

**Independent Evaluation of the
Fuel and Purchased Power Cost Adjustment
of The Long Island Power Authority**

Final Report

By:



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**65 Main Street, P.O. Box 1237
Quentin, Pennsylvania 17083
(717) 270-4500 (voice)
(717) 270-0555 (facsimile)**

admin@libertyconsultinggroup.com

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I. Introduction

A. Background

The Long Island Power Authority (“LIPA” or “Authority”) solicited proposals for the conduct of an independent evaluation of LIPA’s recovery of costs through its Fuel and Purchased Power Cost Adjustment (FPPCA) clause. The Liberty Consulting Group (“Liberty”) responded to that solicitation with a proposal to conduct such an evaluation. The Authority selected Liberty to perform the independent evaluation in accord with the proposal submitted by Liberty. Appendix 1 to this chapter summarizes Liberty’s background. This report describes the work that Liberty performed in conducting that independent evaluation, the factual findings Liberty made, and the conclusions that Liberty reached.

The Authority, created by State legislation enacted in 1986, operates as an instrumentality and political subdivision of the State of New York. The Authority acquired all of the outstanding common stock of the Long Island Lighting Company, and has since, through its subsidiary, Long Island Lighting Company d/b/a LIPA, provided electric service to approximately 1.1 million customers in the counties of Nassau and Suffolk, and in the Rockaways portion of Queens County.

LIPA adopted its initial electric tariff at an April 9, 1998 Board of Trustees meeting. This tariff became effective upon the May 29, 1998 acquisition of LILCO. The initial tariff contained the FPPCA, which LIPA derived from LILCO’s Fuel Cost Adjustment clause. LIPA has since made a number of tariff changes that affected the content and operation of the FPPCA.

B. Objectives

The purpose of Liberty’s independent evaluation was to respond to the following specific questions about LIPA’s FPPCA:

1. Since May 1998, has LIPA been recovering through its FPPCA clause any cost that is already being recovered in other rates and charges levied by LIPA?
2. Has the recovery of costs through the FPPCA, and all material modifications thereto, been duly authorized by the Authority’s Board of Trustees?
3. Are the costs listed in LIPA’s Power Supply Charge tariff provision of the nature to reasonably be considered components of the costs of fuel and purchased power?
4. Is the range of costs that the Public Service Commission has allowed one or more investor owned utilities to recover through automatic adjustment clauses similar to the types of costs that LIPA recovers through its FPPCA?

C. Work Scope

Each of the above four questions is discussed below as a specific work scope element.

1. FPPCA Costs Recovered

This work scope element sought to respond to the question: *Since May 1998, has LIPA been recovering through its FPPCA clause any cost that is already being recovered in other rates and charges levied by LIPA?*

The relevant section of LIPA’s FPPCA tariff (Tariff Leaf 166) generally includes the costs of fuel and power acquired by or on behalf of LIPA, transmission, payments for load shedding, the

value of foregone emissions credits that offset revenues from energy sold off-system, management fees for power and fuel supply arrangements, ISO charges, bill credits under the Choice program, fuel hedging program premiums, and costs associated with the New York State Renewable Portfolio Standards program. Liberty undertook the following specific work steps:

1. Interview persons responsible for performing the calculations across the period covered, in order to understand the procedures used, accounts involved, their methods, calculations, work papers produced, and any tests/examinations performed to verify them.
2. Secure access to documents identified at interviews, review procedures, accounts, calculations, work papers, test/examination, and other documentation provided.
3. Gain an understanding of all relevant rate elements (base, FPPCA, and any other) through the test period, and determine the underlying cost types and amounts that form their bases.
4. Review supporting data for and changes in all FPPCA-related rate elements during the test period.
5. Identify, quantify and categorize by key rate-element changes during the test period, in order to break the test period into discrete segments that can be examined and reported on in a logical manner.
6. Validate through on-site work the execution of procedures and calculations and the creation of documents according to written guidelines and understanding of methods gained at interviews.
7. Verify the existence of controls appropriate to assuring complete and accurate capture and assignment of costs between base and FPPCA rate elements.
8. Identify any likely risks of material error during the period; for any such risks, generate for discussion with LIPA a work plan, budget, and schedule for addressing such potential sources of material error.
9. Provide an opinion as to whether LIPA may have or is at material risk of having, for each of the discrete portions (those between major changes in rates, accounting, or other key parameters) of the test period, recovered through its FPPCA clause any cost that is already being recovered in other rates and charges levied by LIPA.

Liberty conducted random testing of various fuel-cost accounting transactions, including a review of supporting invoices. Liberty tested for the existence of controls and for the accurate capture and assignment of costs among clause rate elements to identify any likely risks of material error and risk associated with the fuel cost accounting and reporting process. Liberty did not, however, perform test work to verify the accuracy of accounting entries that make up the costs (*e.g.*, were third-party invoices coded to the right accounts, were costs as booked equal to costs paid), because such work was outside of the scope of this engagement.

2. Board Authorization

This scope element corresponded to the question: *Has the recovery of costs through the FPPCA, and all material modifications thereto, been duly authorized by the Authority's Board of Trustees?*

Liberty undertook the following specific work steps:

1. Interview General Counsel/Secretary to learn of the manner in which the Board has exercised oversight over the FPPCA during the test period, and highlight any material changes.

2. Determine what presentations by management, minutes, resolutions, and other documents exist with respect to the Board's consideration of FPPCA matters.
3. Interview senior management involved in presentations of information to and deliberations by the Board with respect to FPPCA matters.
4. Secure access to and review the documentation identified.
5. Verify that documentation reflects Board authorization of FPPCA cost recovery and all modifications during the test period.
6. If any uncertainties arise about the match between documentation (understanding that minutes of Board meetings often do not reflect the full depth of discussions undertaken) and subsequent LIPA actions, seek to resolve them through further interviews.
7. Provide an opinion as to whether the recovery of costs through the FPPCA, and all material modifications thereto, have been duly authorized by the Authority's Board.

3. FPPCA Cost Types

This scope element responds to the question: *Are the costs listed in LIPA's Power Supply Charge tariff provision of the nature to reasonably be considered components of the costs of fuel and purchased power?*

Liberty undertook the following specific work steps:

1. Determine for each discrete portion (those between major changes in rates, accounting, or other key parameters) of the test period all cost types recovered through the FPPCA.
2. Compare those cost types with experience at other utilities, based on the extensive experience of Liberty and of the extensive experience of Liberty's team members with other utilities as well.
3. Discuss with LIPA personnel any other utilities considered comparable to LIPA with respect to fuel and energy costs and their recovery.
4. Add to the list of utilities from steps 2 and 3 above any others comparable to LIPA and for whom information about automatic adjustment clause cost types is available.
5. Compare LIPA FPPCA cost types with those with whom Liberty and its team members are familiar and for any others added from the previous step.
6. Assess the level of comparability between LIPA and the other utilities considered.
7. Discuss with LIPA management any apparent, material differences in cost types between LIPA and the other utilities considered, in order to determine the reasons for including them in the FPPCA.
8. Provide an opinion on whether costs listed in LIPA's Power Supply Charge tariff provision are of the nature to reasonably be considered components of the costs of fuel and purchased power, based on: (a) industry experience, and (b) any LIPA-specific circumstances for including them.

4. Comparison with Other Clauses

This scope element corresponded to the question: *Is the range of costs that the Public Service Commission has allowed one or more investor owned utilities to recover through automatic adjustment clauses similar to the types of costs that LIPA recovers through its FPPCA?*

Liberty undertook the following specific work steps:

1. Secure information about other New York utilities necessary to document what cost types the Public Service Commission has allowed them to recover through automatic adjustment clauses.
2. Compare the cost types that LIPA has recovered in the test period with the cost types the Commission has allowed other New York utilities to recover through automatic adjustment clauses.
3. Determine the existence of precedent with other New York utilities for the recovery of each cost type that LIPA has recovered through its FPPCA.
4. Discuss with LIPA those FPPCA cost types (if any) that do not have a New York precedent.
5. Provide an opinion on whether the range of costs that the Commission has allowed investor-owned utilities to recover through automatic adjustment clauses is similar to the types of costs that LIPA recovers through its FPPCA, discussing LIPA's rationale for including any that do not have precedent.

D. Approach

Liberty began with an orientation session designed to introduce Liberty team members to LIPA personnel who will be responsible for providing information and support, to establish protocols for securing access to documents and interviewees, and to conduct initial interviews to gain background information. Liberty followed the orientation session with document requests, reviews of the responses, outside data gathering (*e.g.* cost types recovered by others under automatic adjustment clauses) and subsequent interviews. Upon completing its analysis of the data gathered, Liberty prepared a draft report for comment by LIPA on factual accuracy and completeness, and for review by the New York Department of Public Service (DPS) of the draft report's fulfillment of the scope of the RFP.¹ Following the comments and conferences, Liberty prepared this final report.

