREPA Initiatives

▸ Fuel Discussion

▸ Regulatory/Environmental Compliance

▸ Vision For PREPA



## Introduction

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- Puerto Rico Electric Power Authority's (PREPA) Chief Restructuring Officer – selected by PREPA Governing Board in September 2014
- Managing Director and global leader of the Turnaround and Restructuring Practice at AlixPartners, a global business and advisory firm
- Prior to appointment as PREPA's Chief Restructuring Officer helped turn around a number of other power companies including:
  - ❖ Calpine Corp. – an independent power producer operating in Texas, California, Canada and Mexico
  - ❖ Atlantic Power Corp. – a publicly traded power and infrastructure company
  - ❖ SemGroup, L.P. – a mid-stream oil & gas, pipeline, storage and commodity trading company
- Each company faces different challenges – All assignments have one thing in common – Transform the business operation and restructure the company's financial condition to secure a self sustaining company.
- Outlay the current status of PREPA, the transformation and the ultimate recovery plan





## PREPA Background

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- Prior to CRO arrival, PREPA had reached a financial crisis in the summer of 2014
  - This crisis did not arise overnight - factors that led to the crisis:
    - ❖ Combination of recurring negative cash flows
    - ❖ Ongoing recession
    - ❖ Outdated generation facilities
    - ❖ Substantial debt maturities
    - ❖ Inability to access the capital markets – which created a severe financial and liquidity crisis that threatened PREPA’s ability to operate, including its ability to continue purchasing fuel to run its power plants and provide electricity to Puerto Rico
  - Facing a deadline to pay nearly \$700 million to fuel line lenders - in mid-August PREPA entered into forbearance agreements with its fuel line lenders and other key financial creditors, including insurers and bondholders controlling more than 60% of PREPA’s \$8.3 billion of outstanding power revenue bonds (the “Forbearing Creditors”)
  - The Forbearance Agreements were the first step in addressing PREPA’s financial situation by:
    - ❖ Setting a framework for a consensual path towards PREPA’s restructuring
    - ❖ Proving operational flexibility by permitting PREPA to use construction reserve funds for operating purposes
    - ❖ Increasing PREPA’s liquidity by removing any obligation to make sinking fund payments totaling nearly \$45 million each month
  - The breathing space afforded under the Forbearance Agreements has allowed PREPA to begin the work necessary to turnaround its operations and develop a new business and operating plan
  - Since the Forbearance Agreements were originally entered into in August 2014, they have been extended through April 30th and we expect they will be extended again
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## CRO Mandate

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- Selected by PREPA's governing board as chief restructuring officer in September 2014 after a robust search process, including interviewing several potential candidates
- Direct report to the Board and working alongside PREPA's management and serve at the discretion of the Board
- The CRO is broadly responsible for developing and implementing PREPA's financial and operational restructuring, on terms approved by PREPA's Governing Board
- As part of achieving a financial and operational restructuring, these are some of the CRO's specific responsibilities:
  - ❖ Developing a business plan
  - ❖ Implementing revenue improvement and cost reduction plans
  - ❖ Overseeing and implementing cash and liquidity management activities
  - ❖ Improving PREPA's ability to analyze, track and collect accounts receivable
  - ❖ Improving PREPA's capital expenditure plan
  - ❖ Developing a plan to improve PREPA's generation, transmission, distribution and other operations



## PREPA Challenges

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- Once a crown jewel of Puerto Rico, PREPA's situation has deteriorated over the years to become one of the island's most challenged public corporations
- These challenges include:
  - ❖ Lack of institutionalized processes and procedures
  - ❖ Outdated systems and information technology ("IT")
  - ❖ Frequent changes of employee positions and responsibilities with each electoral cycle -staffing decisions are made often without regard for prior experience or expertise given the nature of PREPA's role in the political process
  - ❖ Customer collection history is poor - due to unreliable and outdated billing systems and because PREPA does not take sufficient actions to collect
  - ❖ Theft of power remains high and costly
  - ❖ Generation infrastructure is old and outdated - results in an unusually high rate of forced outages and reliance on expensive fuel



