

**BGS Auction Administrative and
Other Related Expenses of
New Jersey EDCs**

*Final Report – Public Version
Confidential Material is Redacted*

Presented to:

*Board of Public Utilities
State of New Jersey*

Presented by:

*The
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Executive Summary

Audit Scope

The Liberty Consulting Group (Liberty) performed an audit of the administrative and other related expenses (Administrative Costs) of the four New Jersey Electric Distribution Companies (EDCs), as requested by the New Jersey Board of Public Utilities (BPU) in Docket No. EA17010004. The BPU issued a request for proposals (RFP) addressing the following of New Jersey BGS Administrative Costs:

- Administrative Cost definition and application
- Outside consultant and patent-related legal costs
- Administrative Cost Reasonableness (overall, outside consultants, and patent-related legal costs)
- EDC-specific Administrative Costs
- Administrative Cost Allocations (among EDCs and between each's CIEP and RSCP customers)
- Methods for Recovering Administrative Costs
- Potential standardization of Administrative Costs
- Compliance with BPU requirements.

Our audit addressed the Administrative Costs of Public Service Electric and Gas Company (PSE&G), Atlantic City Electric Company (ACE), Jersey Central Power & Light Company (JCP&L), and Rockland Electric Company (RECO). The four EDCs incur a variety of internally- and externally-generated Administrative Costs in designing and executing the state's Basic Generation Service (BGS) process, which consists of many integrated elements that take course throughout the year.

The EDCs have used the process since 2002 to procure electric supply through a statewide auction, conducted each February, to serve their BGS customers. The EDCs offer BGS service to retail customers who do not choose to take service from a third-party supplier or competitive retailer. Separate annual auctions, run concurrently, procure supply for the two BGS customer Groups:

- Larger users - -classified as Commercial and Industrial Energy Pricing (BGS-CIEP) customers
- Smaller users - - classified as Residential Small Commercial Pricing (BGS-RSCP).

Our work included an examination of the processes used to provide similar services in other jurisdictions. Their terms for BGS-like services differ, including titles such as Standard Offer Service (SOS), Default Service (DS), or Provider of Last Resort (POLR) Service.

The following report presents the results of our study addressing this scope established by the RFP. This Executive Summary highlights our findings, conclusions, and recommendations.

BGS Cost Elements

Assessing BGS Administrative Costs requires an understanding of the BGS process elements that drive them. New Jersey operates, in comparison with other jurisdictions in the region, a complex process for securing supply for customers who do not choose competitive suppliers. We found that process very sound and particularly commendable in providing a highly and in some respects uniquely participative (by potential suppliers), transparent, tightly controlled, and well-understood means for securing BGS supply. Understandably, the measures that produce these strengths add both complexity and cost to the New Jersey BGS process, when compared with other jurisdictions.

The use of a multi-day descending clock auction (DCA) adds particularly to the complexity of the New Jersey BGS process. Another auction form commonly used employs submission of a single confidential (sealed) bid per block or tranche of supply for customers like those who take advantage of BGS in New Jersey. We estimate that costs added by New Jersey's DCA process, when compared with simpler bidding processes, at approximately \$500,000 in direct annual charges. Moreover, changing from the DCA to these simpler methods [REDACTED] that appear from the information available to us unique to the New Jersey DCA auction method. [REDACTED]

These process costs and risks imposed by use of the DCA should be measured against the value that the BPU and stakeholders place on the benefits considered uniquely offered by the DCA method. In undertaking that cost/benefit balance, we found no empirical basis for concluding that the DCA produces lower-cost purchases than does a sealed bid approach. The EDCs and the outside firm they use to manage the BGS process agree. Replacing the DCA can be done in a manner that can preserve the other strengths of the long-standing BGS process (*e.g.*, extremely robust bidder participation, commendable transparency, and superior controls).

Some potential exists for short-term disruption in transitioning to a new approach from a BGS process. It also appears that the approach taken across more than a decade in New Jersey has met with satisfaction.

Administrative Cost Definition, Formulation, and Application

Defining Administrative Costs

The EDCs incur BGS Administrative Costs on both common and individual bases. The EDCs conduct many of the design, marketing, training, auction, and contract administration elements of the BGS commonly, using the same resources. An outside firm retained by the EDCs as Auction Manager performed or led much of the activity required to perform these BGS elements. A leading firm in the business, National Economic Research Associates, Inc. (NERA), has performed this role for the EDCs for many years. This firm provides similar services in other jurisdictions. A single law firm represented all four of the EDCs on patent-related matters. A single firm (now part of Bates White) served as consultant to the BPU and its Staff in overseeing BGS activities.

