

The Brattle Group

Strategic Organizational Analysis

LIPA Board of Trustees
Workshop

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Agenda

- ◆ A Brief History of LIPA
- ◆ Overview of Study Approach
- ◆ Key Findings on LIPA's Situation
- ◆ Conclusions on Organizational Alternatives



A Brief History of LIPA

LIPA Formation

Previous Organizational Studies

Current Study Objective and Scope

Why This Study? Why Now?

A Brief History of LIPA

LIPA Formation

In 1998 LIPA acquired Long Island Lighting Co. (LILCO)

- ◆ LIPA retained the T&D system, Nine Mile Point 2, Shoreham-related liabilities, and some power supply agreements.
 - LIPA created by NY state legislation with oversight by the state comptroller, state attorney general, and other government agencies.
- ◆ Other generation assets and the gas supply system were transferred to KeySpan Corporation.
- ◆ LIPA entered into 3 operating agreements with KeySpan:
 - Management Services Agreement (MSA) for T&D system operations and maintenance services,
 - Power Supply Agreement (PSA), and
 - Energy Management Agreement (EMA) for fuel management.
- ◆ Under the MSA LIPA's T&D system is entirely operated by National Grid
 - Some electric and gas system-related functions are operated jointly for efficiency.

Previous Organizational Studies

2005 study by FTI Consulting, et al.

- ◆ Explored options to purchase generating assets and three strategic organizational options:
 - Status quo continuance of existing MSA,
 - Full municipalization, and
 - Privatization.
- ◆ Recommended continuation of the status quo, with some improvements.
- ◆ Resulted in re-negotiation of the current MSA with National Grid.

2010 study by Lazard

- ◆ Update to the 2005 study.
- ◆ Explored enhancements to the existing MSA, but focused primarily on options to purchase generating assets.
- ◆ Recommended future evaluation of strategic options with more specific data about the MSA costs and performance.

Current Study Objective and Scope

Brattle engaged in summer of 2010 to revisit these organizational questions in conjunction with MSA replacement.

Objectives

- ◆ Develop cost and performance data for comparing options.
- ◆ Clarify and analyze organizational options for LIPA's future T&D operations.
- ◆ Estimate rate impacts associated with each organizational option.
- ◆ Recommend a preferred organizational option, with sufficient information on tradeoffs and risks to allow LIPA and its Trustees to make a reasoned decision.

Scope

- ◆ Primarily T&D, Customer Service and Corporate functions; that is, areas outside of generation, fuel and purchased power and/or capacity.
- ◆ Also, consideration was given to possible impacts of LIPA's organizational structure on power supply costs.

Why This Study? Why Now?

LIPA's Management Service Agreement (MSA) with National Grid will expire on 12/31/2013.

- ◆ The MSA must be replaced, with sufficient lead time to solicit and vet alternatives.
- ◆ Strictly extending the current MSA could come at a considerable cost.
- ◆ Expiring MSA has options for LIPA to transfer systems and property; must decide whether to exercise.

This presents a unique opportunity to assess a range of organizational alternatives.



Overview of Study Approach

Strategic Organizational Options
Management Services Agreement (MSA)
 ServCo Option
 ServCo ≠ MSA
Brattle Workflow and Approach

Strategic Organizational Options

Variations on two broad sets of organizational options were analyzed.

Municipalization Options

“Full Municipalization”

Bring into LIPA:

Employees and
resources
currently
serving LIPA

+ New
resources as
needed

“ServCo”

“Partial
Municipalization”

Dedicated entity

IT systems will
be owned or
licensed by LIPA

Transparent
accounting and
costs

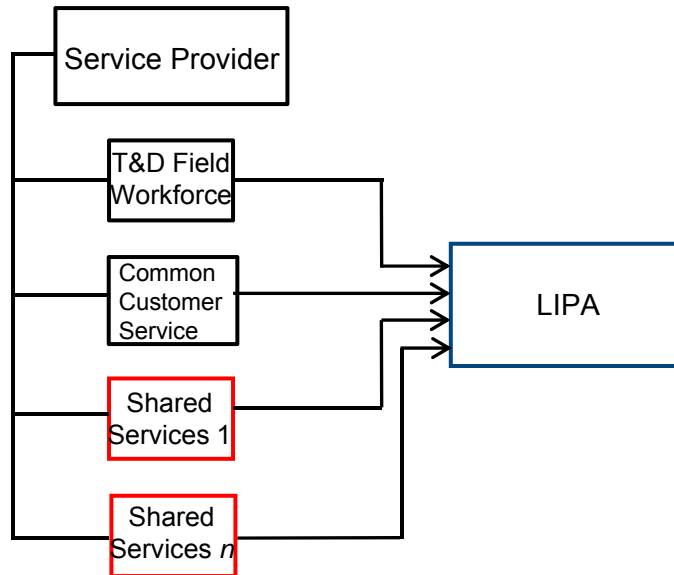
Privatization

Sell LIPA’s
assets and
obligations to a
private
company –
such as an IOU

Put services
and rates
under NY PSC
price regulation

Overview

Management Services Agreement (MSA)



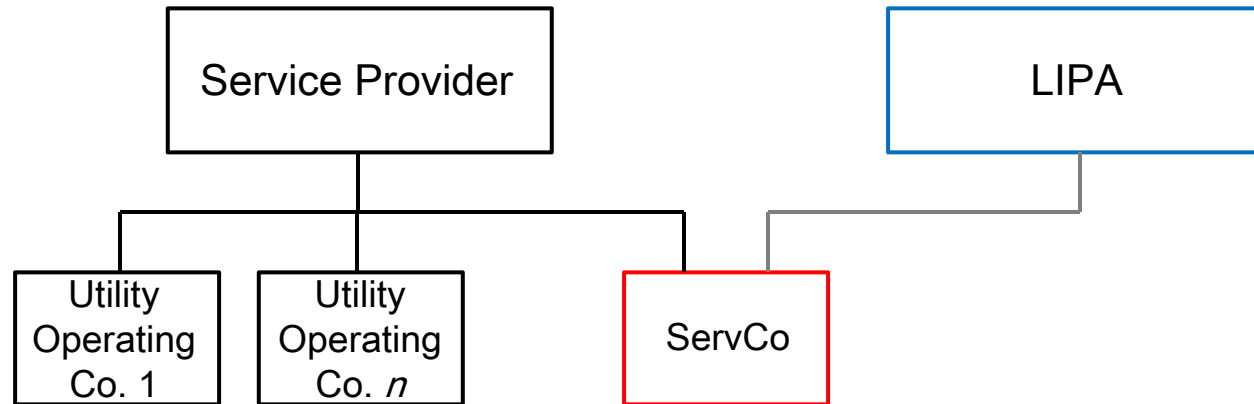
Where is LIPA?

Many services provided under the MSA are geographically and organizationally dispersed.