¹ A Memorandum of Understanding between LIPA and DPS specified that DPS staff would assist LIPA in preparing the RFP, reviewing and assessing proposals received in response to LIPA's RFP, selecting the consultant, and providing comments as to whether the consultant complied with the scope of the RFP.

Appendix I.1: Liberty's Background

Liberty has been in business for over twenty years, during which the firm has become a leading provider of utility management, operations, financial, rate, and regulatory consulting services. Liberty has served over two-thirds of the country's utility regulatory authorities (and several others in North America) in electricity, natural gas, telecommunications, and water industry matters and over 40 utilities in a wide variety of capacities.

Liberty performed this engagement under a very senior team, whose members all have 30 or more years in the utility and utility regulatory businesses, and have averaged 10 years and more than 50 projects with Liberty. The team members included:

- Liberty's president and a founder, who has substantial experience in utility regulatory proceedings involving fuel and energy clause design and operation, board of directors oversight and governance, and utility management and operations evaluations
- A former executive of an energy production company and a senior utility fuel and energy manager who has performed over a dozen audits that focused on management and operation of fuel adjustment clauses for electric utilities
- An electrical engineer who directed the New York Public Service Commission's electric, gas and water operations, had responsibility for regulatory oversight of many types of New York automatic adjustment clauses, and has held lead roles in many rate reviews, management audits and other regulatory reviews for all New York State investor-owned electric and gas utilities, the New York Power Authority, and investor-owned utilities or public power entities in more than ten other jurisdictions
- A regulatory accountant with extensive experience as a regulator, utility financial analyst, and consultant on regulatory matters, including ten years with the Pennsylvania Public Utility Commission participating in audits of the adjustment mechanisms of the energy utilities and development of the first set of regulations on fuel procurement policy and procedures, and tariffs for energy cost rates and gas cost rates for electric and gas companies, and including service for a major electric utility's rate department, having oversight over energy cost rate filings.

II. Board of Trustees' Approvals

A. Background

1. LIPA's Board of Trustees

LIPA's Board of Trustees ("Board") has met regularly since the Authority was established. The Board has met nearly 100 times since the effective date of the first LIPA tariff, May 29, 1998, averaging about nine meetings per year. In earlier years, meetings tended to be more frequent, while in more recent years, the average has been closer to eight meetings per year. Most meetings have taken place in the office building in which the LIPA offices are located, but from time to time the Board has met at other locations in the service territory. Meetings typically ran two to three hours, and generally included an open session, in which most Board business was transacted, and an executive session, in which litigation and personnel matters were discussed, but no votes were taken.

Board meeting attendance also included senior Authority officers (typically including the General Counsel, Chief of Staff, COO, CFO, several Vice Presidents, the Controller and the Secretary to the Board) and occasional guests. Until 2007, the Chairman, and subsequently the CEO typically presented most matters to the Board, with the exception of the Operations and Financial Reports, which were presented by other officers, and occasional presentations made by other officers or invited guests; *e.g.*, consultants.

Prior to the Board meetings, Board members typically received a number of memoranda and reports on various items on the agenda, including an Operations Report, a Financial Report, and specific reports pertaining to matters on the agenda. Items on the agenda requiring a Board resolution typically included a draft resolution in the package.

LIPA's Board meeting minutes are public documents, and the Board meeting minutes from all its Board meetings going back to 1998 are available on its web site.

2. The Fuel and Purchased Power Adjustment Clause

LIPA's tariff includes Section 166, which sets forth the FPPCA. Section 166 became effective, along with the entire initial LIPA tariff, on May 29, 1998, upon LIPA's acquisition of LILCO. LIPA held public hearings for substantive tariff changes; such hearings are subject to the provisions of the State Administrative Procedure Act (SAPA), which specifies various requirements for public notice.

The *Statement of Fuel and Purchased Power Cost Adjustment* ("Statement") forms the basis for calculating the actual rate used in computing bills to customers. LIPA's initial tariff required such a statement and that it be retained on file in its business offices. The statement falls within the responsibility of the CFO; it is not required to be presented to the Board for approval. Statements do not require public hearings and are not subject to the requirements of SAPA.

Statement No. 1 became effective May 29, 1998. A number of Statements have followed; the last one reviewed by Liberty was Statement No. 21, which became effective May 1, 2009. LIPA does not have written procedures to cover the preparation of the Statements.

B. Findings

The following table summarizes Board actions with respect to the FPPCA.

Table I: Summary of Board Actions Related to Fuel and Purchased Power Costs

Meeting Date	Board Action	Tariff Action
May 31, 1998	LILCO-based tariff adopted, including FPPCA	Initial Adoption
March 1, 2001	Board resolution approved, providing for partial recovery of Excess Fuel Costs: ² <ul style="list-style-type: none"> • \$318 million in fuel costs incurred above the amount included in base rates for year 2000, netted against \$22 million recovery above the amount in base rates from 1998; resulting in a net shortfall of \$296 million . • Funding of \$296 million as follows: LIPA will recover \$125 million through FPPCA, will meet the balance of \$171 million through a change to the accelerated Shoreham-related debt retirement. Adopted on an emergency basis under provisions of SAPA.³ 	Partial Waiver of Tariff
June 28, 2001	March 1, 2001 resolution adopted on a final basis. ⁴	Partial Waiver of Tariff
Feb.28, 2002	Board resolution approved, providing for partial recovery of Excess Fuel Costs: LIPA incurred \$200 million in unrecovered fuel costs during the year 2001. LIPA will recover \$125 million through the FPPCA and the remainder of \$75 million through a change to the accelerated Shoreham-related debt retirement. Adopted on an emergency basis under provisions of the State Administrative Procedure Act (SAPA).	Partial Waiver of Tariff
May 21, 2002	February 28, 2002 resolution adopted on a final basis.	Partial Waiver of Tariff
Feb. 27, 2003	Board resolutions approved, providing for partial recovery of Excess Fuel Costs and other changes: <ul style="list-style-type: none"> • LIPA incurred \$254 million in unrecovered fuel costs during the year 2002. LIPA will recover \$129 million through the FPPCA. • Begin transition to current year recovery, rather than one year lag, by recovering \$75 million of expected 2003 Excess Costs beginning in March 2003. • Defer \$70 million of expected 2003 Excess Costs for recovery through FPPCA in 2004. • Institute the Reserve Margin of revenues over costs of \$20 million going forward for the remainder of 2003 and going forward. • Defer remaining 2003 Excess Costs and recover over 10 years. 	Tariff Waiver Tariff Changes

² LIPA refers to any fuel and purchased power costs beyond those recovered through base rates until July 5, 2006 as *Excess Fuel Costs*.

³ Under the SAPA emergency measure provisions, an agency may take action prior to the expiration of the required public notice period, subject to final review and action after the notice period has expired.

⁴ Subsequent to the issuance of the March proposal to the Trustees, LIPA closed its books for the year 2000, and the numbers changed slightly. Unrecovered fuel costs were approximately \$307 million, and LIPA will not collect approximately \$183 million through the FPPCA.

Feb. 10, 2004	Board resolutions approved, providing for 10 year amortization of all 2003 Excess Costs, including the \$70 million that was to have been collected in 2004.	Tariff Waiver (Modification to previous waiver)
April 27, 2006	Board resolution approved to: <ul style="list-style-type: none"> • Change the Reserve margin from \$20 million to \$75 million, plus or minus \$50 million. • Update and modify the tariff language describing FPPCA components. 	Tariff Change
June 22, 2006	Board resolution approved to move all fuel and purchased power costs included in base rates to the FPPCA. In order to make the change revenue neutral for all classes, minimum charges for certain rate classes were changed, as those charges were stated in terms of fixed dollar amounts.	Tariff Change

C. Conclusions

1. LIPA maintains comprehensive minutes of its Board meetings and materials presented to the Board.

During the Audit Period, LIPA maintained bound copies⁵ of the minutes of its Board meetings and materials presented to the Board (*e.g.*, memoranda and draft resolutions) in its corporate offices. The minutes are public documents, and are also maintained on the LIPA web site.

Liberty reviewed the agendas of all Board meetings and, on a sampling basis, the minutes and related material of all Board meetings since the effective date of the initial tariff. Liberty observed that the meetings followed the agendas and that the minutes appear to present a clear and comprehensive description of the discussions and actions that took place at the Board meetings.

2. The Board was fully informed of the proposed changes to the FPPCA through memoranda and presentations at the meetings.

Draft resolutions were provided to the Board for any items requiring Board action. Memoranda were also provided as background for some agenda items.

All proposed changes to the FPPCA were accompanied by both memoranda and draft resolutions which described the proposed actions and explained the underlying rationale for the changes. Liberty reviewed the memoranda, resolutions and minutes related to all changes to the FPPCA that came before the Board. The memoranda presented the proposed changes, explained the reasons for the changes, when and how they would be made, and summarized any comments received. The minutes of those meetings reflected a reasoned discussion of the items and the subsequent Board action.