The outside resources performing these functions have long provided them and continue to do so. Their costs remained stable during the audit period, averaging about \$2.1 million per year. Together, their costs comprise most of the costs that the EDCs account for as BGS Administrative Costs. The Auction Manager accounted for the largest portion of the three primary common services during the audit period - - about \$1.6million per year (76 percent of these outside resource costs). Additional expenses for office space, bidder sessions, and auction viewing room expenses add about \$100,000 per year, also remaining stable across the audit period. Rent accounted for \$79,000 of these other outside cost sources.

The EDCS all treat the following as commonly-incurred BGS Administrative Costs:

- Preparing for and conducting the annual auction (DCA) performed by the Auction Manager
- Legal costs for patent-related issues, performed by the single law firm
- BGS oversight performed on behalf of the BPU and its staff
- Office space at Gateway One in Newark for the Auction Manager
- Equipment and meeting facilities for conducting information and training sessions for potential bidder
- Separate Gateway One space and equipment that others (such as the EDCs) use for real-time viewing of each February auction.

The EDCs treated these cost sources commonly in their BGS filings, but do not (but should) operate under a common, documented definition of commonly-incurred BGS Administrative Costs. We found much greater variance in the individually-incurred costs that the EDCs account for as BGS Administrative Costs. We believe that the EDCs should also subject individually-incurred costs to a common definition.

At one extreme, RECO recorded no individually-incurred costs at all. At the other extreme, ACE recorded amounts approaching \$1 million per year. The other two EDCs, (PSE&G and JCP&L) recorded only small amounts that appeared not to use a consistent definition. The costs they assigned to BGS Administrative Costs included printing, advertising, access to a PJM Interconnection, LLC (PJM) reporting system, and court-reporter fees.

ACE charges were substantial because the company recorded significant time charges incurred by personnel from affiliates who performed BGS-related activities. None of the other three EDCs charged any employee time to BGS Administrative Costs. Presumably, the other EDCs do require similar types and levels of internal services (perhaps excluding RECO, given its comparatively small size). None, however, even require employees to code time to BGS activities. Certainly, the use of an affiliated service company, as ACE does, to perform activities for a utility operating company requires care and completeness in costs assignment and allocation. The potential for cross subsidization of one utility operating company by another does not arise with the use of operating company employees. However, it is also the case that non-BGS customers of the other three EDCs bear responsibility for the recovery of internal costs for BGS activities that ACE's non-BGS customers do not. We did not find among other jurisdictions a universal practice of assigning internal costs to BGS-type processes. Some, however, do include even the costs of regulatory proceedings as BGS-type costs.

At the least, the New Jersey EDCs should consistently treat internal personnel costs. Using ACE as a proxy, amounts of as much or more than \$1 million each year are substantial. Whether provided by a service company or by operating utility employees, the causes of the costs involved remains identical among the four EDCs. In addition, the EDCs should adopt a common definition of what comprises the miscellaneous amounts accounted for as BGS Administrative Costs during the audit period. The amounts involved are relatively small; this change should not have a material impact on costs charged to BGS and non-BGS customers.

Tranche Fees

Tranche fees charged to winning bidders recover commonly-incurred Administrative Costs, based on an estimate of their magnitude made just before the annual February auctions. Each tranche or block of EDC load for each of the two BGS customer types comes with a supplier obligation to pay a pro rata share of these estimated costs. The suppliers make those payments through a deduction from the amounts charged to EDCs for the first month (June) of BGS deliveries under the contracts entered after the auctions. When actual costs differ from those estimates, an annual Reconciliation Charge Mechanism for each of the two customer types of each EDC serves to add the differences (plus or minus) to future BGS customer charges. Our review of the EDCs' policies, processes, and calculation formulas applicable to setting tranche fees and performing reconciliations found them consistent and appropriate across the audit period.

Transaction testing, however, disclosed some minor errors and omissions of expenses in a few categories. None had a material impact on recovered BGS Administrative Costs in the audit period, but the EDCs involved should correct them. Omitted expense items should be treated appropriately and consistently going forward. We found the invoices of the Auction Manager and their accounting treatment consistent and appropriate. The invoices were accurate and supported, and the EDC allocations of invoiced costs conformed to their load block shares as required. However, the EDCs have not exercised their contract rights to audit the Auction Manager's invoices. They should undertake invoice reviews periodically.