- ◆ Significant formula-based compensation component: incentive for Service Provider to minimize cost; may be worth taking “penalty” to avoid compliance with service levels.
- ◆ Lack of clarity and transparency re underlying costs.
- ◆ Practical consumer experience: Mixed message concerning responsibilities; “finger pointing” between LIPA and NG over service problems.

Overview

ServCo Option



- ◆ Creates a self-contained and transportable business unit, comprised of employees, systems and resources that are involved in LIPA-related activities.
- ◆ Overseen by senior management of Service Provider and Joint Operating Committee (JOC): Service Provider + LIPA.
- ◆ Compensated via actual (passed through) costs + variable (performance based incentive) compensation.
- ◆ Accounting records are transparent.

Overview

ServCo \neq MSA

As envisioned: ServCo represents a reorganization from LIPA's current mode of doing business.

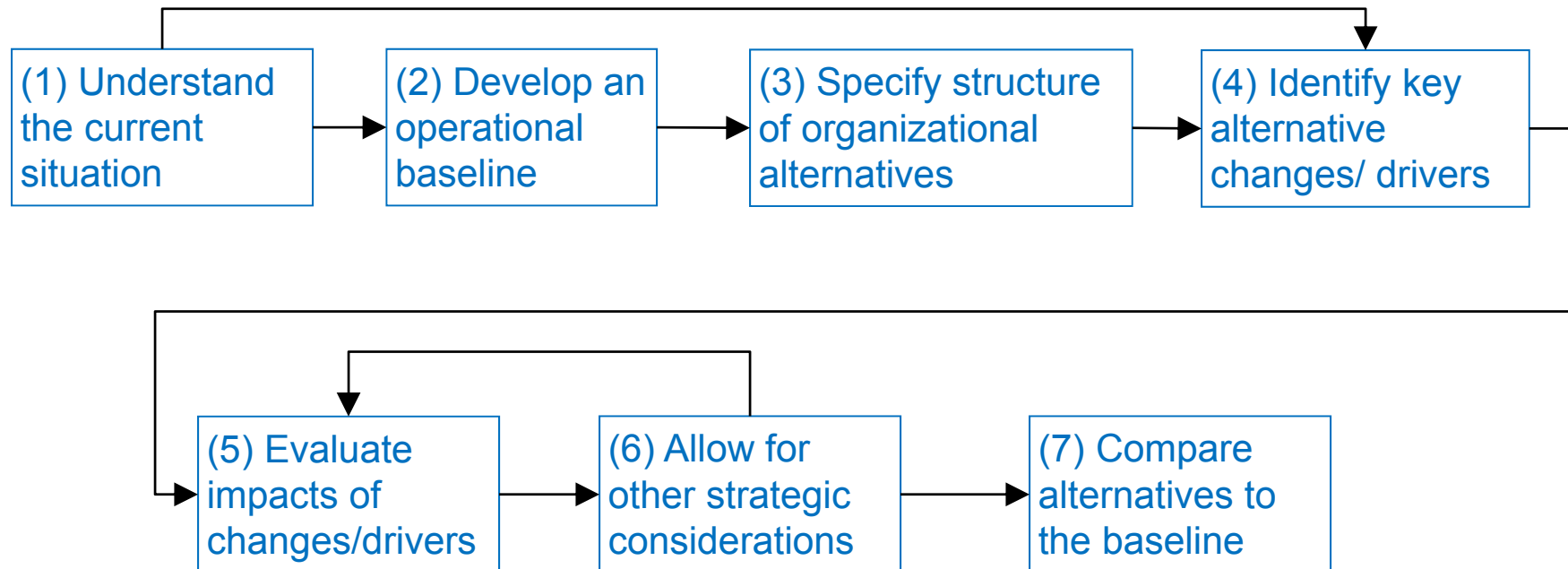
- ◆ Services will be provided through dedicated subsidiary.
- ◆ Majority of costs are “pass-through”; also includes profit component.
- ◆ Includes incentive and penalty provisions.
- ◆ Allows for portability of organization and assets.

→ Provides LIPA with greater control over setting policy, setting goals and directing practices.

Overview

Brattle Workflow and Approach

The approach to the analysis involves diagnostics of LIPA's situation, specification of alternatives, and modeling of rate and financial impacts.



Key Findings on LIPA's Situation

- LIPA's Unique Situation
- Public versus Private Performance
- T&D O&M Share of LIPA Costs
- T&D O&M Cost Breakdown
 - Fuel and Power Costs
 - Financing & Tax Costs
 - Cost Benchmarking
 - Reliability Benchmarking
 - Features of Privatization
 - Transition Costs and Risks

Key Findings

LIPA's Unique Situation

LIPA's current Government-Owned*, Contractor-Operated (GoCo) model is perhaps unique in the U.S. electric utility industry.

- ◆ There is no clear precedent for LIPA's organizational structure or the range of opportunities it is considering:
 - Utilities routinely outsource parts of their operations, but we are not aware of any which outsource virtually all their needs.
 - The GoCo model is common practice in other industries, such as U.S. Department of Energy (DOE) laboratories, and DOE manufacturing and production plants.

- ◆ LIPA's GoCo structure (ServCo) gives it the flexibility to now consider a full range of organizational options, from full municipalization to full privatization.

*LIPA is a corporate municipal instrumentality and a political subdivision of the State of New York created by the Long Island Power Authority Act.

Key Findings

Public versus Private Performance

There are many public power entities in the US, from power authorities to co-ops and munis.

- ◆ LIPA is one of the largest public power entities, comparable to a mid-sized investor-owned utility.
- ◆ No consistent evidence for public vs. private utility organizational form having superior performance to the other.

GWh Sales Rank
Public Power Utilities
2009

Rank	Company	2009 Sales (GWh)
1	SRP	26,181
2	LADWP	23,789
3	CPS Energy (TX)	20,027
4	LIPA	19,271
5	Memphis Light	13,720
6	JEA (FL)	12,299
7	Austin Energy	12,036
8	Nashville Electric	11,667
9	SMUD	10,692
10	Santee Cooper	10,205

Number of Customers Rank
Public Power Utilities
2009

Rank	Company	2009 Customers (000)
1	LADWP	1,449
2	LIPA	1,116
3	SRP	946
4	CPS Energy (TX)	701
5	SMUD	594
6	JEA (FL)	418
7	Austin Energy	409
8	Memphis Light	406
9	Seattle City Light	395
10	Nashville Electric	360