## PREPA Plant – Costa Sur Built 1962-1973





## PREPA Plant – Palo Seco Built 1960-1970





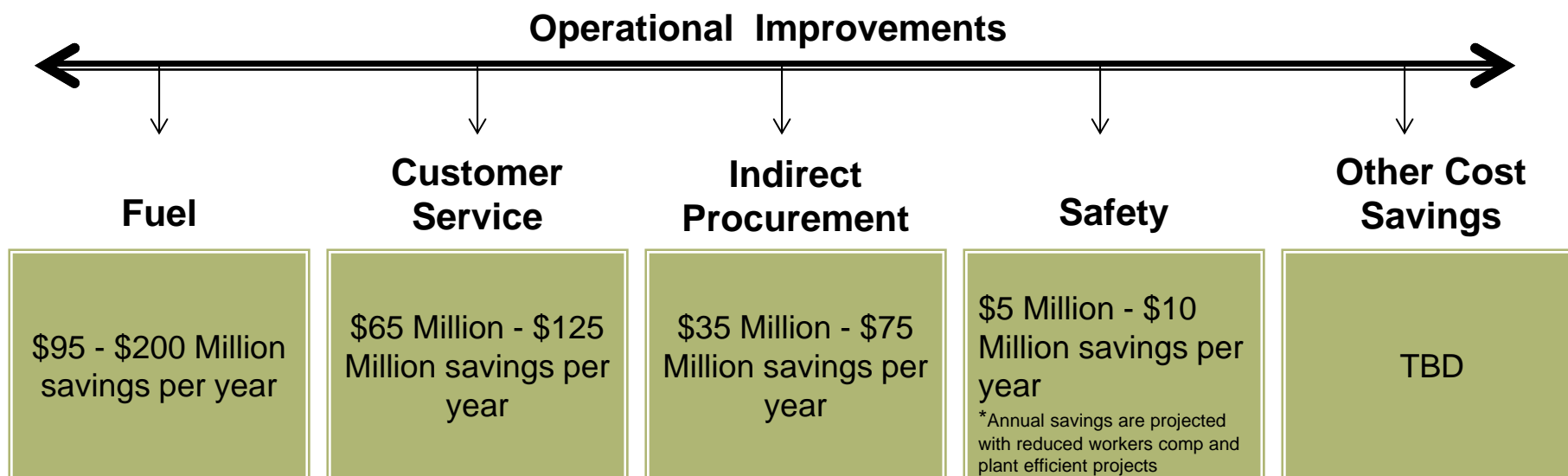
## PREPA Challenges Continued

- ❖ Inventory controls are below industry standards
- ❖ Procurement practices focus on a large number of small vendors, with payments to over 14,000 entities in fiscal year 2014
- ❖ Three-quarters of PREPA's vehicle fleet is technically obsolete - PREPA's maintenance and repair shops are focused on breakdowns and as a result routinely fall behind on preventative maintenance
- ❖ PREPA has limited visibility into fleet movements because it has no central tracking or performance measures
- ❖ PREPA's IT systems are not integrated - resulting in duplicate data, poor data utilization, and poor data quality
- ❖ PREPA's customer service infrastructure is disorganized and ineffective
- ❖ Safety remains a serious issue





## PREPA Initiatives

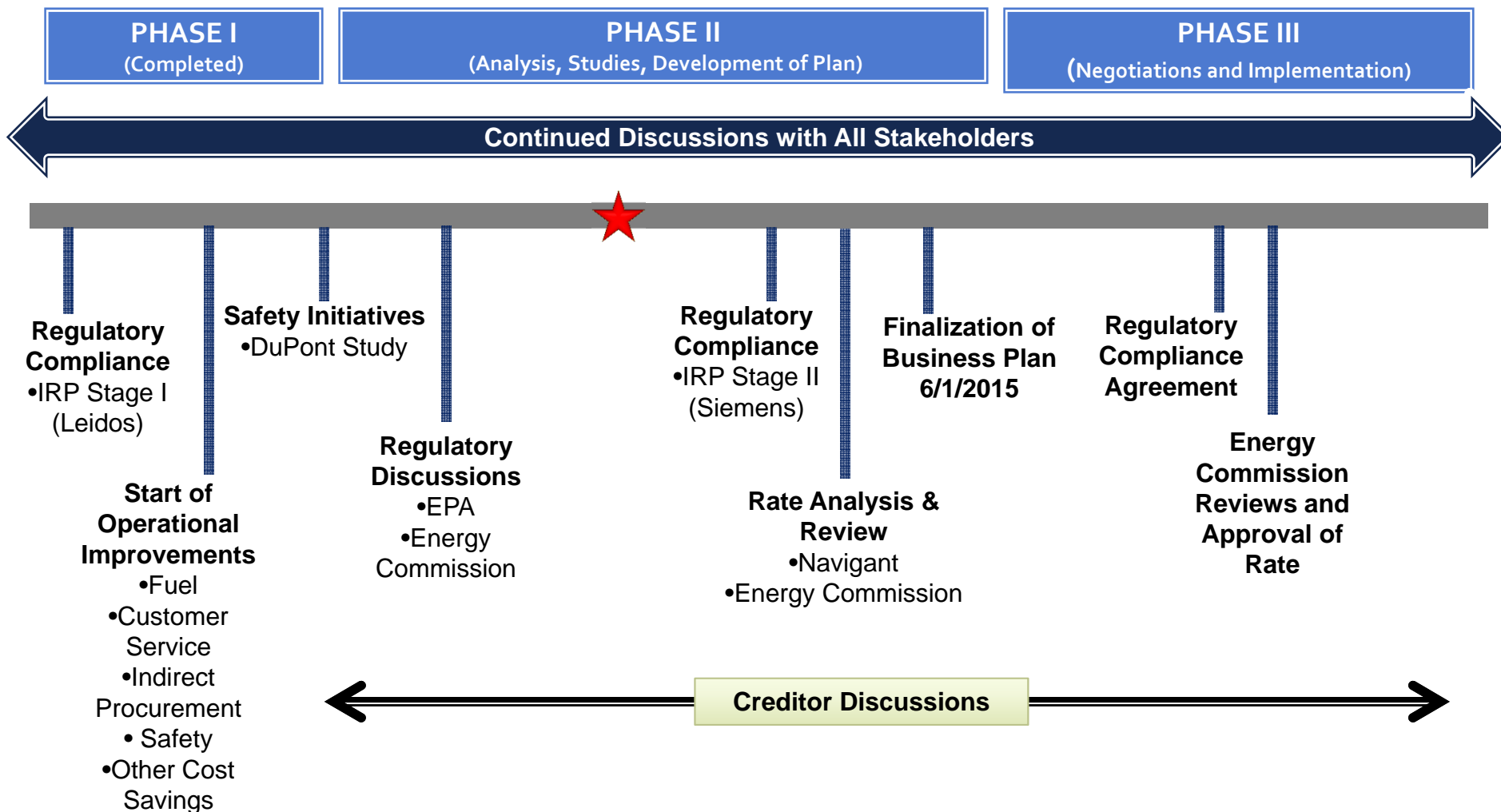


- In addition to annual savings of \$200-400 million the team is also executing on initiatives generating an incremental \$200-300 million of one time savings