⁵ LIPA is currently evaluating whether it should still maintain bound, hard copy minutes, or if electronic copies are sufficient.

3. All waivers of and changes to the FPPCA tariff were approved by the Board.

Liberty reviewed all of the documents, including memoranda, draft resolutions and Board meeting minutes related to changes to the FPPCA. All waivers of and changes to the FPPCA tariff, as summarized in Table 1 in the Findings section of this chapter, were presented to and approved by the Board after discussion.

4. Public hearings were held on several occasions; the outcomes were reported to the Board.

The hearings and a brief summary of any comments made at the hearings were reported in the memoranda presented to the Board and were discussed by the Chairman at the Board meetings. Public hearings were held for all the Board actions included in Table 1, including the actions on March 2001 (3 hearings), February 2002 (3 hearings), May 2002 (2 hearings), February 2003 (2 hearings), June 2001 (2 hearings), February 2004 (4 hearings), April 2006 (2 hearings), and June 2006 (2 hearings).

5. LIPA's under-recovery of Excess Fuel Costs through the FPPCA and treatments of the under-recovery amounts through other actions constituted reasonable exercises of Board discretion.

Through July 5, 2006, LIPA's rate structure provided for recovery of a specified portion of fuel costs through base rates, with any differences between actual fuel costs and the base rate amount (which LIPA refers to as *Excess Fuel Costs*) to be collected from or refunded to customers through the FPPCA. From time to time, as detailed in Table 1, the Board waived certain provisions of the LIPA tariff to change the timing of the recovery of Excess Fuel Costs or to authorize the funding of portions of the Excess Fuel Costs from sources other than the FPPCA.

Liberty found those actions to be fully consistent with actions by the New York PSC and other regulatory commissions. While not necessarily routine matters, they are common. From time to time, commissions authorize deferrals, amortizations or other treatment of certain costs, fuel or otherwise, to spread the costs over a longer period of time, allocate them to specific classes, allocate between shareholders and ratepayers, or handle them in other ways.

6. LIPA's unbundling of fuel costs was consistent with utility practice, and was revenue neutral.

In July 2006, LIPA unbundled fuel and purchased power costs from base rates and put the entire recovery of those costs through the FPPCA. It accomplished this in a revenue-neutral fashion, by reducing base rates and increasing FPPCA charges by a corresponding amount.

This approach is fully consistent with actions taken by the New York PSC and some other regulatory commissions, in separating fuel costs from base rates, to enable retail competition and create transparency and comparability of bills.

7. None of the Board actions taken with respect to the FPPCA authorized the passing of non-fuel costs through the FPPCA.

Liberty reviewed all FPPCA-related memoranda, resolutions and Board minutes since the initial tariff was approved in 1998. All costs addressed by those documents and acted on by the Board were fuel and purchased power costs as defined by the tariff. Liberty's review of the components included in those costs and the related accounting treatment is included in Chapter Five.

III. Costs Recovered through the FPPCA

A. Background

LIPA's initial tariff, effective May 29, 1998 included the following elements:

- Total cost of fossil and nuclear fuel purchased on behalf of LIPA
- Total cost of power purchased by or on behalf of LIPA
- Total cost of all transmission charges related to the previous item associated with current and future off-Long Island transmission facilities
- Payments to customers who shed load at LIPA's request during high demand periods
- Actual costs of all related state and local taxes and payments in lieu of taxes
- The Fuel Purchase Performance Incentive and System Power Supply Performance Incentives in accordance with the Energy Management Agreement with KeySpan
- Less: Revenues from sales to entities other than LIPA retail customers less all costs to LIPA other than fuel.

The tariff also defined the various parameters of the FPPCA calculation, including:

- Average cost of fuel: total cost of fuel and purchased power divided by requirements
- Energy requirements: estimated or actual amounts of electricity, before distribution losses, required to meet LIPA's customer needs, less energy sold to entities other than LIPA retail customers, and transmission and pumping losses associated with energy supplied from pumped storage units
- Base cost of fuel: cost of fuel included in the Energy Charge portion of the rate, set at 3.6379 cents per kWh
- Several elements to provide for a tolerance band around the differences between the Average Cost of Fuel and the Base Cost of Fuel (Fuel Cost Tolerance Band, Difference, Fuel Cost Recovery Allowance)
- Factor of Adjustment: to reflect system losses, set at 1.078
- Adjustments, to define how changes to the FPPCA would be applied.

B. Findings

1. Changes to Accommodate Industry Structure

LIPA's Board modified the cost elements initially included in the FPPCA on three occasions: February 2003, April 2003, and July 2006. Appendix 1 to this chapter summarizes those modifications. They addressed such matters as changes to the New York State ISO operations, changes in the ownership of the Nine Mile II nuclear plant, the State's Renewable Portfolio Standard, and changes to service agreements with KeySpan/National Grid.

2. Changes to Accommodate Increasing Fuel Costs

LIPA did not pass the full measure of fuel cost increases through the FPPCA for several years. The Authority chose instead to use part of the reserve margin included in base rates to offset Excess Fuel Costs. LIPA did not include this offset portion in future recoveries through the FPPCA. As fuel prices steadily increased, LIPA began to exhaust those options, and to address the fact that basing current bills on historic FPPCA costs was resulting in higher and higher shortfalls in fuel and purchased power revenues as compared to the associated costs. In early 2003, LIPA began a two-year transition (2003 – 2004) to remove the lag feature of FPPCA

recoveries, and to base FPPCA charges on current projections of fuel costs, rather than on historic fuel costs.

In February 2003, LIPA also changed its tariff to include what Liberty refers to as an *Operating Reserve* as a component of the FPPCA. LIPA initially set this “excess of revenues over expenses,” generally similar to net income, at a target of a flat \$20 million; *i.e.*, with no tolerance band above the \$20 million. In April 2006 LIPA increased this target to \$75 million, and added a tolerance band of plus or minus \$50 million. In requesting Board approval of the April 2006 change, the Chairman noted that the Operating Reserve and tolerance bands were modest, representing only 2 percent and 2.7 percent of annual revenues, respectively. This modification provided a method under which the level of fuel cost to be recovered could be reduced by no more than an amount that would still provide the targeted margin between total revenues and total expenses. In no event, however, would this mechanism allow the Authority to recover an amount that would exceed its incurred fuel and purchased power costs.

3. Unbundling of Supply and Delivery Charges

Having completed the move to current collection of fuel costs, LIPA next decided to fully unbundle fuel costs from base rates. This change moved the fuel component of approximately \$725 million per year from base rates to the FPPCA, which LIPA accomplished on a revenue neutral basis. The reasons cited for the change included customer confusion over the presentation of fuel and purchased power costs in two parts, the perceptions by some customers that the FPPCA was an inappropriate charge (*i.e.*, that they were paying for fuel twice, in base rates and through the FPPCA), and to provide for conformance of LIPA’s bills more closely to the bills of the New York investor-owned utilities (IOU)s. This change produced customer bill reformatting to include two primary components: supply charges and delivery charges.

C. Conclusions

1. LIPA’s initial FPPCA tariff and rate structure adopted the tariff from its predecessor, LILCO.

The initial tariff, adopted in May 1998, essentially adopted the LILCO tariff language and the LILCO FPPCA, which had been approved earlier by the PSC. LIPA’s base rates were set such that an expected level of fuel costs, based on historic levels, was included in those base rates, and the FPPCA recovery for the first year was set at zero. At that time, the tariff provided for a one-year lag for recovery or refunding of under- or over-collection of FPPCA revenues. That is, over- or under-collections of FPPCA during any given year were to be recovered or refunded the following year.

2. LIPA’s funding of fuel costs partly through base rates was consistent with the well-established practice of including some fuel costs in base rates and the remainder through a clause such as its FPPCA.

General industry practice has long been for fuel adjustment clauses to include a portion of costs (either historic or projected) in base rates, and to recoup or refund any departures from those levels through an adjustment clause. LIPA’s initial FPPCA adopted that approach, with some time shifting of recoveries accomplished through waivers of certain tariff provisions, until it fully unbundled supply and delivery charges.

Through its earlier Board actions and currently through the Reserve Margin method, LIPA has essentially funded more of its excess (*i.e.*, above the amounts included in base rates) fuel and purchased power costs through base rates, and therefore has collected less than it otherwise would through the FPPCA. In other words, LIPA has recovered less than the prevailing type of adjustment clause would permit, choosing instead to allocate a portion of its base revenues, beyond the fuel cost included in base rates, to fuel and purchased-power cost recovery. Thus, lower base rates and full recovery of fuel and energy cost increases through the adjustment clause could have produced the same charges to customers (and correspondingly, revenues to the Authority). Accordingly, LIPA has not recovered more than its fuel and purchased power costs. Rather, it has in effect used margins generated from base rates to offset some of those fuels and purchased power costs. Provided that the difference between base rate revenues and related costs remained high enough to produce the targeted *Operating Reserve*, LIPA could have continued to offset fuel and energy cost under-recoveries without increasing the FPPCA rate element.