We also found the invoices of the patent law firm and the BPU Consultant (the next two largest providers of services driving commonly-incurred BGS Administrative Costs) appropriately supported and allocated. However, all the EDCs other than PSE&G accounted for patent legal costs in ways that excluded portions from the BGS processes that reconcile estimated to actual costs subject to recovery through the BGS process. The accounting that produced this gap differed among the three EDCs involved. [REDACTED]

JCP&L, ACE, and RECO need to correct the accounting for audit period patent-issues legal costs, to include them fully in their Reconciliation Charge Mechanisms. In comments to a draft of this report, JCP&L stated that it has made the correction.

PSE&G initially bore the office space lease costs for Newark office facilities used by the Auction Manager. Allocations of those costs should have followed the indicated EDC allocation factors, but the amounts borne by each EDC in our test months showed different allocations. Overall, the actual allocations caused PSE&G to bear a greater share of costs than called for by its established allocation factor. PSE&G also bore costs for facilities used to allow auction monitoring (*e.g.*, by

EDC personnel) and to hold bidder information systems. These costs were not allocated, due to their small size. PSE&G ultimately bore all of them, relieving the other EDCs of what would have been their allocated shares. The EDCs should correct practices for these charges, but the results will not produce material changes in allocations among them or costs to customers.

Invoice Timing

We found a substantial lag between the time that the Auction Manager delivered services and the monthly invoices covering those services. Auction Manager work took a predictable course each year; therefore, we found it reasonable to expect invoicing to occur within 45 days of billing-month end. Auction Manager monthly invoices well exceed our benchmark, with the lag increasing substantially as the audit period progressed. Lags of this length make corroboration of services rendered more difficult, and complicate measures to reconcile estimated to actual costs. The EDCs should work with the Auction Manager to come into conformity with this benchmark. It will help to minimize the amounts of costs reconciled to estimates used to set tranche fees in a prior year for collection from BGS customers in the following year.

Reasonableness of Administrative Costs

Auction Manager

The key source of comparatively-high New Jersey’s BGS auction administrative costs is the Auction Manager. The manager’s costs are largely driven by the highly labor-intensive nature of the services it provides in leading and performing the more complex process employed in New Jersey. We found this process superior in many respects, and especially supportive of robust bidder participation, transparency, and control. These values justify a higher cost.

The Auction Manager’s cost declined during the Audit Period. We found no basis for concluding that its charges reflected any inefficiency. The Auction Manager’s rates and the costs of the systems that support the BGS process were reasonable. The Auction Manager supported its charges with sufficiently detailed invoices. We found no reason to question the efficiency with which the Auction Manager provided services.

Nevertheless, exposing the Auction Manager role periodically to some meaningful level of competition would increase assurances the EDCs are receiving best value, without compromising the values produced by a commendable New Jersey process.

Patent-Related Legal Costs

[REDACTED]

[REDACTED] On the other hand, they have faced none in recent years during which infringement exposure (risk probability and measures of damages) have moderated in American business generally. Without criticizing past activities, the EDCs should not stay their current course without subjecting its wisdom to a

structured analysis of the probability of occurrence and the dollar (and other) magnitude of consequence of the two principal risks involved:

[REDACTED]

[REDACTED]

[REDACTED]

The EDCs have not undertaken, but now should do so, an analytically-founded risk analysis to measure the value of annual expenditures on patent risk mitigation against the level of risk mitigation (measured in dollars) produced. Analysis of this type comprises a core element of modern thinking on risk management, and an element that needs to be applied here to annual amounts that have become a normal, recurring cost to customers.

Our review of the efficiency with which patent-related legal services have been provided was limited by our inability to examine billing details (based on claims of privilege). Notwithstanding this limitation, we found the expenses at a low enough recurring level to conclude that there was not a significant risk of material inefficiency. Therefore, we did not pursue the billing details when presented with claims of privilege. Ultimately, we believe that the best way to look at the patent-legal costs is as an inherent “cost of doing business” under the DCA. The way to avoid that cost, like the others imposed by the DCA, is to change to another auction method. We presented our view on that choice above.

BPU Consultant

The BPU consultant provided comprehensive and task-oriented monitoring and evaluation of the BGS process. The role of the BPU consultant includes completion of a detailed checklist evaluating the performance of BGS activities that take place before, during, and after the DCA. We found this work performed as expected and at a cost that is within the range of reasonableness. Further, the selection of the BPU Consultant results from a competitive solicitation regularly performed, which further demonstrates the reasonableness of the costs related to this function.

Individual EDC Administrative Costs

Except for ACE, the EDCs did not account for significant levels of individually-incurred BGS Administrative Costs. We tested the ACE personnel charges and found no problems. We did not undertake a review of the efficiency of their performance, but, based on the functions performed, as ACE described them, we did not find them beyond what we would generally expect.