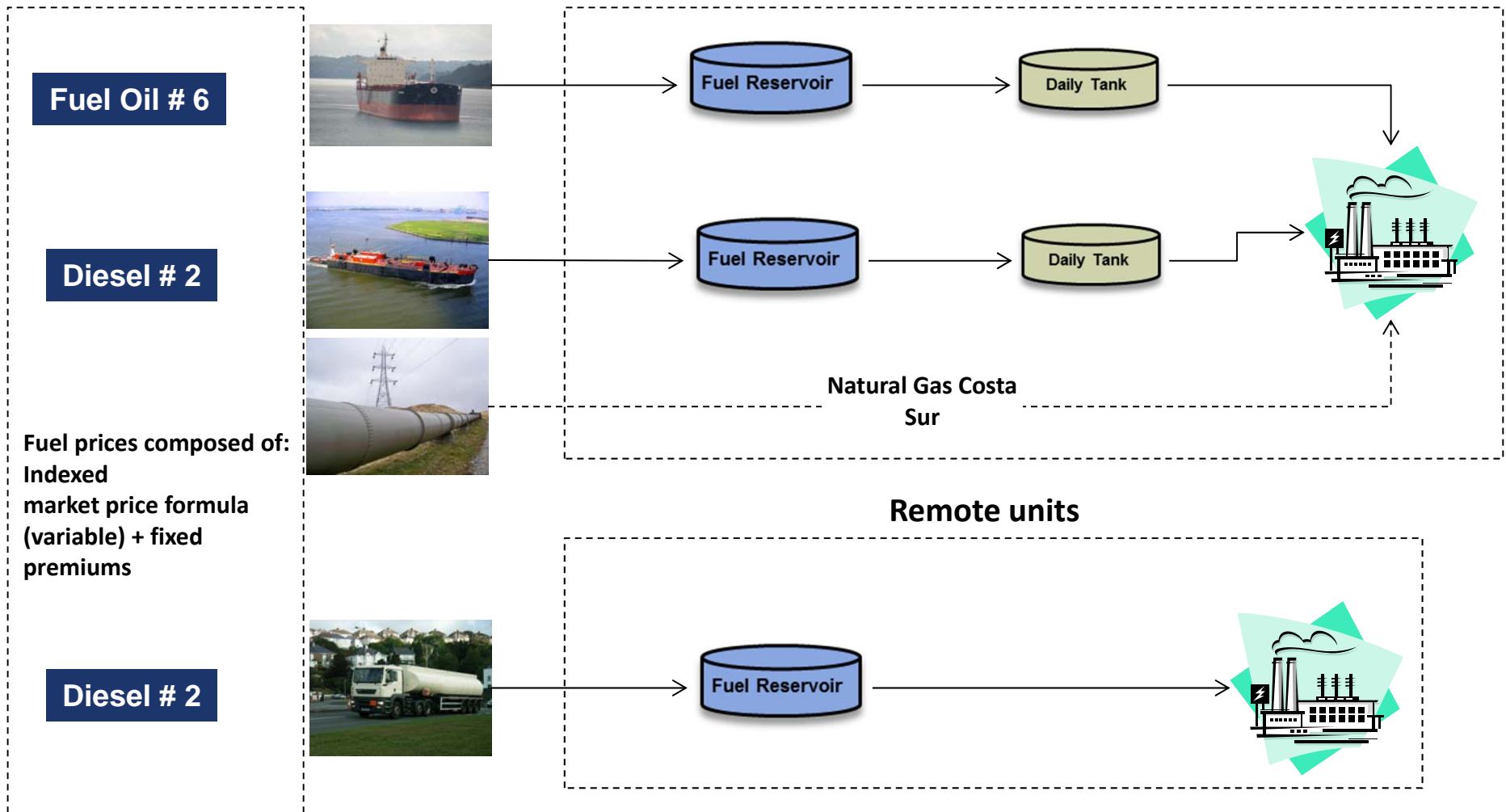
**Initiatives generating benefits of approximately \$130 million have been implemented to date**