This “pooling” of revenues (base and FPPCA) to offset fuel and purchased power cost under-recoveries is not typical, but did not result in over-recovery of fuel and energy costs. LIPA’s ability to use this approach is unusual in that it had a margin from base rates that investor-owned companies generally do not have for extended periods of time. Its “advantage” in this respect, while unique, did not lead either to base rate increases (which have remained the same since LIPA began service) or to over-recovery under the FPPCA (which LIPA could have, consistently with general industry practice, increased on a number of occasions, but did not).

3. LIPA’s changes to the components included in the FPPCA were consistent with the intent of the FPPCA and the recovery of fuel and purchased power costs.

A number of LIPA’s changes to the components of the FPPCA were made to accommodate changes to ISO operations, markets, and contracts. These changes conform to the manner in which such changes have been treated in New York and other jurisdictions. For the most part, they are considered “housekeeping” changes. They are frequently aggregated over a period of time and implemented in a package, as opposed to presenting a constant stream of small changes.

4. LIPA’s full unbundling of supply costs from base rates in 2006 was consistent with industry practice.

In Liberty’s experience, fuel adjustment clauses have frequently caused some level of customer confusion, particularly when there was a lag between expenditures and recovery. As competitive markets emerged, another level of confusion was overlaid on bills. It became important to provide a level playing field for competitive suppliers and to enable customers to compare and contrast options available to them. LIPA’s unbundling provided customers with separate line items on their bills for supply and delivery, similar to the way the bills for New York IOUs are itemized.

5. None of LIPA’s FPPCA changes triggered the need for PSC filing or approval.

The Public Authorities Law provides generally that the Public Service Law does not apply to LIPA’s rates, services and practices, with the exception of the siting of certain generating and transmission facilities. However, the Public Authorities Control Board conditioned its approval

of LIPA's acquisition of LILCO on the requirement that any increase in average customer rates greater than 2.5 percent be subjected to PSC hearing and approval.⁶

In Liberty's experience, standard ratemaking practice in New York and other states allowing fuel adjustment clauses provides for the pass through to customers of fuel costs outside the normal rate case and ratemaking process. Indeed, that is the purpose of a fuel adjustment clause. Fuel costs may be subject to other post hoc reviews, as in the New York PSC's annual fuel adjustment clause filing and review process, but that is outside of the Commission's rate case process.

The Chairman of the PSC at the time conveyed that information to LIPA in a letter dated April 21, 1998 (attached as Appendix 2 to this chapter), which stated the standard of review that the Commission would apply with respect to automatic adjustment clauses:

1. *Consistent with Commission ratemaking practices, the two and a half percent rate increase threshold would exclude any rate changes attributable to operation of LIPA's automatic adjustment clauses (e.g., fuel and power adjustment rider, payments-in-lieu of revenue taxes rider, Shoreham property tax settlement rider, and ratepayer class action refund rider....*

Subsequent to that that letter, in 2006 the PSC determined that, regardless of the condition imposed by the Public Authorities Control Board, the PSC had no authority or jurisdiction to review LIPA's rates.⁷ That decision was upheld by the Albany County Supreme Court in 2007.⁸

⁶ Public Authorities Control Board Resolution 97-LI-1, July 16, 1997, Condition No. 5

⁷ Case 06-M-0587 – Petition of Long Island Power Authority for Commission Review of the Appropriateness of Long Island Power Authority's Recovery of Fuel and Purchased Power and Related Costs Through Its Automatic Adjustment Clause, Order Declining Request for Review of Adjustment Clause, issued June 20, 2006, and Order Denying Petition for Rehearing, issued November 13, 2006

⁸ County of Suffolk v. NYPSC (Albany County Index No. 7099-06)

Appendix III.1: LIPA Tariff Changes

Cost Element (Adder unless otherwise indicated)	5/29/1998	2/27/2003	4/27/2006	7/5/2006
Total actual cost of fossil and nuclear fuel purchased on behalf of the Authority to produce electricity	x	x		
Total actual cost of fossil and nuclear fuel purchased on behalf of the Authority to produce electricity, including nuclear fuel disposal costs and the Authority's share of the Nine Mile Point 2 nuclear generating plant decontamination and decommissioning costs paid to the operator			x	x
Total actual cost of all electric power purchased by or on behalf of the Authority (1)	x	x	x	x
Total actual cost of all transmission wheeling charges related to previous element (2)	x	x		
Total actual cost of all transmission wheeling and other charges (including charges on any off-island transmission facilities which deliver power to the Authority's system)			x	x
Total actual cost of payments by the Authority to customers who shed load during times of high system demand at the request of the Authority	x	x	x	x
Total actual cost of all related State and local taxes and Payments in Lieu of Taxes	x			
<i>(Minus)</i> Actual fuel costs and the value of foregone emission credits that partially offset revenues credited from energy sold to other utilities, power marketers, or other brokers who are not retail supply customers of the Authority (4)	x	x	x	x
<i>(Minus)</i> The actual monthly net revenues received by the Authority from sales to non-retail customers (3). Net revenues are the revenues from these sales less the related costs of fuel and taxes, and all other costs to the Authority for such sales.	x			
The Fuel Purchase Performance Incentive in accordance with the Energy Management Agreement	x	x		
The cost incurred under any system power supply management agreement or fuel management agreements			x	x
The System Power Supply Performance Incentive in accordance with the Energy Management Agreement	x	x		
Charges for Scheduling, System Control and Dispatch Service (cost based components of ancillary services) provided by the NYISO (5)		x		
Charges for Capacity, Energy, Scheduling, System Control and Dispatch Service, and ancillary services paid by LIPA as a participant in any Independent System Operator (ISO) administered markets			x	x

Any other net charges or revenues associated with TCCs, ancillary services and short term capacity revenues received by LIPA as a participant in the NYISO (6)	X	X	X
Bill Credit Adjustment revenues to ESCOs and DRCs under the LI Choice Program (7)	X	X	X
Premiums and other costs associated with the Authority's fuel hedging program, including any gains or losses realized		X	X
Costs incurred to comply with the requirements of the New York State Renewable Portfolio Standards program		X	X

Appendix III.2: PSC Chairman's April 21, 1998 Letter



STATE OF NEW YORK
PUBLIC SERVICE COMMISSION
THREE EMPIRE STATE PLAZA
ALBANY, NY 12223-1350
E-Mail Address: MOH@dps.state.ny.us

MAUREEN O. HELMER
CHAIRMAN

(518) 474-2523
FAX (518) 473-2838

April 21, 1998

Richard M. Kessel
Chairman
Long Island Power Authority
333 Earle Ovington Boulevard
Uniondale, New York 11553

Dear Chairman Kessel:

This letter relates to the New York State Public Authorities Control Board's Resolution No. 97-LI-1, dated July 16, 1997 ("PACB Resolution"). As you know, Condition No. 5 of the PACB Resolution provides that: "LIPA will not implement an increase in average customer rates exceeding two and one half percent over a twelve month period, nor will LIPA extend or reestablish any portion of a temporary rate increase over two and one half percent, without approval of the Public Service Commission following a full evidentiary hearing." Please be advised that, based on our understanding of this PACB condition, the Commission will implement this condition in the following manner:

1. Consistent with Commission ratemaking practices, the two and a half percent rate increase threshold would exclude any rate changes attributable to operation of LIPA's automatic adjustment clauses (e.g., fuel and purchased power adjustment rider, payments-in-lieu of revenue taxes rider, Shoreham property tax settlement rider, and ratepayer class action refund rider).
2. The Commission's approval would be based upon a reasonable showing by LIPA that any covered rate increase in excess of two and one half percent proposed by it is consistent with its statutory obligations to fix and maintain rates, fees, and charges pursuant to Sections 1020-f(u) and 1020-k(6) of the Public Authorities Law, including LIPA's obligations under its bond resolutions.

Chairman Richard M. Kessel
Page 2
April 21, 1998

3. The Commission would conduct the referenced evidentiary hearing and render a decision in an expedited manner.

Very truly yours,



Maureen O. Helmer
Chairman

IV. Comparison of LIPA's FPPCA with Other Adjustment Clauses

A. Background

1. Automatic Adjustment Clauses Generally

Automatic adjustment clauses in various forms have been used for ratemaking purposes by utilities for decades. Generally, they have been employed for periodic or aperiodic changes that meet one or more of the following criteria:

- Price volatility
- Timing unpredictability
- Controlled by external events (outside of utility control)
- Expedience (*e.g.*, implementation of a change between rate cases).