Key Findings

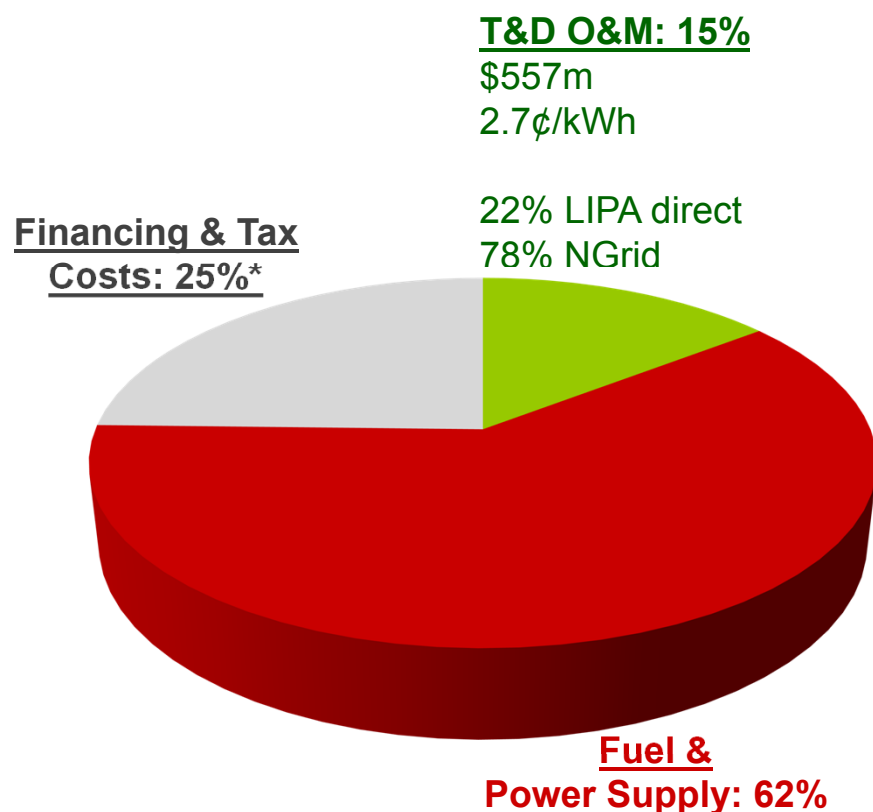
T&D Share of LIPA Costs

LIPA Revenue Requirement

2010 Baseline

~\$3,777m

18.2¢/kWh



T&D operational expenses are only a small part of LIPA's costs.

- ◆ LIPA's annual T&D expenses, largely associated with the MSA, accounts for roughly 15% (\$557 million) of its total annual revenue requirement, or 2.7 cents/kWh.
- ◆ Even an implausibly large reduction in T&D costs would only change rates slightly.
 - **\$200 million cost reduction = 1 cent/kWh**

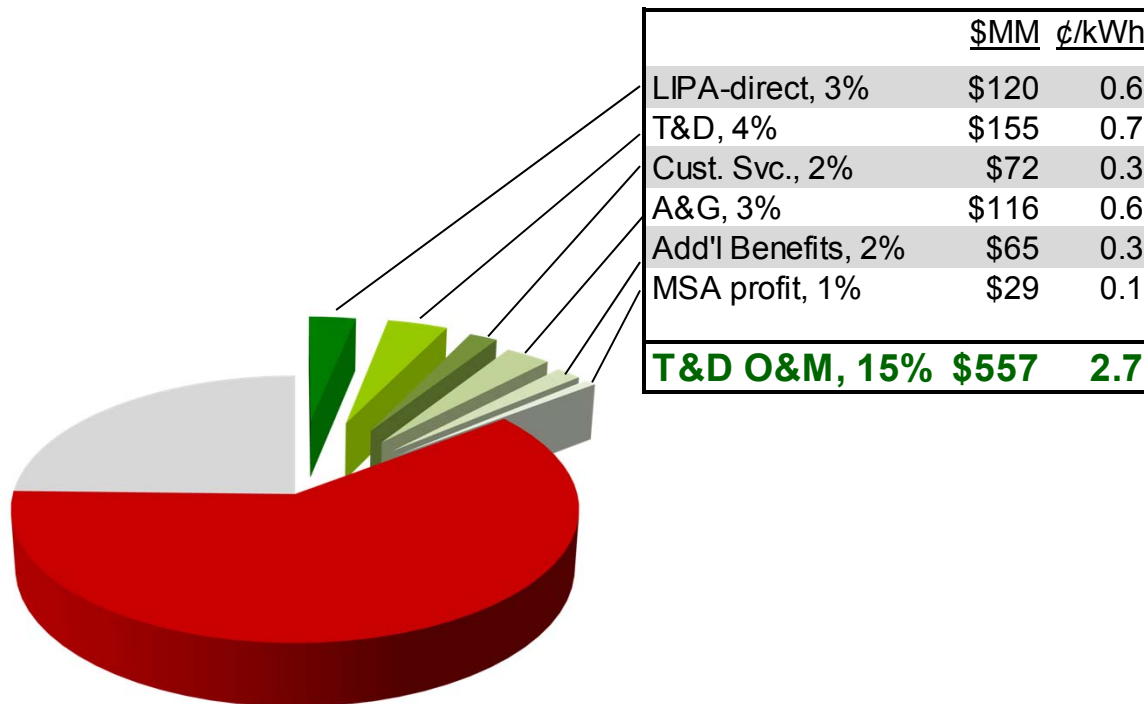
*Note that "other income" of -2% is not shown on the chart.

Key Findings

T&D O&M Cost Breakdown

LIPA's \$557 million T&D O&M costs are largely managed by National Grid.

**LIPA Composition of Costs
2010 Baseline**



◆ 80% of T&D O&M through National Grid

- ◆ 80% includes 62% labor and benefits + 38% materials and fees for services.
- ◆ 80% reflects costs mostly for T&D system, then customer service and corporate overheads.
- ◆ The remaining 20% reflects LIPA-direct program costs, labor, materials, and purchased services.