## Transformation of PREPA: Milestones and Timeline



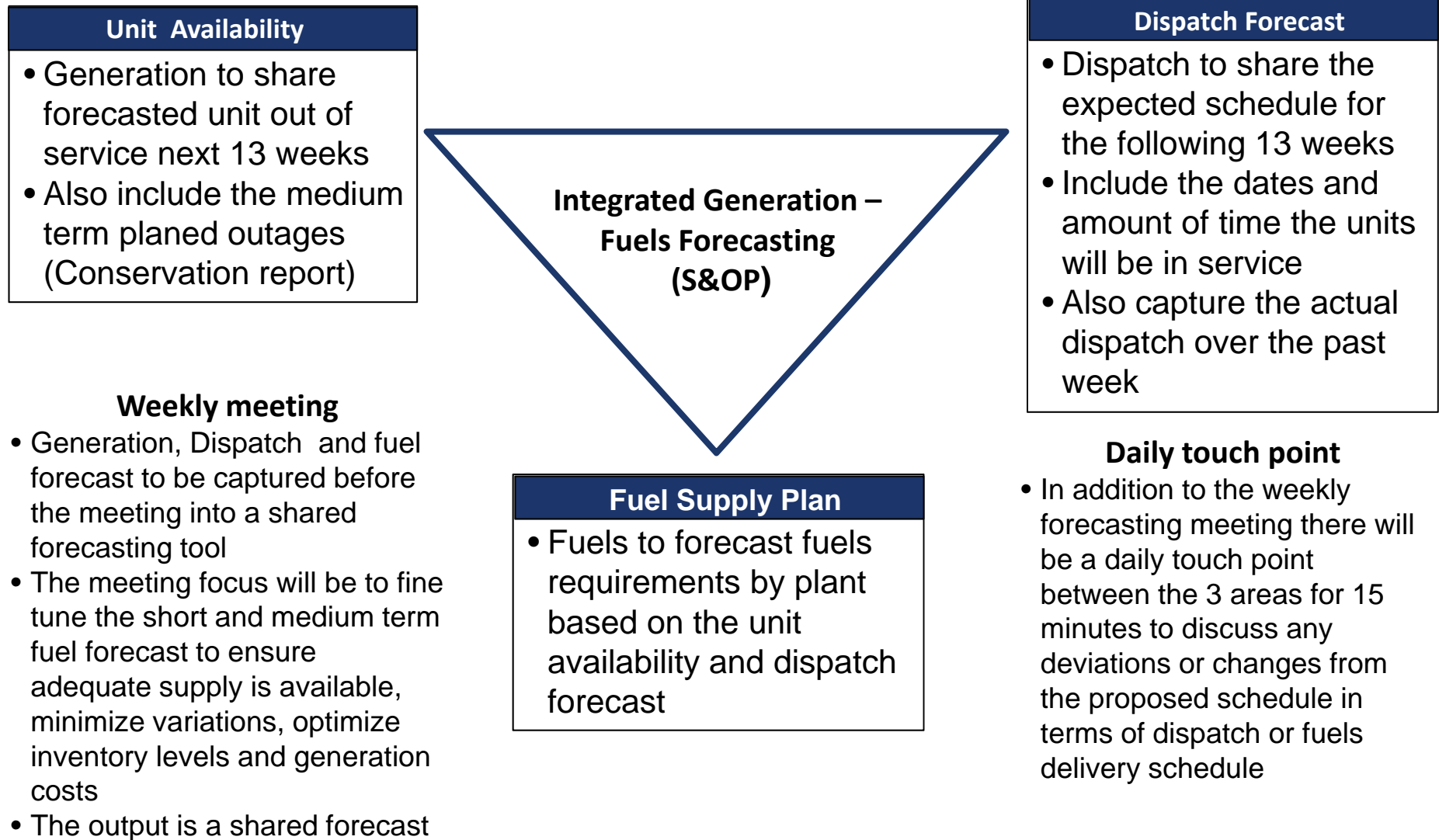
# The Fuel Supply Chain Varies Across the Different Power Units







## Proposed Generation - Fuels Forecasting Approach





# Fuel Forecasting Tool Has Been In Use Since October

## Extract dispatch model by unit

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DAILY LOG												
YEAR: 2014 MONTH: 10 DAY: 5 WDAY: 1												
UNIT	CAP	MW	MBTU	HRATE	FUEL COST	LOW LIM	LOW REG	HGH REG	HGH LIM	HRS	SMWH	
CC S JUAN 5	220	4,776.62	36,092.71	7,556.11	804,289.90	100	140	200	220	24	\$168.	
S JUAN 7	100	2,007.48	21,824.93	10,871.78	344,113.60	50	70	90	100	24	\$171.	
S JUAN 8	100	2,040.00	20,150.24	9,877.56	317,709.00	50	70	90	100	24	\$155.	
S JUAN 9	100	1,923.64	19,404.79	10,087.51	305,955.30	50	70	90	100	24	\$159.	
P SECO 1	85	1,320.00	13,579.11	10,287.20	215,228.90	40	40	55	55	24	\$163.	
P SECO 2	85	1,664.91	16,810.88	10,097.12	266,452.60	40	40	78	78	24	\$160.	
AGUIRRE 2	450	6,038.87	63,707.78	10,549.61	1,039,392.00	180	230	390	450	24	\$172.	
ECO 1-2	530	10,868.21	110,242.50	10,143.58	519,760.20	180	254	507	507	24	\$47.	
AES	510	5,448.00	53,383.51	9,798.73	309,298.80	180	200	227	227	24	\$56.	
C CYCLE GT 1-1	55	150.00	1,964.00	13,093.37	43,494.87	50	50	50	50	3	\$289.	
AERO MAYA 1	55	275.00	2,829.23	10,288.13	63,705.92	55	55	55	55	5	\$231.	
AERO MAYA 2	55	81.00	979.05	12,087.15	22,045.47	27	27	27	27	3	\$272.	
AERO MAYA 3	55	275.00	2,827.67	10,282.44	63,670.64	55	55	55	55	5	\$231.	
AERO MAYA 4	55	220.00	2,279.78	10,362.65	51,333.85	55	55	55	55	4	\$233.	
SOUCONS 75%	410	9,077.52	88,194.43	9,715.69	1,352,285.00	180	230	390	410	24	\$148.	
SOUCON6 75%	410	9,301.89	89,633.66	9,636.06	1,374,353.00	180	230	390	410	24	\$147.	