The costs of fuel for electricity generation and the costs of gas purchased for delivery to customers comprise by far the most common elements of automatic adjustment clauses for energy (electricity and gas) utilities. Liberty is familiar, however, with a number of other costs that have been passed through to customers under such clauses. These costs include:

- Purchased water
- Property taxes
- Capital costs of infrastructure replacement
- Negotiated wage and salary increases.

Further, while recurring expenditures are the most common subjects of automatic adjustment clauses, Liberty is also familiar with one-time pass-throughs, particularly for one-time changes and for expedience.

2. Fuel Adjustment Clauses Specifically

A standard reference work in the field of public utilities regulation notes that in 1981, 28 public utility commissions allowed automatic adjustment clauses for fuel for electric generation, and 35 commissions allowed automatic adjustment clauses for purchased gas.⁹ Those clauses were used for, "tracking fluctuations in the cost of fuel to the fuel costs embedded in the base rates... and ...relieve[d] utilities of the burden of constantly filing for rate increases or decreases as fuel costs change."¹⁰

3. Fuel Adjustment Clauses of New York State Investor-Owned Utilities

Liberty reviewed the current fuel adjustment clause tariffs of all the New York State electricity-delivery IOUs, including:

- Central Hudson Gas & Electric Corporation
- Consolidated Edison Company of New York, Inc.
- National Grid (the former Niagara Mohawk Power Corporation)
- Orange and Rockland Utilities, Inc.

⁹ *The Regulation of Public Utilities*, Phillips, Charles F., Public Utilities Reports 1985, p. 235

¹⁰ *Id.*, p. 236

- New York State Electric & Gas Corporation
- Rochester Gas & Electric Corporation.

4. Fuel Adjustment Clauses of Utilities Outside New York State

Liberty collected utility adjustment clause information through internet data searches, direct communication with some utilities, and Liberty's files. In total, Liberty analyzed clause information for the following 25 public and private utilities outside New York State:

- Kentucky – clause identical for 5 utilities
 - AEP – Kentucky Power Company
 - Duke Energy Kentucky
 - East Kentucky Power Company
 - Kentucky Utilities
 - Louisville Gas & Electric
- Indiana – clause similar for 4 utilities, and similar to Kentucky
 - Duke Indiana
 - Southern Indiana Gas & Electric Co. (SIGECO)
 - Northern Indiana Public Service Company (NIPSCO)
 - AEP Indiana
- Missouri – clause similar for 3 utilities
 - AmerenUE
 - Empire District Electric Co.
 - Kansas City Power & Light Co.
- Ohio – clauses similar for the only two utilities that have automatic adjustments
 - Duke Energy Ohio
 - AEP Ohio
- Salt River Project (SRP)
- Arizona Public Service Company (APS)
- Public Service of New Mexico (PNM)
- Los Angeles Department of Water and Power (LADWP)
- Tennessee Valley Authority (TVA)
- Florida Power & Light Company (FPL)
- Nova Scotia Power Inc. (NSPI)
- Carolina Power & Light Company, d/b/a/ Progress Energy Carolinas, Inc. (CP&L)
- The Potomac Edison Company, d/b/a Allegheny Power – Maryland (PECO)
- Virginia Electric and Power Company, d/b/a Dominion North Carolina Power (VEPCO)
- Duke Carolinas.

B. Findings

1. Clause Formats

a. New York Utilities

The New York PSC has no prescribed standard format for adjustment clauses or standard definitions of terms used in clause tariffs. Each utility applies its own format, presentation, definitions, and level of detail for its tariff in general and its clause in particular. One does find

major overlaps among the definitions used by the utilities. Some use very broad terms, allowing the clause to encompass many components not specifically delineated in the tariff, while others use very narrow, specific definitions.

Tariffs are usually modified on a case-by-case basis, typically in the context of formal proceedings. Even when there is a generic change, utilities are usually free to comply using their own formats, definitions and language.

Appendix 1 to this chapter shows a comparison of the general provisions of the clauses of the New York utilities, including LIPA and the IOUs. Because of the differences in formats and definitions, exact comparisons are impracticable. The categories and elements have been condensed to provide a reasonable measure of comparability.

b. Utilities Outside New York State

As with the New York utilities, Liberty found that for both public and private utilities outside of New York, each utility typically uses its own format, presentation, and definitions for its tariff in general and its clause in particular. Similarly, there are major overlaps among the definitions used by the utilities, and varying levels of detail. Some use very broad terms, allowing the clause to encompass many components not specifically delineated in the tariff, while others use very narrow, specific definitions.

Appendix 2 to this chapter shows a comparison of the general provisions of LIPA's clause to the clauses of the public and private utilities outside of New York State that Liberty examined. Because the differences in formats and definitions make exact comparisons impracticable, the categories and elements have been condensed to provide a reasonable measure of comparability.

2. Unbundling of Supply and Delivery Charges

a. New York Utilities

For many years, the convention in New York State (and most other jurisdictions) was to include a best estimate of fuel costs in base rates, with variations around that level to be charged to or refunded to customers through the fuel adjustment clause. As the utilities divested generation and retail competition began, that methodology became unworkable. It had become virtually impossible to put utility and non-utility suppliers on the same footing. By the early 2000s, all the New York IOUs had unbundled their rates to separate the supply and delivery components. In 2006, LIPA completed a similar unbundling.

b. Utilities Outside New York State

Liberty found both bundled and unbundled supply and delivery charges in the fuel adjustment clauses for utilities outside of New York State. A number of jurisdictions unbundled rates in conjunction with the divestiture of generation or the introduction of retail competition; however, many have not. Where competition has not been introduced, the primary driver for unbundling does not exist, and many states have remained with the traditional practice of including a portion of the fuel costs in base rates and a portion in the clause.

3. Clause Characteristics

Liberty found a general similarity among the clauses of most IOUs. Additionally, Liberty found that those features commonly included in the clauses for most IOUs are also found in the clauses for public power entities, including LIPA. However, in general, public power entities have more expansive and more complicated clauses.

For example, a typical IOU clause is that of Kentucky. All Kentucky utilities have the identical clause, and the clauses for many other IOUs are similar. The Kentucky clause reads as follows:

Fuel costs shall be the most recent actual monthly cost of:

- (a) Fossil fuel consumed in the utility's own plants, plus the cost of fuel which would have been used in plants suffering forced generation or transmission outages, but less the cost of fuel related to substitute generation, plus*
- (b) The actual identifiable fossil and nuclear fuel costs associated with energy purchased for reasons other than identified in paragraph (c) below, but excluding the cost of fuel related to purchases to substitute for the forced outages, plus*
- (c) The net energy cost of energy purchases, exclusive of capacity or demand charges¹¹ (irrespective of the designation assigned to such transaction) when such energy is purchased on an economic dispatch basis. Included therein may be such costs as the charges for economy energy purchases and the charges as a result of scheduled outages, all such kinds of energy being purchased by the buyer to substitute for its own higher cost energy; and less*
- (d) The cost of fossil fuel recovered through inter-system sales including the fuel costs related to economy energy sales and other energy sold on an economic dispatch basis.*

By comparison, the LIPA's FPPCA reads as follows:

The Cost of Fuel and Purchased Power includes:

- a) The total actual cost of fossil and nuclear fuel purchased on behalf of the Authority to produce electricity, including nuclear fuel disposal costs and the Authority's share of the Nine Mile Point 2 nuclear generating plant decontamination and decommissioning costs paid to the operator, plus*
- b) The total actual cost of all electric power purchased by or on behalf of the Authority from the New York Power Authority (NYPA), other utilities, and independent power producers, including qualifying facilities and customer-generators, plus*
- c) The total actual cost of all transmission wheeling and other charges (including charges on any off-island transmission facilities which deliver power to the Authority's system), plus*

¹¹ The tariff language reflects pre-Regional Transmission Organization (RTO) practice. Current RTO operations include bundled pricing, which includes demand and capacity charges rolled in with energy charges, all of which are passed through the fuel adjustment clauses.

- d) *The total actual cost of payments by the Authority to Customers who shed load during times of high system demands at the request of the Authority, plus*
- e) *The actual fuel costs and the value of foregone emissions credits that partially offset revenues credited from energy sold to other utilities, power marketers, or other brokers who are not agents for retail power supply customers of the Authority, plus*
- f) *The cost incurred under any system power supply management or fuel management services agreements, plus*
- g) *Charges for Capacity, Energy, Scheduling, System Control and Dispatch Service, and ancillary services paid by LIPA as a participant in any Independent System Operator (ISO) administered markets, plus*
- h) *Any other net charges (net of revenues) associated with TCCs, ancillary services and short term capacity received by LIPA as a participant in any Independent System Operator (ISO) administered markets, plus*
- i) *Bill Credit Adjustment (BCA) payments to ESCOs and DRCs under the LI Choice Program, plus*
- j) *Premiums and other costs associated with the Authority's fuel hedging program, including any gains or losses realized, plus*
- k) *Costs incurred to comply with the requirements of the New York State Renewable Portfolio Standards program.*

The above list of clause components from the LIPA tariff most closely resembles the clause language from another public entity, the Los Angeles Department of Water and Power (LADWP), with two exceptions. One item (LIPA clause item "i") is not found in the clause language for any other utilities, including LADWP. This is due to the method LIPA employs to true-up the credit given to customers of ESCOs for energy and capacity costs those LIPA avoids. More commonly, other utilities do not true-up the credit monthly and therefore do not include this clause item.