◆ 2,017 total FTEs serve LIPA

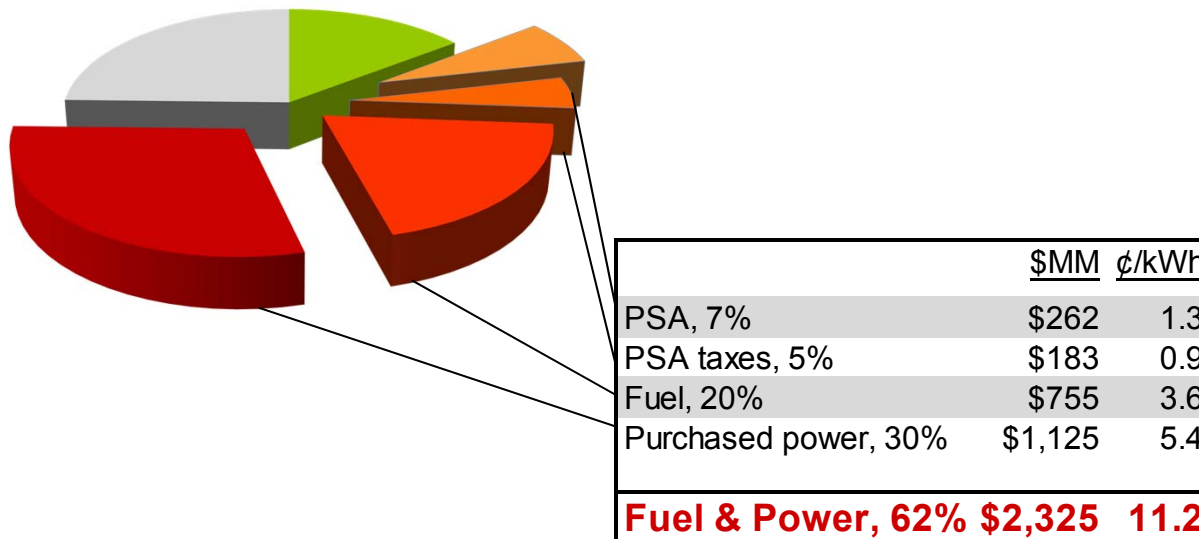
- ◆ ~100 LIPA vs. 1,913 through National Grid.
- ◆ 40% of National Grid staff shared, mostly in customer services and corporate overhead.
- ◆ 89% of National Grid staff are on Long Island.

Key Findings

Fuel and Power Costs

Fuel and power, LIPA's largest cost area, will not be materially affected by re-organization or new service provider.

LIPA Composition of Costs
2010 Baseline



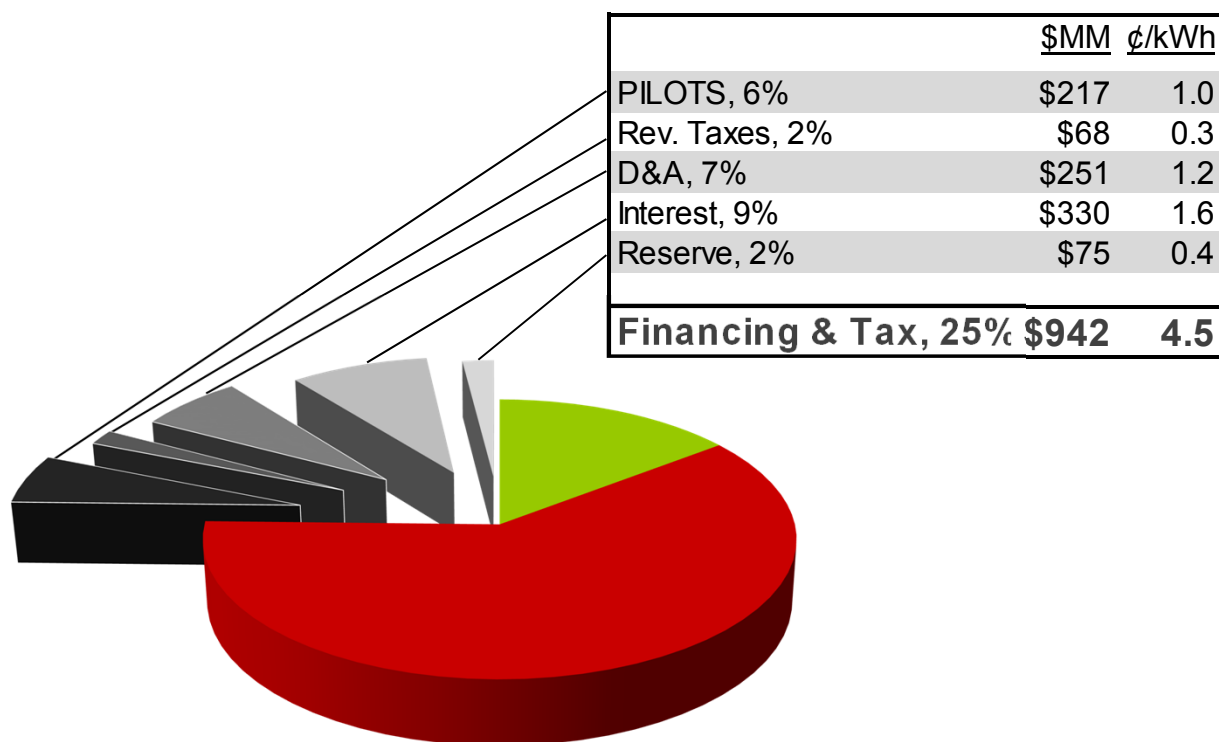
- ◆ These costs reflect contracts and other purchases of fuel, power and capacity
 - ◆ Not part of T&D operations.
 - ◆ Subject to market conditions that are *largely independent of organizational form.*
- ◆ This is a very important area of LIPA operations, and it is an area of ongoing management review.

Key Findings

Financing & Tax Costs

LIPA's current financing structure has low costs due to tax-advantaged debt.

LIPA Composition of Costs
2010 Baseline



- ◆ Largely unchanged under the ServCo and Full Municipalization options.
- ◆ However, these costs would increase significantly under the Privatization option.