## Generate fuel consumption by unit

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Plant	Aguirre	Aguirre	Palo Seco	Palo Seco	San Juan	San Juan	San Juan
Unit	AGUIRR E 1	AGUIRR E 2	P SECO 1	P SECO 2	S JUAN 7	S JUAN 8	S JUAN 9
Fuel Consumption per HR	# 6	# 6	# 6	# 6	# 6	# 6	# 6
5-Oct	0	12,240	2,940	2,940	3,298	3,298	3,298
6-Oct	0	12,240	2,940	2,940	3,298	3,298	3,298
7-Oct	0	12,240	2,940	2,940	3,298	3,298	3,298
8-Oct	0	12,240	2,940	2,940	3,298	3,298	3,298
9-Oct	0	12,240	2,940	2,940	3,298	3,298	3,298
10-Oct	0	12,240	2,940	2,940	3,298	3,298	3,298
11-Oct	0	12,240	2,940	2,940	3,298	3,298	3,298

## Generate fuel consumption by Plant

3

Fuel Oil (# 6)

Date	Aguirre	Palo Seco	San Juan	Costa Sur	Sub Total
5-Oct	12,240	5,880	9,893	6,665	34,678
6-Oct	12,240	5,880	9,893	6,665	34,678
7-Oct	12,240	5,880	9,893	6,665	34,678
8-Oct	12,240	5,880	9,893	6,665	34,678
9-Oct	12,240	5,880	9,893	6,665	34,678
10-Oct	12,240	5,880	9,893	6,665	34,678
11-Oct	12,240	5,880	9,893	6,665	34,678
12-Oct	12,240	5,880	9,893	6,665	34,678
13-Oct	12,240	5,880	9,893	6,665	34,678
14-Oct	12,240	5,880	9,893	6,665	34,678
15-Oct	12,240	5,880	9,893	6,665	34,678
16-Oct	12,240	5,880	9,893	6,665	34,678
17-Oct	12,240	5,880	9,893	6,665	34,678

## Generate fuel forecast with minimum inventory levels and target batch sizes

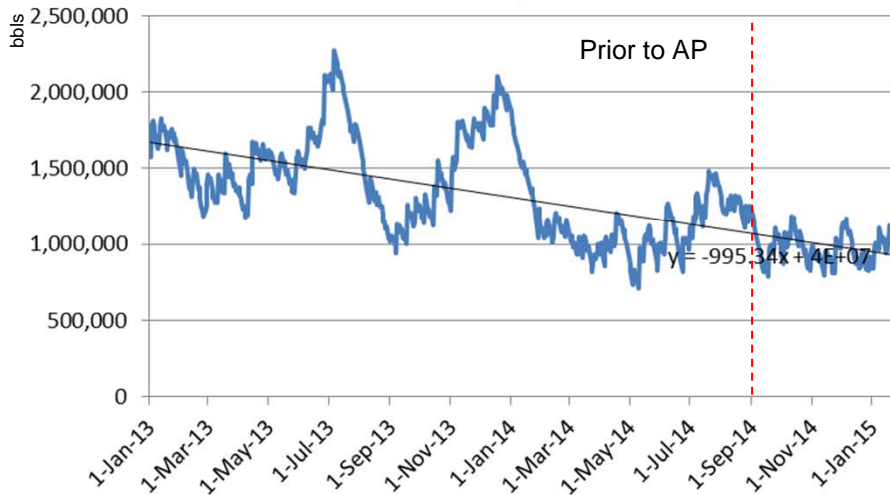
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Date	Aguirre				Palo Seco			
	Cons. Forecast	Inventory Balance	Inv. Days	Suggeste d order	Cons. Forecast	Inventory Balance	Inv. Days	Suggeste d Order
5-Oct	12,240	287,760	24	0	5,880	94,120	16	0
6-Oct	12,240	275,520	23	0	5,880	88,240	15	0
7-Oct	12,240	263,280	22	0	5,880	82,360	14	80000
8-Oct	12,240	251,040	21	0	5,880	156,480	27	0
9-Oct	12,240	238,800	20	0	5,880	150,600	26	0
10-Oct	12,240	226,560	19	0	5,880	144,720	25	0
11-Oct	12,240	214,320	18	0	5,880	138,840	24	0
12-Oct	12,240	202,080	17	0	5,880	132,960	23	0
13-Oct	12,240	189,840	16	0	5,880	127,080	22	0
14-Oct	12,240	177,600	15	68000	5,880	121,200	21	0
15-Oct	12,240	233,360	19	0	5,880	115,320	20	0
16-Oct	12,240	221,120	17	0	5,880	109,440	19	0
17-Oct	12,240	208,880	15	0	5,880	103,560	18	0
18-Oct	12,240	196,640	13	68000	5,880	97,680	17	0