Some items in the LIPA clause can be found only in the clauses of other public power entities. For example, the provision for recovery of renewable-portfolio standard costs and the specific provision for recovery of ISO costs are found only in the LIPA and LADWP clauses. In Liberty's experience, those costs are frequently recovered through fuel adjustment clauses, but included in other categories and not specifically identified.

The LIPA FPPCA provision for an Operating Reserve is only found in the clauses for other public entities: LADWP, SRP and TVA. Some distinction on this similarity must be made, however. The clauses of the other three public entities use the concept of an Operating Reserve to provide for stability of fuel costs, and the funding mechanisms vary among the four entities.

The LADWP and SRP mechanisms are similar to the LIPA mechanism in that each of the other utilities brings in funds from other sources to partly fund fuel costs. However, the TVA mechanism is significantly different in that it only serves as a deferral account to buffer changes in fuel and purchased power costs; but eventually these costs are passed on to ratepayers. A brief summary of these mechanisms of other public power entities is as follows:

- The SRP mechanism (called a Rate Stabilization Fund) is funded by transfers from the General Fund, at the direction of the Directors, in order to provide stability to fuel prices.
- The LADWP mechanism (called a Rate Stabilization Account) is funded in multiple ways, as specified by specific formulas set forth in the clause tariff language, in order to provide stability to fuel prices.
- The TVA mechanism is actually a deferral account where fuel and purchased power costs in excess of a certain amount, as specified in the clause language, are deferred, carried as a receivable, and charged to customers at some point in the future, in order to provide stability to fuel prices.

Liberty also noted a few unique attributes of certain clauses:

- CP&L has no provision for the direct recovery of changes in purchased power costs. However, the clause for this utility does provide for the recovery of fuel costs that are clearly identifiable as fossil fuel costs associated with energy purchased. Also, the clause for this utility does provide for the recovery of firm generation capacity purchases.
- VEPCO has no provision for the direct recovery of changes in purchased power costs. The clause is only for recovery of fuel costs.
- PECO terms its clause an “Energy Cost Adjustment Charge” and covers only “Transmission and Electric Supply Charges.”

C. Conclusions

1. The NY PSC exercises broad discretion over what costs and revenues are permitted to flow through fuel adjustment clauses.

For the most part, the components (and the dollars) in the clauses of New York utilities are directly or indirectly related to fuel and purchased power costs. However, some components are only distantly related, and other costs are unrelated and are included in the clause for expediency of collection or refund.

2. LIPA’s FPPCA is similar to the clauses of the NY IOUs, with two exceptions.

Unlike the New York IOUs, which purchase most of their power through the ISO, LIPA purchases most of its power under bilateral contracts administered by another entity.

LIPA’s tariff also includes a Cost Adjustment Factor to produce a Reserve Margin which allows LIPA, within certain parameters, to collect less but no more than the total allowed cost of fuel and purchased power through its clause.

3. Investor Owned Utilities across the country have clauses that are generally similar to each other, and that are relatively simple compared to the LIPA FPPCA; however, the components of IOU clauses are also found in the LIPA FPPCA.

Clauses of IOUs across the country are generally straightforward and concise, and include costs for both fossil and nuclear fuels and purchased power, with provisions for reconciliation and true-up. These same features are included in the LIPA FPPCA. Many of the other features found in the LIPA clause, including the Operating Reserve, are not found in IOU clauses.

4. Public power entities nationwide have clauses that resemble the LIPA FPPCA.

The clauses of public power entities, including LIPA, are noted for being more complex than the IOU clauses, and cover a number of additional components not found in IOU clauses. However, there is similarity between the LIPA FPPCA and similar clauses of other public power entities. For example, the LADWP clause contains provisions for recovery of renewable portfolio standard costs, Demand Side Management costs, and recovery of ISO costs, as does LIPA's FPPCA.

In addition, the clauses for LADWP, SRP and TVA have provisions to provide for stability of fuel costs.

5. The LIPA Operating Reserve has both similarities to and differences with similar mechanisms of other public power entities.

The funds maintained by LADWP, SRP and TVA are used in part provide stability to fuel costs. LIPA achieves such stability primarily through its hedging program, but LIPA's use of margins to offset fuel and energy cost recovery has moderated the impact of rising fuel and purchased power costs. LADWP's and SRP's mechanisms are similar to LIPA's in that they fund fuel and purchased power costs in part from other sources. The TVA mechanism is different in that it only serves as a deferral account to buffer changes in fuel and purchased power costs, but eventually these costs are passed on to ratepayers. A brief summary of these mechanisms of the three other public power entities is as follows:

- The SRP mechanism (called a Rate Stabilization Fund) is funded by transfers from the General Fund, in order to provide stability to fuel prices.
- The LADWP mechanism (called a Rate Stabilization Account) is funded in multiple ways, in order to provide stability to fuel prices.
- The TVA mechanism is actually a deferral account where fuel and purchased power costs in excess of a certain amount are deferred, carried as a receivable, and charged to customers at some point in the future, in order to provide stability to fuel prices.

6. Of the many components within the LIPA FPPCA, only two were not specifically found in clauses of other utilities that Liberty analyzed.

The various components of LIPA's FPPCA are similar to those of other public power entities, but two components were not found in clauses of LAWDP, SRP or TVA, or in the clauses of any IOUs. These two components are:

- Total actual costs of payments by LIPA to customers who shed load during times of high demand at the request of LIPA (Tariff item VII.A.1.d),
- Provision for payments to marketers, as part of the Choice Program (Tariff item VII.A.1.i), as opposed to charging for it separately.

Components such as these are often subsumed by other more inclusive clause elements and not specifically identified.

7. LIPA's funding of fuel and purchased power costs partly through base rates prior to July 5, 2006 was consistent with the well-established practice of including some fuel costs in base rates and recovering the remainder through a clause.

Liberty's evaluation of the clauses of multiple utilities, both public and private, found that with only two exceptions, utility clauses serve to compensate the utility for changes in fuel and purchased power costs, either positive or negative, compared to a base amount of fuel costs that were already included in the base rates of the utility. The two exceptions are both public entities: SRP and LADWP. In each case, the clauses for these two electricity providers (and for LIPA as well) cover all recovery of fuel costs through the fuel and purchased power adjustment mechanism.

Appendix IV.1: Comparison of LIPA FPPCA with New York State IOUs' FACs

Fuel Clause Component	LIPA	Con Ed	NiMo	Cen Hud	NYSEG	O&R	RG&E
1. Direct Fuel and Purchased Power Charges							
ISO Charges - Capacity, Energy, & All Other	x	x	x	x	x	x	x
Transmission Charges and Revenues	x	x	x	x		x	x
Revenues from Various Generation and Transmission Sales (Net)	x	x			x		
Cost of Fossil Fuel	x	x					x
Costs from Owned Generation		x		x	x		x
Non-Utility Generator Contracts, Including Tax Reimbursement	x	x		x		x	
Cost of Nuclear Fuel & Other Nuclear Plant-Related Costs (1)	x		x				
Purchased Power	x	x		x	x		x
Public Policy Contracts		x					
2. Indirect Direct Fuel and Purchased Power Charges							
Fuel & Power Supply Management Services, Supply Procurement Expenses	x				x		
Hedging Costs and Credits	x	x			x	x	
Cash Working Capital on Purchased Power					x		

3. Renewable and Demand Side Programs						
Renewable Portfolio Standards Costs	X					
Demand Side Programs (incl. Program Costs, Incentives, Lost Revenues)		X				
Choice Program - Bill Credit Adjustments to ESCOs, DRCs	X					
4. Miscellaneous						
Payments to customers who shed load	X					
Cost of savings to a particular large customer		X				
Transition charges resulting from divestiture of generation		X				X
Revenue shortfalls from NYPA serving Con Ed customers		X				
Certain Uncollectible, A&G, Customer Care Expenses		X		X	X	
Cost Equalizer for Diversified Service Territory					X	
Commodity Earnings Sharing					X	
Certain Depreciation Expenses and Taxes					X	
Value of Foregone Emissions Credits Offsetting Revenues from Energy						
Sales to other than LIPA Retail Customers	X					
Factor of Adjustment for Lost & Unaccounted for				X		
Steam Air Conditioning Programs		X				
Reconciliations and True-ups	X	X	X	X	X	X
Other Costs as May Be Approved by PSC		X				

(1) LIPA other costs include only fuel disposal, decontamination and decommissioning costs paid to the operator.