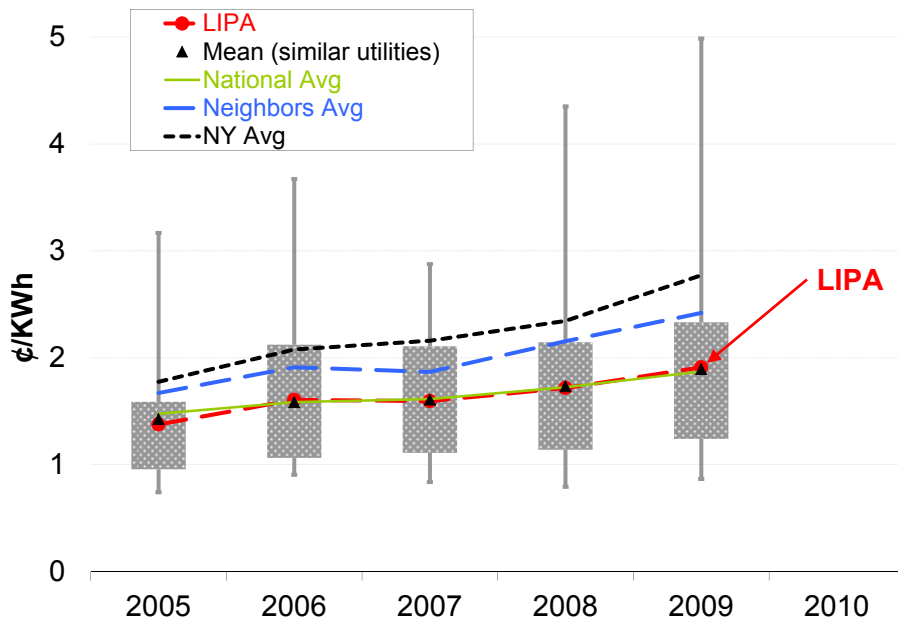
Key Findings

Cost Benchmarking

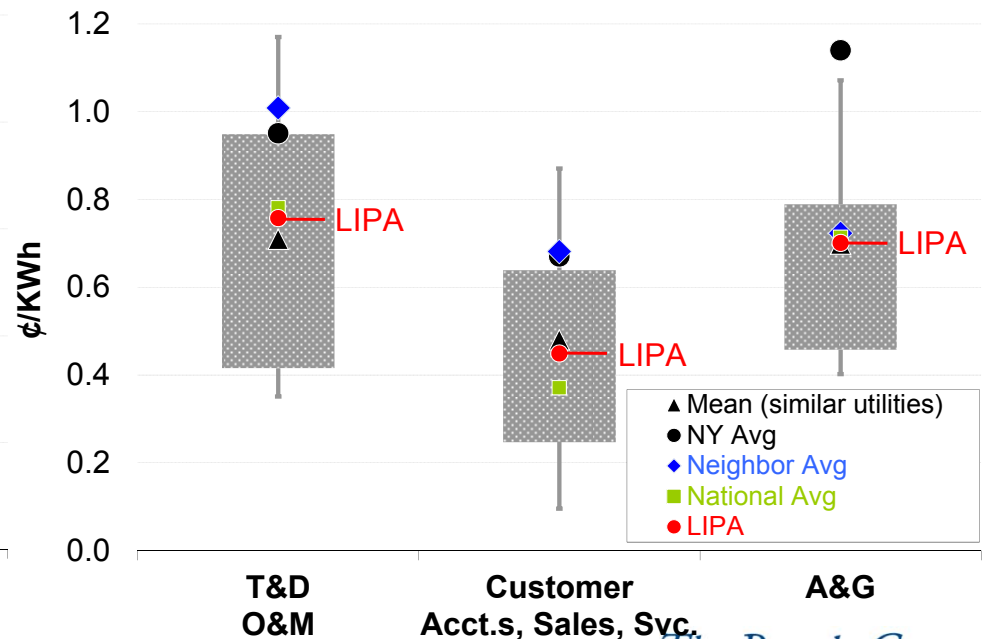
Brattle compiled cost data on 123 utilities for comparison to LIPA. We found that LIPA's T&D costs compare favorably to industry norms.

- ◆ Total LIPA NFOM cost per kWh \approx national utility average < neighbors < NY utilities.
- ◆ Components of LIPA NFOM costs also comparable to national averages.

**Non-Gen NFOM Benchmarking
for Similar Utility Panels**



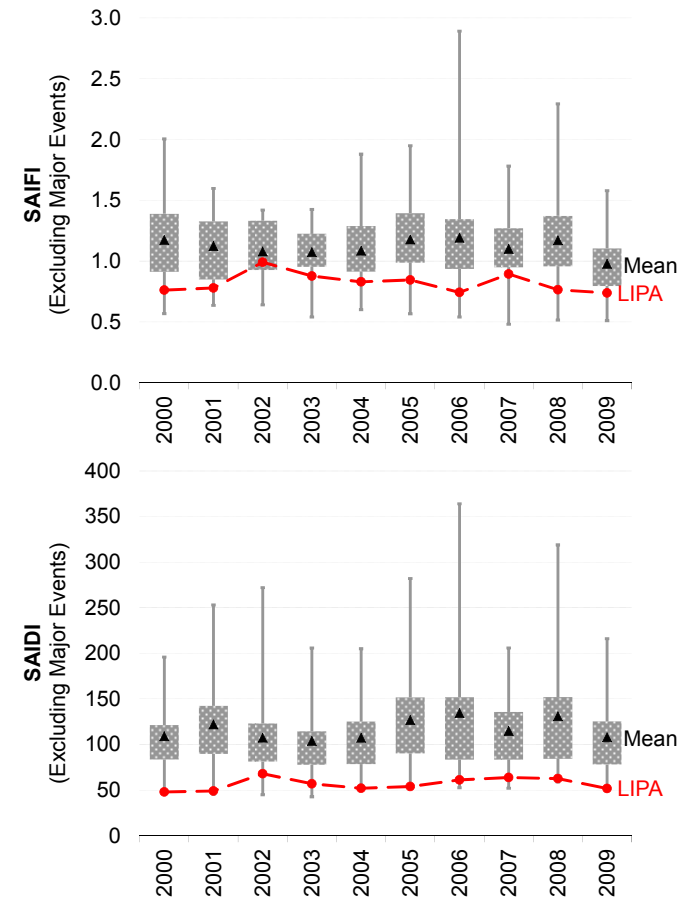
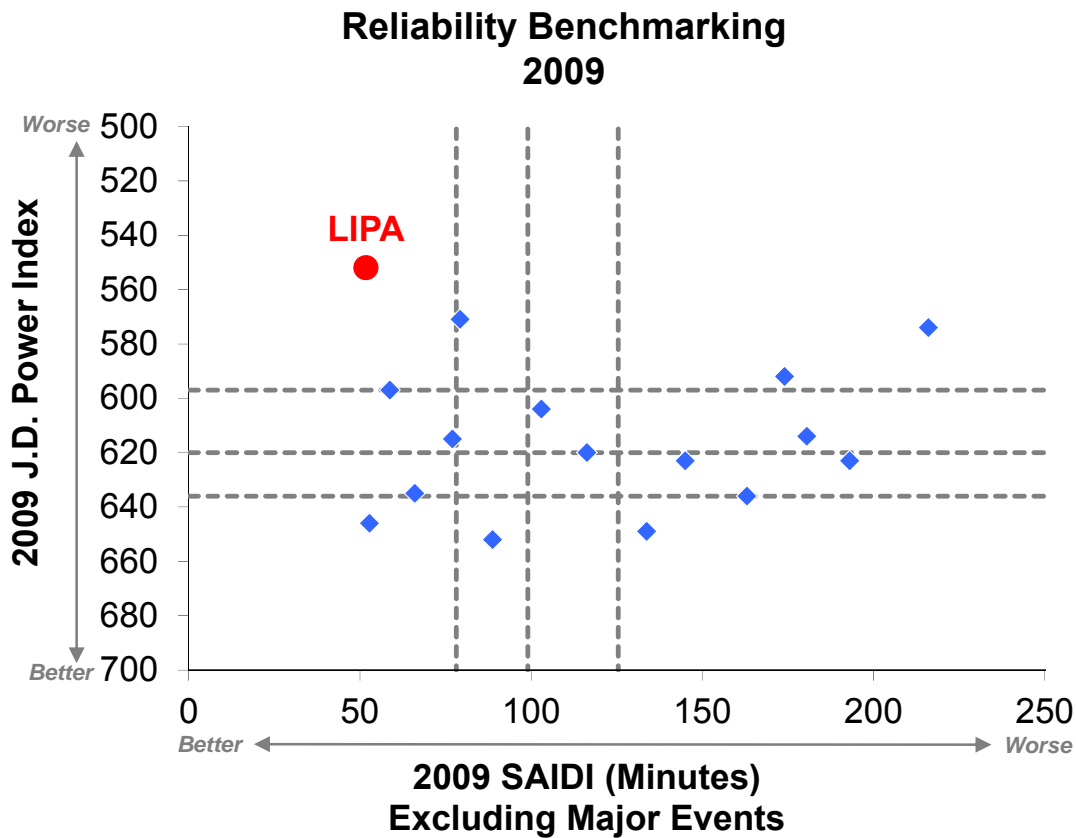
**Non-Gen NFOM Benchmarking
for Similar Utility Panels
2009**



Key Findings

Reliability Benchmarking

Brattle compiled data on SAIDI and SAIFI reliability statistics, as well as J. D. Powers customer satisfaction scores. LIPA's service reliability is among the highest, but its customer satisfaction is among the lowest.