Allocation of Administrative Costs

A large portion of BGS Administrative Costs are incurred on a common basis among the four state EDCs, and then allocated among them. The process for setting and collecting tranche fees that recover these common costs was clearly defined and consistently applied. Our testing of invoices and supporting calculations showed the process to be a well-controlled one, with two exceptions of minor magnitude and concerning allocation of office space lease and facilities costs representing a very small portion of commonly-incurred BGS administrative costs during the audit period.

We found a single, consistently executed method for allocating common BGS Administrative Costs. We found no reason to conclude that differentiated methods would enhance the cost allocation process. Each EDC consistently used a uniform and appropriate recovery method for common BGS Administrative Costs during the audit period. Our review and testing of the EDCs' Reconciliation Charge Mechanisms verified the consistent and accurate use of the tranche fee calculations and reconciliation methods.

Our review and testing verified appropriate allocation of BGS Administrative costs between CIEP and RSCP customer groups, with one exception. Beginning in February 2014, ACE allocated all Auction Manager and BPU Consultant costs to its RSCP customer group. Correcting this misallocation during the audit period takes a downward adjustment to the RSCP group and a corresponding upward adjustment to the CIEP customer group in the amount of \$101,802. We also recommend that ACE makes the necessary adjustments in the future to reflect the appropriate allocation of costs between the two customer groups.

Administrative Cost Recovery Methods

The BGS process requires reconciliation of estimated and actual Administrative Costs and revenues. The EDCs use different cycles for reconciling costs. We found that each followed and used clear and consistent processes, cost components, and allocations of Administrative Costs during the audit period. Our review of the Company Specific Addendum (CSA) Compliance Filings, Rate Reconciliation Charge filings, and supporting accounting information verified compliance with BPU requirements.

However, the EDCs should file with the BPU periodic reports identifying BGS Administrative Costs at a reasonably detailed categorical level, to support direct review of the accuracy and appropriateness of the components subjected to reconciliation. Combining many cost types and elements into a single line item without detail hinders the process for identifying specific costs sources and testing them.

Administrative Cost Standardization

In practice, the New Jersey EDCs do employ a common, standard means for addressing commonly-incurred BGS Administrative costs, notwithstanding some of the execution issues (lease and facilities costs and accounting for patent-related legal costs, for example) we found. The biggest variance among them occurred in their treatment of individually-incurred costs. The EDCs did not demonstrate consistency in the internally-generated expenses they classified as Administrative Costs.

We did not find a sound justification for differences in classification of miscellaneous costs, such as those for printing, advertising, and court reporting services, but the costs involved are too small to make the gap there a material issue. Much more important are employee costs, which, as described above, only ACE accounts for as BGS Administrative Costs. These ACE costs neared \$1 million per year over the audit period.

Each of the EDCs use systems and structures capable of standardizing reporting and recovery of both commonly- and individually-incurred BGS Administrative Costs. They have the capability to do so without major development or sustaining costs and resources.

The risk of double recovery of costs can arise when determining what charges to treat separately from those generally recoverable through delivery rates. We did not find that risk significant in the case of ACE. Billings for services provide a suitable basis for testing whether costs billed “to” the BGS process have been deducted from the larger pool of employee costs from which they come.

There is a sound basis for considering a requirement for the other EDCs to include similar employee costs, or for requiring ACE to cease doing so. Moreover, controllable means exist for making inclusion happen in a transparent, testable fashion. The question of doing so thus turns more on policy considerations. Practice in other states varies, assigning no costs at one extreme. What we would view as the “middle group” of utilities contains some utilities who include costs for three types of resources: (a) planning and executing BGS-type supply acquisition and management agreements, (b) accounting for BGS-related costs and revenues, and (c) regulatory and legal expenses for proceedings that address process design and cost and rate recovery approval. At the other end of the spectrum, a few jurisdictions add costs designed to provide third-party suppliers sufficient “head room” to compete with the prices for BGS-type service.

Certainly, the internal resources whose costs ACE assigns to BGS Administrative Costs perform functions of the three types noted. Including or excluding them are both reasonable options, but treating ACE differently on the basis that it uses service-company resources does not appear consistent with how other affiliate costs are treated in other ratemaking contexts.

Compliance

In all the areas we examined, we considered applicable BPU requirements and we considered how the functions, activities, and documentation reviewed comported with them. While we have made recommendations for change, and while we consider them all consistent with BPU requirements, we did not find any clear violations of BPU requirements.

Summary of Audit Recommendations

Chapter II: BGS Process Elements

1. [REDACTED]
2. Evaluate the net cost and BGS-quality impacts of transitioning to a simpler auction process.