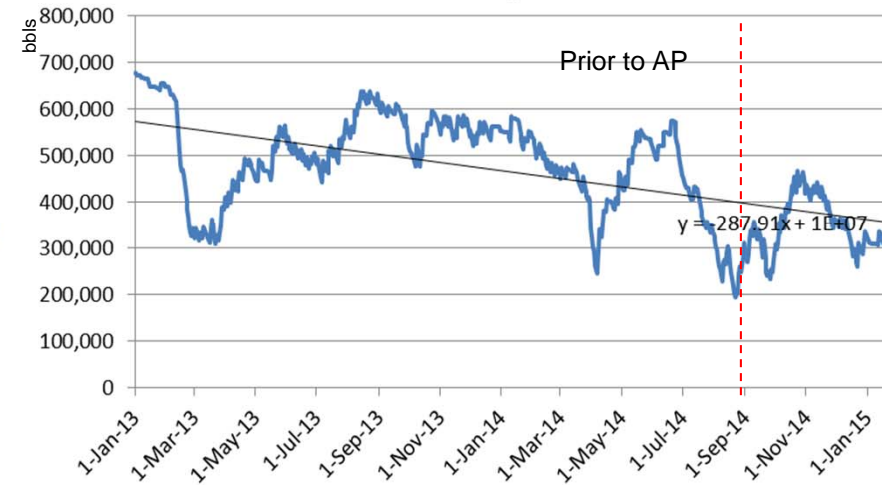


## Save \$3-4M in Annual Cost of Capital And A One Time \$36M by Maintaining Inventory levels the LTM August 2014 Average Inventory Levels

### Total Inventory Levels #6



### Total Inventory Levels #2



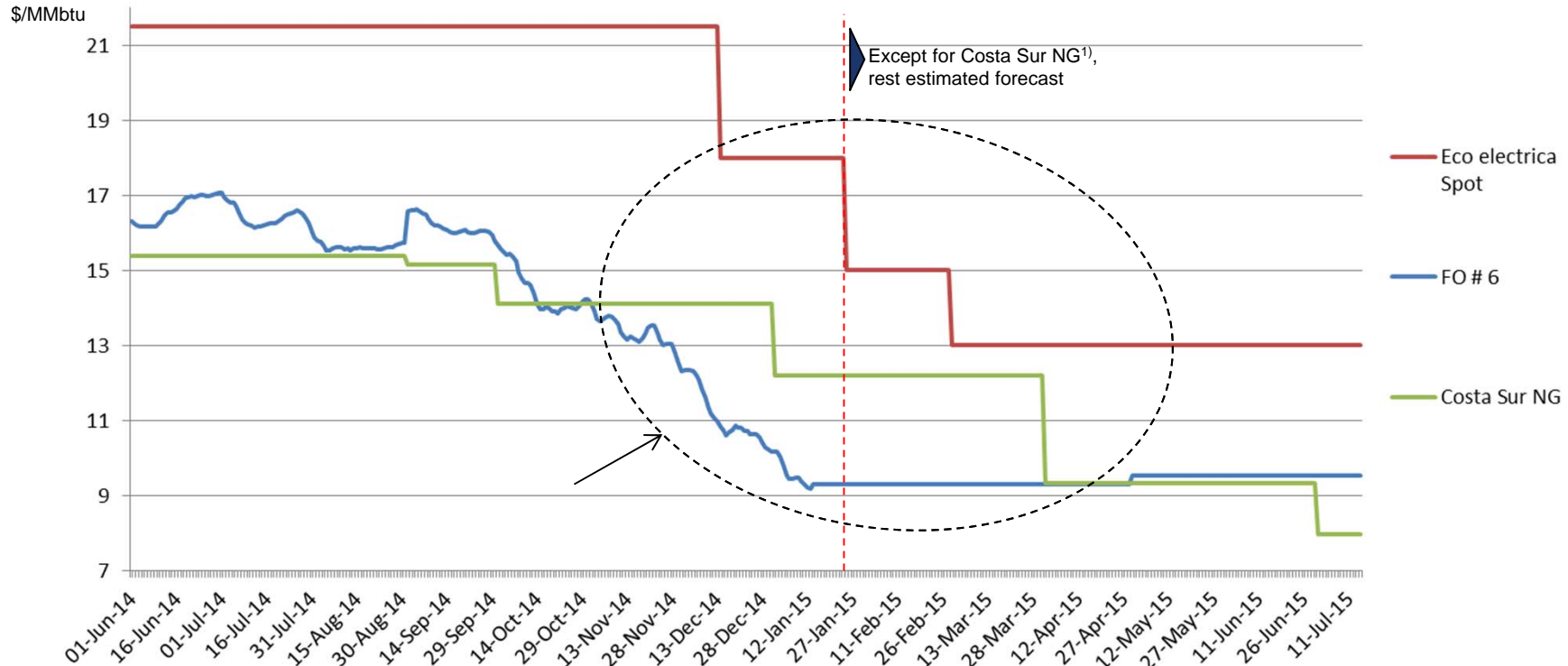
	Total bbls	Usable bbls	Cost/bbl	Average cost	Annual cost of capital @ 10%
LTM Aug 14	1,257,902	940,283	\$90	\$113,211,220	\$11,321,122
2014 Sept-Jan 2015	972,896	682,364	\$90	\$87,560,628	\$8,756,063
Target Below	1,000,000	700,000	\$90	\$90,000,000	\$9,000,000
				<b>Estimate Sav.</b>	<b>~\$2.5M</b>