Key Findings

Features of Privatization

Privatization includes a number of features that would significantly increase cost and transitional complexity

- ◆ NYPSC rate-making process: LIPA's rates would be set by the NYPSC in a manner similar to the existing 6 IOUs in NY State.
- ◆ Loss of tax-advantaged financing: new owner will fund with roughly 50% equity requiring around a 10% return after taxes, vs. 5% rate on LIPA's current all-debt structure
- ◆ Rate base: the book value of assets on which the NYPSC would allow the utility to earn a return likely to equal approximately \$7.6 Billion
 - Non-productive \$2.6 billion Shoreham Acquisition asset doubtful – not “used and useful”
- ◆ Debt defeasance cost: all of LIPA's debt would have to be “defeased” in order to comply with tax laws, at a total cost of ~\$961 Million.
- ◆ Acquisition premium: Recent market observations indicate that many utilities' common stock trade at a premium to book value – could defray defeasance or rate increases
 - Average utility stock trades at 1.5X book value per share; equivalent to 1.2X PP&E
 - In addition, utility equities usually command about a 10-20% acquisition premium in M&A transactions (based on 41 transactions from 2000 – 2010).
- ◆ Total financing cost: Privatization would result in an increase of ~\$438+ MM in annual revenue requirements due to financing costs alone. This *excludes* debt defeasance costs.

Transition Costs and Risks

Several kinds of transaction and transition costs, plus implementation risks attend each option:

- ◆ **Privatization** – has transaction costs for advisory and bankers fees incurred as a part of a sale or refinancing – **\$20 – 40 million**; bond defeasance costs for providing equivalent tax exempt bonds to be exchanged for existing LIPA debt – **almost \$1 Billion**. Also a commercialization risk of being able to complete the transaction on time and terms consistent with expectations.
- ◆ **ServCo** – has transition and integration costs involving expenses and/or capital investments to transfer systems and capabilities to the new manager – **24 months built into UMS agreement**.
- ◆ **Municipalization** – involves transition costs of obtaining and integrating new systems for operational and corporate management, plus management risk of ability to oversee and coordinate a much enlarged staff effectively

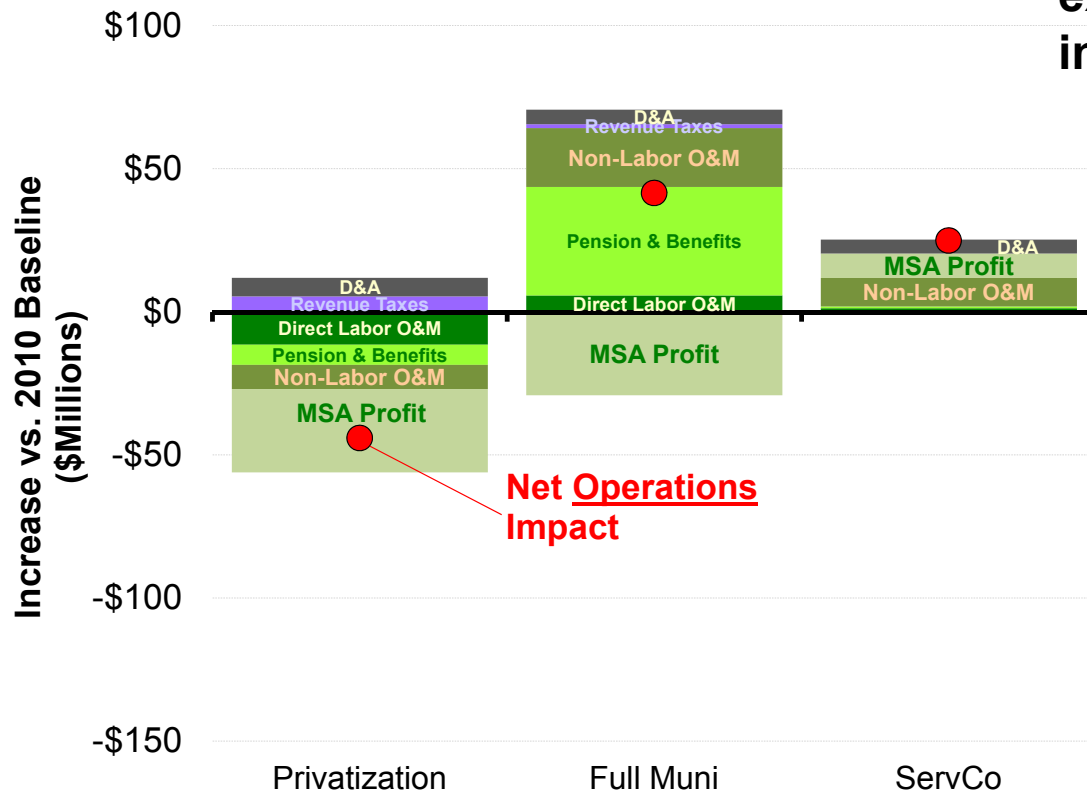
Conclusions on Organizational Alternatives

Changes in Operating Costs
Changes in PILOTs
Changes in Financing Costs
Overall Cost Impact Comparison
Rate Impact Analysis
Privatization Effects on Other Options
Operating Costs
ServCo versus Full Muni Rates
ServCo versus Full Muni Transition
Flexibility of ServCo
Overall Recommendation

Conclusions

Changes in Operating Costs

Impacts on LIPA's Revenue Requirement
Compared to 2010 Baseline
(\$Millions)