Appendix IV.2: Comparison of LIPA FPPCA with Non-New York State Utilities' FACs

Fuel Clause Component	LIPA	KY	MO	OH	SRP	APS	PNM	Duke	SIGECO	NIPSCO	AEP	LADWP	TVA	FP&L	NSPI	CP&L	PECO	VEPCO	Duke
								Ind			Ind						MD	NC	Car
		(1)	(2)	(3)															
1. Direct Fuel and Purchased Power Charges																			
ISO Charges - Capacity, Energy, & All Other	x											x							
Transmission Charges and Revenues	x											x							
Cost of Fossil Fuel	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x
Cost of Emission Allowances	x			x								x	x						
Cost of Nuclear Fuel & Other Nuclear Plant-Related Costs	x					x	x	x	x	x	x		x			x			x
Purchased Power	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x		x
2. Indirect Direct Fuel and Purchased Power Charges																			
Fuel & Power Supply Management Services, Supply Procurement Expenses	x																		
Hedging Costs and Credits	x		x		x	x									x				

3. Renewable and Demand Side Programs																			
Renewable Portfolio Standards Costs	x										x								
Demand Side Programs (incl. Program Costs, Incentives, Lost Revenues)	x										x								
Choice Program - Bill Credit Adjustments to ESCOs, DRCs	x																		
Energy Efficiency Savings Program											x								
4. Miscellaneous																			
Payments to customers who shed load	x																		
Certain Depreciation Expenses and Taxes							x	x	x	x									x
Value of Certain Foregone Emissions Credits	x																		
Factor of Adjustment for Lost & Unaccounted for				x															
Reconciliations and True-ups	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Reserve Margin of Revenues over Expenses	x						x												
Other Costs as May Be							x	x											

Approved by PSC																		
Rate Stabilization Fund				x						x	x							
Fossil & Nuclear fuel costs associated with energy purchased	x	x						x	x	x						x		
Cost of Fossil Fuel recovered through inter-system sales (Subtraction)		x						x	x	x						x		
Cost of Federally Mandated Carbon or Energy Taxes					x													
Exemption for certain low income, medical and solar rates						x												
Decommissioning expenses for Nuc. Generating Facilities	x										x							
Audit Costs Related to Fuel											x							

Notes:

- (1) Kentucky includes 5 Kentucky utilities: AEP Kentucky Power Company, Duke Energy Kentucky, East Kentucky Power Company, Kentucky Utilities, Louisville Gas & Electric
- (2) Missouri includes 3 Missouri utilities: AmerenUE, Empire District Electric Company, Kansas City Power & Light Co.
- (3) Ohio includes 2 Ohio utilities: Duke Energy Ohio, AEP-Ohio; other Ohio utilities do not have fuel clauses

V. FPPCA Costs Recovered

A. Background

The scope of Liberty's review included a determination of whether LIPA has, since May 1998, recovered through the FPPCA any costs already recovered in other rates and charges. Liberty's examination of this question included a review of LIPA's FPPCA tariff provisions, LIPA Statements No. 1 through 21 in support of FPPCA rate changes and the accounting books and records in support of actual and projected applicable fuel cost and associated revenues for the period of 1998 through 2009.

1. FPPCA Changes

The initial FPPCA provided for a 3.6379¢/kWh of fuel and purchased power cost at the generator voltage level. This amount reflected the fuel and purchased power costs included in base rates. LIPA set the initial FPPCA rate at "zero," pending an anticipated continuing annual review cycle of actual cost incurred versus the 3.6379 cents¢/kWh reflected in base rates charged to customers. LIPA has since filed 21 FPPCA Statements. On six separate occasions, LIPA modified the language of its tariff leafs addressing the FPPCA. These changes, addressed in more detail earlier in this report, recognize changes in ISO organization structure and operating circumstances affecting fuel and purchased power costs, and the desirability of providing improved clarity and definition of allowable cost elements and of the methods for calculating the FPPCA rate element.

Effective April 27, 2006 the 3.6379¢/kWh fuel and purchased power portion of the base rate was increased to 3.9217¢/kWh. This amount reflects the 3.6379¢/kWh of fuel and purchased power costs in base rates, multiplied by the 1.078 Factor of Adjustment for line losses in the FPPCA calculation formula. This simply eliminated one of the steps in the FPPCA calculation process, *i.e.*, multiplying the base rate charge by the line loss factor. The last major tariff change, approved on June 22, 2006 effective on July 5, 2006, eliminated the 3.9217¢/kWh from the FPPCA calculation formula and decreased the general base rate charges by the same amount. This revenue-neutral change produced no net change in total costs per kWh to customers; it merely moved an element from base rates to the FPPCA. LIPA describes this change as producing customer bills that totally unbundle the costs of fuel and purchased power costs.

2. FPPCA Accounting

The FPPCA rate provides for the recovery or refund of the difference between actual costs encompassed by the charge and those costs recovered through base rates. The general purpose of combining automatic adjustment clause (FPPCA) and base rate elements in charges to customers is to provide a general conformity between what customers pay and what fuel and purchased power actually cost. Automatic adjustment clause mechanisms vary in how they seek to accomplish this goal. In most cases the mechanisms: (a) describe the fuel cost elements and the calculation methods, and (b) provide for a reconciliation (a true-up provision) to assure that revenue collections and costs match appropriately over the long term. Some clauses use an actual (historical) or projected (future) period for setting the amount that customers pay for current costs. In general, the purpose of a projected or future test year basis is to help eliminate the lag in recognizing changes in fuel cost when an historic period is used.

The changes LIPA has made to its FPPCA have: improved clarity and definitions related to fuel cost components, recognized changes in organization structure, added or removed tolerance bands, simplified the calculation process, incorporated reserve margins, eliminated timing lags by moving from an actual historical period to a prospective future test period, and transferred the portion of fuel and purchased power costs recovered in base rates to the FPPCA. Chapter Three of this report discusses these FPPCA changes more fully. As LIPA modified its FPPCA, it also provided for changes within its accounting system and budgeting process to meet its own cost accounting and reporting controls in support of FPPCA rates.

B. Findings

Liberty interviewed LIPA's controller and other persons responsible for performing the FPPCA calculations under LIPA Statement Nos. 1-21 in order to gain an understanding of the procedures used, accounts involved, methods, calculations, work papers produced, and any tests/examinations performed to verify conformity of methods, practices, and costs with tariff requirements.

LIPA has not used a formal written plan of administration for purposes of administering and calculating the FPPCA. Liberty has found such plans to be a common element of clause administration. Absent such written plan or narrative, Liberty conducted a detailed interview to obtain an overview of the process, including the review of supporting workpapers for the FPPCA calculations. LIPA advised that there was no outside independent audit or review performed specifically on its FPPCA calculations. LIPA further explained that while such focused types of audits had not been performed, their outside auditors reviewed fuel costs as part of their general audit procedures. Liberty found the participants to be knowledgeable and forthcoming with respect to the FPPCA calculation process and the type of support work papers available to support each calculation.

Liberty secured access to documents necessary to address the recovery of LIPA costs from customers. These documents included: LIPA's tariffs, LIPA Statement Nos. 1-21, supporting workpapers, and electronic copies of LIPA's general ledger accounts from 1998 through 2008 relating to the monthly/annual activity pertaining to fuel costs and associated revenues.

Liberty reviewed some of this documentation on-site at LIPA. Liberty examined the original FPPCA tariff files and other tariff pages to begin the identification and classification of base rate charge items. Liberty reviewed general ledger details, and secured information about its structure and contents. LIPA also provided an electronic copy of the general ledgers for the years relevant to Liberty's examination.

Liberty's initial work allowed the review team to gain a sufficient understanding of the cost types addressed by the FPPCA as LIPA calculated it through the period in question. Liberty also sought to identify any changes in the cost components of LIPA's base rate element during this period.

Liberty's review and comparison of LIPA Statement No. 1 for the year 1998 and fuel and purchased power costs confirmed the general consistency of the two in content and ultimately in amount. The 1999 fuel and purchased power cost per kWh was consistent with the 3.6379¢/kWh

in base rates. Liberty found that the amount assigned to fuel and purchased power costs at the FPPCA's outset was determined appropriately and with sufficient accuracy. Liberty also found that base rates and their components remained unchanged across the period of study, recognizing the transfer, effective July 5, 2006, of the initial base rate amount associated with fuel and purchased power costs to the FPPCA. Liberty's work found that transfer to be revenue neutral.