	Total bbls	Usable bbls	Cost/bbl	Average cost	Annual cost of capital @ 10%
LTM Aug 2014	482,010	409,566	\$105	\$50,611,014	\$5,061,101
2014 Sept-Nov	366,712	299,529	\$105	\$38,504,808	\$3,850,481
Target Below	367,000	300,000	\$105	\$38,535,000	\$3,853,500
				<b>Estimate Sav.</b>	<b>~\$1.2M</b>

Maintain inventory levels aligned with expected units consumption  
Includes a one time reduction of \$36M



## Fuel Market Changes Have Created Significant Cost Arbitrage Between the Different Fuel Sources



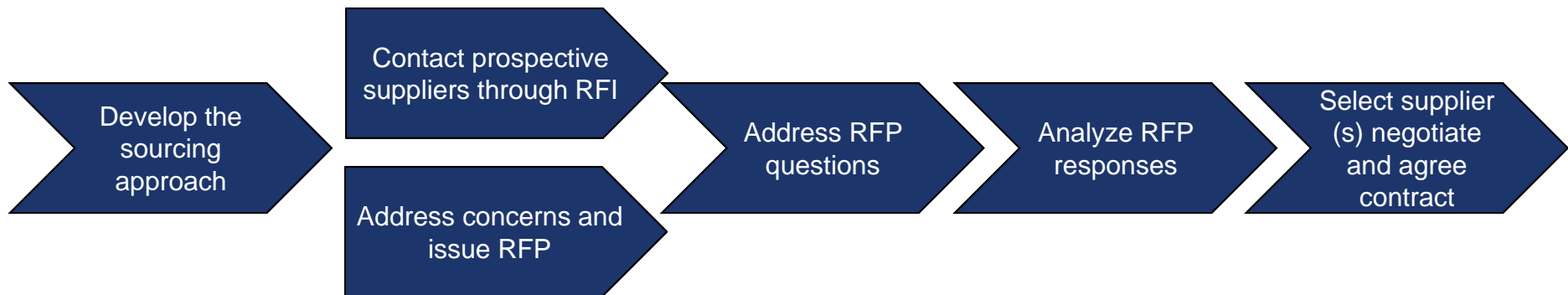
- Fuel arbitrage is opportunistic but it can be capitalized given the way the indexes behave in the market place

1) Costa Sur NG pricing is until March 31<sup>st</sup>, 2015





## Sourcing Strategy



- Develop sourcing approach that delivers the key objectives
- Have legal review of sourcing approach and alignment on required timelines
- Develop should cost models to estimate target adder levels

- Identify and proactively reach out to prospective suppliers prior to issuing RFP to give a heads up about the sourcing process about to start so they are prepared and any specific concerns can be addressed
- Develop and issue RFP leveraging prior RFP documents

- Proactively contact suppliers to address any technical or commercial questions
- Continuously update a FAQ document send to the vendors based on the vendor calls
- Vendor questions and answers to be documented

- RFP responses privately analyzed by an internal committee
- Give vendors 2 rounds of feedback on price and terms
- Rank vendors using key parameters like price, credit terms and response comprehensiveness

- Select supplier (s) based on RFP analysis to arrive at a manageable portfolio of key vendors
- Finalize negotiations with 1-2 suppliers to that meets the expected timeline
- Notify the current supplier if not the winner of the RFP process



## Regulatory Compliance – The Puerto Rico Energy & Relief Act (Act 57)

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- PREPA is making significant progress towards addressing local and federal regulatory requirements
- To comply with its obligations under Act 57, PREPA has contracted with Siemens –
  - ❖ Siemens is assembling a comprehensive integrated resource plan that addresses generation, transmission, distribution, and fuel options
  - ❖ The Siemens integrated resource plan is an essential building block for PREPA's overall recovery plan, and will be used to update and refine PREPA's long-term business plan and financial forecasts
  - ❖ PREPA is on schedule to meet the July 1, 2015 filing deadline required by Act 57
- Act 57 also requires that PREPA participate in a rate review process –
  - ❖ PREPA has contracted with Navigant Consulting to complete a rate review study
  - ❖ Navigant's work is another key building block that will allow PREPA to update and refine the work it has already completed on its long-term business plan and financial forecasts



## Environmental Compliance

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- PREPA has also taken a series of steps towards an executable compliance plan for federal environmental regulatory standards, including the Mercury and Air Toxics Standards, commonly referred to as the “MATS”
- PREPA anticipates that 8 of its 14 units subject to MATS will comply with the standards by the applicable deadline of April 16, 2015
- Four units likely will not be able to comply with the MATS by the applicable deadline: Palo Seco units 3 – 4, and San Juan units 9 – 10
  - ❖ On December 3, 2014, PREPA requested a one-year extension of the MATS compliance deadline for the four units at Palo Seco and San Juan
  - ❖ The request was recently denied by the Puerto Rico Environmental Quality Board as PREPA’s compliance plans for those units are still in formative stages
  - ❖ The preliminary plan for these units—which is part of the Siemens IRP work—is to replace them with new, more-efficient unit(s)
  - ❖ Construction of the new unit(s) will require capital, but will also result in significant cost savings and emissions reductions, by burning cleaner fuel and burning less of it