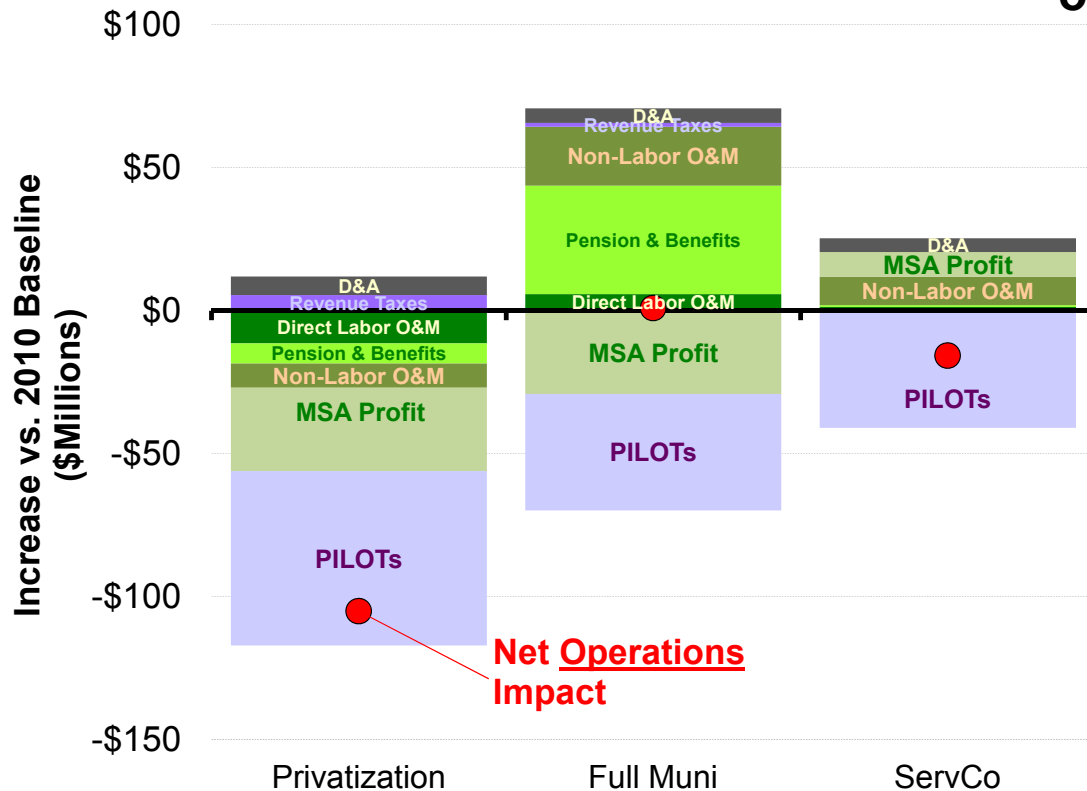
Privatization will likely produce the largest reduction in operating costs, while ServCo and Full Muni are expected to have modest increases in operating costs.

- ◆ Changes are plus or minus about \$50 million, or 0.25 cents per kWh.
- ◆ Small improvements consistent with benchmarking findings, and with T&D costs already being under IOU management.
- ◆ *This graph does not reflect all cost adjustments of re-organization.*

Conclusions

Changes in PILOTs

Impacts on LIPA's Revenue Requirement Compared to 2010 Baseline (\$Millions)



There are also opportunities to reduce LIPA's PILOT expenses – which can be pursued across each of the organizational options.

- ◆ Recent APPA survey suggests that LIPA pays higher levels of PILOTs than the panel of municipal utilities.
- ◆ We have assumed that privatization provides the strongest incentive to reduce PILOTs (property taxes).
- ◆ *This graph does not reflect all cost adjustments of re-organization.*

Conclusions

Changes in Financing Costs

Even optimistic variations on privatization involve increased financing costs, creating strong tensions between substantial rate increases, unreasonably large cost reductions, implausibly low ROEs, and/or the need for other entities to cover non-productive assets.

Acquisition Terms and Structure:		As-is	All-book	U & U assets in RB + SPE	U & U assets in RB + SPE + defeasance	U & U assets in RB + SPE + defeasance + M/B of 1.5x
Acquisition Value	(\$Bil)	\$10.2	\$10.2	\$7.6	\$8.4	\$9.7
Rate Base (RB)	(\$Bil)	n/a	\$10.2	\$7.6	\$7.6	\$7.6
Rates from RB	(¢/kWh)	18.2¢	21.2¢	19.3¢	19.3¢	19.3¢
Shoreham SPE	(¢/kWh)			1.0¢	1.0¢	1.0¢
Amortization of defeasance	(¢/kWh)				0.3¢	0.3¢
Rebate from acquisition premium	(¢/kWh)					-0.5¢
Total Rate	(¢/kWh)	18.2¢	21.2¢	20.3¢	20.6¢	20.1¢
Earned ROE	(%)	n/a	9.75%	9.75%	9.67%	7.13%
Required cost reductions for all-in 18.2¢ rate	(\$Mil)	\$0	\$622	\$438	\$507	\$406
ROE with rates capped at 18.2¢	(%)	n/a	2.08%	5.98%	3.96%	2.74%

Require additional entities to cover non-productive assets

Substantial rate increases

Implausible cost reductions

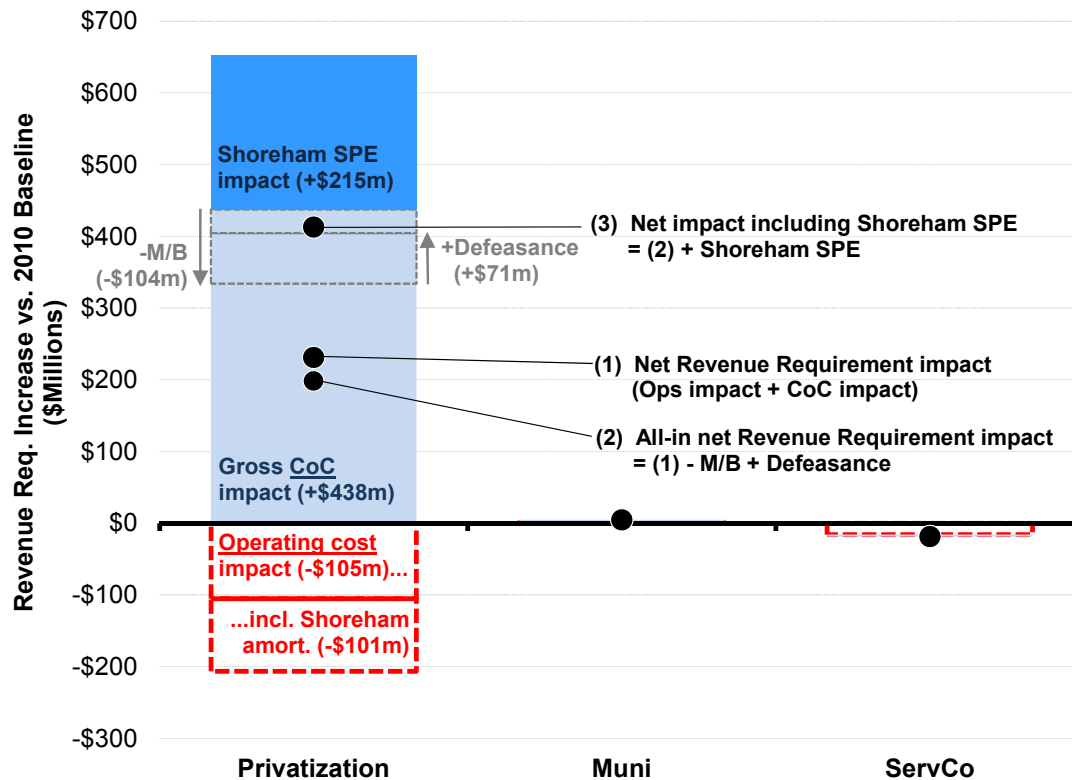
Equity returns < bonds

Conclusions

Overall Cost Impact Comparison

Implementing Privatization will likely include a 10% to 20% increase in electric rates: estimated \$100mm savings in operating expenses are not large enough to offset increased financing costs of over \$400mm.