Liberty next reviewed the calculations and supporting documents provided in support of LIPA Statements No. 1-21. Liberty examined the per book actual detail general ledger information used in support of the FPPCA during the period when LIPA calculated it on the basis of historical cost. Liberty examined the details underlying budgeted information for the period when LIPA calculated the FPPCA on a prospective basis. Liberty reviewed the historical information on which LIPA based its true-up reconciliation process during this second period.

Liberty found the mathematical calculations undertaken by LIPA to perform all relevant FPPCA calculations to be reasonably accurate. Moreover, Liberty found historical fuel costs recorded in LIPA's per books general ledger and the budgeted costs calculations to be reasonably accurate. Liberty found minor differences, but they were not material. Additionally, adjustments and other related cost elements regarding deferred fuel and purchased power costs or the use of margins generated by base rates to offset unrecovered fuel and purchased power costs were supported by appropriate documents and calculations.

Liberty reviewed the LIPA information that supported rate element changes during the test periods. This review included the examination of information provided by LIPA in support of fuel cost and over/under recovery on a cost or component element basis, and a comparison of that information with general ledger detail. Liberty also compared fuel costs elements and any changes in recovery methods (such as the deferral of over/under recovery of fuel costs) to tariff requirements. Liberty found LIPA's changes in rate elements to be occasioned by factors such as improved clarity and definitions of FPPCA components, recognition of changes in organization structure, addition of or changes to tolerance bands, simplification of the calculation process, incorporation of reserve margins in FPPCA calculation, elimination of timing lags by moving from an actual historical to a prospective future test period and transferring the base rate fuel and purchased power costs to the FPPCA.

Liberty's review of LIPA's general ledger found individual FPPCA accounts to be maintained appropriately to classify and track costs and to include in some cases additional sub-accounts to track various cost elements contained within the FPPCA. As the FPPCA changed over time, LIPA made corresponding accounting changes to accommodate them. LIPA provided a summary report schedule of such items on an annual basis. Liberty reviewed the schedule and tracked these costs to the underlying accounts within the general ledger. This process verified the use of actual costs in the FPPCA over/under calculations. Similarly, LIPA established separate accounts to track deferred fuel cost to be recovered over extended future time periods. As discussed earlier, LIPA decided to forego the recovery of some levels of fuel cost through the FPPCA and offset those amounts with funds from other sources. Liberty found the decisions to defer or offset fuel costs not recovered through the FPPCA to be reasonably documented, appropriately structured, and supported by appropriate accounting entries to record the necessary

transactions. The identification and ease in tracking costs and the effects of changes served as an important measure for assuring that costs were recovered only once from customers.

Liberty validated LIPA general ledger accounting cost and procedures through additional follow-up questions. For example, following a review of general ledger detail, Liberty asked LIPA to provide responses and additional supporting information for journal entries that Liberty selected to use as tests at points in time across the entire audit period. The process included a review of the entire general ledger for the fuel and revenue accounts on a monthly basis for the entire period. In some cases, Liberty observed adjusting entries that reclassified cost into the fuel cost accounts, entries for fuel cost items that simply reflected monthly accruals without any reversals and entries of actual incurred costs, irregular credit entries that reduced fuel expense costs, and some very large adjustments. These typified the items that Liberty selected for further testing.

LIPA responded to all of Liberty's inquires and provided the additional supporting data requested. Liberty's review of that information demonstrated that the reclassification entries were appropriate. Liberty's examination of some credit entries revealed that they were offsets to lease expenses for generating facilities for land rent received from the vendor. Liberty noted that some offset amounts seemed very high and then dropped down to much lower consistent monthly amounts. Further review showed that the higher irregular offset items were the results of truing-up adjustments to conform to the contract terms. The large adjusting entries for some fuel contracts were supported by actual invoices that contained adequate descriptions of the costs and services provided. In summary, LIPA's responses included sufficient supporting data to justify all of the entries that Liberty tested.

Liberty's review did not include a test to verify the accuracy of accounting entries that make up the costs (*e.g.*, were third-party invoices coded to the right accounts, were costs as booked equal to costs paid). Further, while Liberty reviewed budget costs used in the FPPCA calculation under the tariff provision which provides for said calculation on a future prospective basis, it did not test for the reasonableness of the LIPA approved budgeted fuel costs, because the reasonableness of estimates was not within the scope of the examination.

C. Conclusions

1. LIPA has administered the FPPCA through a comprehensive and reasonable set of accounts that have remained consistent since its creation.

Liberty's review of LIPA's detail general ledger accounting system revealed that individual fuel and purchased power accounts were maintained to classify and track cost, including a number of sub-accounts to track various key components of FPPCA costs. Liberty found appropriate accounting entries to support decisions approved by the Board to defer or offset certain costs allowable for FPPCA recovery. LIPA's FPPCA documentation provides for sufficient traceability and allows for a sufficiently detailed level of FPPCA cost reporting by component.

2. LIPA has made reasonable changes to its FPPCA to accommodate new costs, not addressed in base rates, associated with market and regulatory changes; however, apart from a revenue-neutral transfer from to the FPPCA of the fuel and purchased power costs initially included in base rates at LIPA's inception, there has remained consistent separation and treatment of fuel and purchased power costs.

LIPA Statement No. 1 (for the year 1998) and actual incurred fuel costs reported for 1999, at the total and the component levels, matched reasonably closely. Liberty found the initial establishment of the costs included in base rates to have been reasonably prepared. The FPPCA rate element increased over time to reflect: (a) changes in costs already included in the FPPCA, and (b) new costs as the industry progressed through federal and other industry change and restructuring. Liberty found that base rates did not change, and that the cost increases and the new costs added to the FPPCA did not represent costs already being recovered in base rates. The transfer of the base rate portion of fuel and purchased power costs to the FPPCA, in June 2006, was revenue neutral; it did not produce double recovery.

A number of LIPA's FPPCA changes added clarity, definitional modifications, or calculation simplifications appropriate to changing conditions. None of these changes produced an opportunity for double cost recovery.

The change from the use of historical to prospective costs as the basis for FPPCA calculation also did not, given the continuation of an appropriate reconciliation process, create an opportunity for double or over-recovery. The addition of tolerance bands and reserve margins actually served to reduce recovery from what the FPPCA allowed at inception, and to reduce it further or assure that no more than actual fuel and purchased power costs would be recovered.

3. Liberty's test work found appropriate support and underlying calculations for the costs charged to accounts whose costs LIPA collected through the FPPCA.

Liberty reviewed LIPA Statements No. 1 through 21, and examined the supporting workpapers, accounting information, and the applicable FPPCA tariffs in effect from 1998 through 2008. Liberty found LIPA's FPPCA calculations reasonably accurate. Additionally, Liberty found the historic fuel cost was recorded in the per-books general ledger and budgeted costs consistent with LIPA calculations. Liberty observed only minor differences. LIPA has made a number of accounting adjustments across the audit period, and has elected to make certain cost deferrals and to allocate a portion of its Operating Reserve to fuel costs in lieu of recovering some fuel and purchased power costs (above those included in base rates) it could have collected through the FPPCA. Liberty found the adjustments to be supported by accounting documents, and, as noted earlier in this report, subjected to Board approval.

4. LIPA does not administer the FPPCA under a comprehensive set of written guidelines and procedures.

LIPA's controller and support staff indicated that there was no formal written Plan of Administration ("POA") for purposes of administering and calculating the FPPCA. Liberty considers the existence of such a plan to be an element of good utility practice, and has found such plans common in the industry. While LIPA's FPPCA appears to be reasonably administered, a formal written POA will provide for better administration and clarity as to what costs, i.e., related fuel and revenue accounts are to be included and/or excluded in the routine calculations. Further, a POA provides guidance to those not familiar with the process and helps to provide for consistency should the task of preparing the FPPCA shift to those not generally familiar with its preparation.

5. LIPA does provide for substantial, independent FPPCA testing, but has not provided for periodic certification of the propriety and reasonableness of costs assigned to accounts collected through the FPPCA.

LIPA advised that there was no outside independent audit or review performed specifically on the propriety and reasonableness of costs assigned to accounts collected through the FPPCA. LIPA's independent accountants do perform substantial test work to assure that controls applicable to the accounting for fuel and purchased power costs are effective. They do not, however, provide an opinion confirming the accuracy and sufficiency of the execution of procedures and calculations necessary to apply FPPCA tariff provisions, and verifying the existence of controls appropriate to assuring complete and accurate capture and assignment of allowed fuel and purchased power costs subject to the tariff provisions.

6. While procedural and controls changes would provide better assurances of FPPCA accuracy, Liberty's test work found no tangible indication of material error or of duplicate (base rate and FPPCA) recovery of costs.

LIPA appropriately accounted for, documented, and supported FPPCA tariff changes. Liberty's test work found no errors or document gaps that would suggest a risk of material error. A conformance to good utility practice, however, merits the establishment of a detailed plan of administration governing FPPCA administration and providing for routine auditing.