## Vision For PREPA

**▪ Vision – TRANSFORM PREPA INTO A MODERN AND SELF-SUSTAINING UTILITY AND REDUCE THE ALL –IN RATE CHARGED TO CONSUMERS OVER TIME**

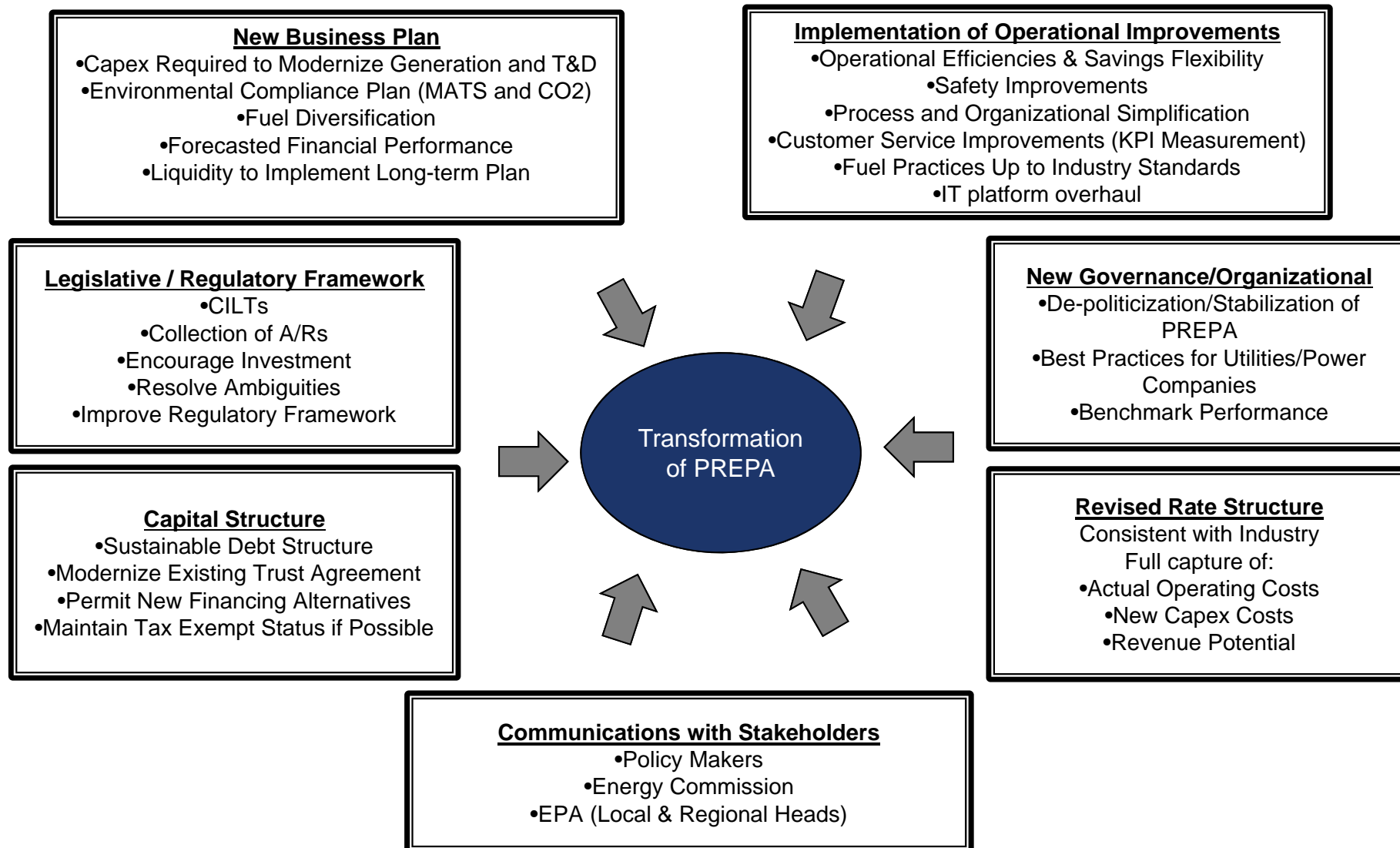
An overview of the plan to achieve this vision includes:

- I. Mechanisms to allow PREPA to operate more independently
  - ✓ Make PREPA an efficient and effective place to work that can plan and staff itself beyond the next election cycle
  - ✓ Focus must be on improving its ability to meet the immediate and long-term needs of its customers
  - ✓ PREPA’s board and management structure will need to be independent and focused on best business practices
- II. Create financial stability
  - ✓ Sustainable capital structure
  - ✓ Robust capital investment program to modernize PREPA’s generation facilities and transmission and distribution network
- III. Update PREPA’s rate structure
  - ✓ The new rate will reflect actual operating costs, capital expenditures, financing costs, and realized revenue
- IV. A strategy and roadmap to comply with MATS and other EPA regulations, critical components to make PREPA environmentally compliant
- V. Recommendations to revise the procedures governing contributions in lieu of taxes (“CILT”), and improvements to PREPA’s collection mechanisms
- VI. Diversify PREPA’s fuel supply mix over time to decrease commodity price risk
  - ✓ More modern units will give PREPA more flexibility to maximize its use of renewables – Eventually reducing customer costs and result in a more reliable and secure system
- VII. Continued implementation of the operational improvements across PREPA





## The CRO Team is Progressing Multiple Work Streams In Collaboration With PREPA To Transform The Utility





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**Questions?**

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