Total Impacts On Revenue Requirements and Rates
Compared to 2010 Baseline
(\$Millions)



Conclusions

Rate Impact Analysis

Rates under the Muni and ServCo options would be comparable to current levels, but Privatization (even assuming a Market Value / Book Value premium and greater operating cost savings) would result in a 2 to 3 cent rate increase.

	Rate (¢/kWh)	Change from Base Case (%)	Illustrative* Monthly Impact on Customer Bill (\$/Mo)
Base Case	18.2	n/a	\$141.05 (absolute)
Full Muni	~18.2	+0.0%	+\$ 0.00
ServCo	~18.1	-0.5%	-\$ 0.78
Privatization	~20.5	+12.6%	+\$ 17.83

* Monthly bill based on average revenue requirement impact and monthly consumption of 775 kWh.

Conclusions

Privatization Effects on Other Options

The rate impact associated with the Privatization option removes this option from consideration; pursuit of this option also presents other risks.

- ◆ Privatization requires its own lengthy process of soliciting and vetting offers.
 - During this period, market conditions could shift, making consummation more or less attractive.
 - Possible NY PSC resistance or push-back to proposed buyers' terms.
 - Longer than expected time to achieve takeover → gap between expiring MSA and new ownership.
 - Withdrawal or collapse of the offers.

- ◆ Concurrent pursuit of both the Privatization and the ServCo options is an unlikely proposition – largely because it involves the same pool of candidates.

- ◆ Pursuit of Privatization may interfere with other options to such an extent that it becomes the only option (an irreversible process).

Conclusions

Operating Costs

Some of the projected increases in operating costs are specific to the strategic organizational option; other costs will have to be incurred in any event.

	Full Muni	ServCo
Staffing Levels	Staff additions to make up for shared corporate and support resources under MSA	Staffing levels designed to account for contract management
Pensions & Benefits	Likely increase if employees are shifted to NYS Retirement System	N/A
Profit to Service Provider	N/A	USM includes a profit component
IT System Development / Upgrades	LIPA = developer, owner / licensee	SP = developer LIPA = owner / licensee
	E.g., Customer Accounting System (CAS) Outage Management System (OMS)	

Conclusions

ServCo versus Full Muni Rates

Rate impacts under the ServCo and Full Municipalization options are very close; modifications to cost assumptions may shift these already close rankings slightly, but not substantively.

- ◆ Tax-advantaged financing is equivalent under both options.
- ◆ Implementing either option will likely be accompanied by increases in (direct) T&D operating costs – but from different cost areas; at a detailed level, some cost areas are estimated to increase, others to decrease.
- ◆ But expenses associated with PILOTs may also be reduced under both options – which would largely offset the projected increases in direct T&D expenses associated with implementing these options.

The close ranking of costs and rate impacts under the Full Muni and ServCo options indicates that strategic, organizational and risk considerations should primarily determine the selection process.

Conclusions

ServCo versus Full Muni Transition

All other things being equal – i.e., if both options could be put into place seamlessly – the Full Municipalization option may very well be preferred over the ServCo option...

- ◆ ServCo provides LIPA with only indirect control over resources, and requires somewhat duplicative management; under a Full Municipalization model, LIPA directly employs resources.
- ◆ ServCo is based on contracts and incentives – which inherently face Principal-Agent problems; these can be minimized through well designed and executed contracts, but unanticipated circumstances may present risks.

...But, getting from LIPA's current state to Full Municipalization presents considerable "transition" risk – more so than the transition from the current state to ServCo.

Conclusions

Full Muni Issues

Several issues and challenges would need to be successfully addressed in order to effectuate a Full Municipal model.

- ◆ Transition from LIPA's current organizational structure to a fully municipalized model would involve a large scale organizational transformation – which involves implementation risk.
- ◆ Full municipalization of LIPA operations would require legislative authority.
- ◆ Other issues:
 - Possible issues to be negotiated with collective bargaining units.
 - Loss of private sector price discipline.
 - Compensation for utility executives: NYS employee guidelines vs. private sector pay scales.

Conclusions

Flexibility of ServCo

ServCo provides several attractive features – notably option value – that address the circumstances immediately facing LIPA.

- ◆ The ServCo model requires that the Service Provider (with LIPA direction) build a dedicated (i.e., stand-alone) and transportable T&D electric utility.
 - This model allows LIPA to leverage the resources and expertise of the Service Provider, thereby facilitating a smoother transition to a stand alone utility, than if it had to be accomplished “from scratch.”
 - ServCo is not an “all or nothing” proposition: LIPA can keep key strategic support functions (including those that are currently provided by the Service Provider under the MSA) to LIPA.

- ◆ ServCo governance structure allows LIPA management to actively direct improvement efforts – e.g., focusing on improving customer satisfaction metrics.

- ◆ The transportability component of ServCo provides *option value*; overall, the design of the ServCo model provides both an “exit” and “entrance” ramp.
 - Exit – termination provisions to end Utility Management Services contract.
 - Entrance - Optionality to convert to Full Muni, Private Utility or follow-on Service Provider, if circumstances or opportunities change.

Conclusions

Overall Recommendation

The ServCo option has the best likelihood of low transitional risks, effective performance incentives, and optionality to adjust in the future.

	Full Muni	ServCo
Transition Issues	Large-scale organizational deployment / transformation <ul style="list-style-type: none">• Personnel• Systems	Up-front systems and process integration
Control & Incentives	Integrated organization, subject to public entity constraints <ul style="list-style-type: none">• Salaries• Governance• Stakeholder participation	Potential principal-agent issues <ul style="list-style-type: none">• Duplicative management• Cost• Performance
Optionality	Largely irreversible choice	Optionality to convert to Full Muni, Private Utility or follow-on Service Provider

These factors are largely qualitative and reflect overarching values and philosophies – areas within the province of the LIPA Board of Trustees