Chapter III: Administrative Cost Definition, Formulation, and Application

1. Through the next EDC CSA filings, establish a formal, documented definition of Commonly- and Directly-Incurred BGS Administrative Costs.
2. Establish a practice of conducting periodic reviews of the Auction Manager’s charges for BGS services.
3. Correct JCP&L’s under-inclusion of patent-related legal expenses.
4. Correct ACE’s under-inclusion of patent-related legal expenses.
5. Correct RECO’s under-inclusion of patent-related legal expenses.
6. Correct the methods and calculations for allocating lease costs for Newark offices used by the Auction Manager.
7. PSE&G should allocate the costs of auction viewing and bidder information session facilities.

8. ACE should adopt the practice of explaining more fully out-of-period adjustments in the future.
9. Enhance standardization of the categories of uniquely-incurred costs of the EDCs for performing and supporting BGS functions.

Chapter IV: Allocation of BGS Administrative Costs

Liberty has no recommendations regarding the allocation of common BGS Administrative Costs.

Chapter V: Mechanisms for Recovering Administrative Costs

1. Provide for EDC filings with the BPU of periodic reports identifying BGS Administrative Costs at a reasonably-detailed categorical level, to support direct review of the accuracy and appropriateness of the components subjected to reconciliation.

Chapter VI: Allocation of Administrative Costs to Customers

1. Provide to the BPU supporting information sufficient to demonstrate that patent-related legal costs originally included in delivery rates were charged to BGS customers per the established allocation factors.
2. Adjust ACE charges to the BGS-RSCP and BGS-CIEP to reflect the appropriate allocation of Auction Manager and Staff/Board Consultant Charges for the 2013 to 2016 BGS periods.

Chapter VII: Review of Auction Manager Costs

1. Periodically subject Auction Manager services procurement to meaningful competition.

Chapter VIII: Timing of Charges for Services

1. Move Auction Manager billing into conformity with a 45-day benchmark.

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I. Introduction

A January 30, 2017, Request for Proposals (RFP) from the New Jersey Board of Public Utilities (BPU) sought an audit of the administrative and other related expenses (Administrative Costs) the New Jersey Electric Distribution Companies' (EDCs) incur in designing and executing the state's Basic Generation Service (BGS) processes. Retail electric customers who do not choose alternate energy suppliers may take Basic Generation Service (BGS). The state's four electric distribution companies (EDCs) provide customers access to BGS through contracts secured annually through competitive marketplace solicitations. These four EDCs are Public Service Electric and Gas Company (PSE&G), Atlantic City Electric Company (ACE), Jersey Central Power & Light Company (JCP&L), and Rockland Electric Company (RECO). A January 2017 Order in Docket No. EA17010004 authorized an audit of BGS Administrative Costs and the mechanisms providing for their recovery, and led to the RFP. The BPU selected Liberty to perform the audit, whose results this report addresses.

Attention to BGS Administrative Costs has recurred for several years; a BPU directive of November 20, 2012, in Docket No. ER12060485 asked the four EDCs to submit descriptions of all costs they captured as BGS Administrative Costs and of their means for recovering them. Most BGS Administrative Costs have arisen from agreements with outside parties who provide a range of services to the EDCs collectively. A November 24, 2014, BPU Order directed Staff to initiate a review of BGS Administrative Costs, which included ██████████ expenditures for legal services provided in connection with patent issues associated with the annual BGS auctions. A November 16, 2015, BPU Order required the EDCs to provide updated patent-related legal costs charged and mechanisms used to recover BGS Administrative Cost.

The EDCs incur a variety of internally and externally generated Administrative Costs in designing and executing the state's Basic Generation Service (BGS) process. The BGS process elements that drive these costs include:

- Regulatory proceedings through which the EDCs and stakeholders propose and comment on determining the sizes and structures of procurement needs, design of the process for conducting auctions for that procurement, establishing how to administer the resulting agreements, and addressing recovery of contract and administrative costs from customers
- Marketing the auction broadly to the marketplace, qualifying, training, and responding to inquiries from potential bidders, and establishing clear procedures for participation
- Establishing, executing, and providing suitable controls over an auction process that will secure all needed procurements in a transparent, easy-to-use, and tightly-controlled manner
- Reporting on and validating auction results and providing for the execution of certain tasks associated with administering the resulting contracts.

The basic elements of the BGS process, who has responsibility for executing them, and the methods and systems that facilitate execution have remained stable since the inception of the BGS process in 2002.

The EDCs have used the process since 2002 to procure electric supply through a statewide auction process, conducted each February, to serve their BGS customers. BGS service is available to retail customers who do not choose to take service from a third-party supplier or competitive retailer. Concurrently-run, but separate annual auctions procure supply for the larger, Commercial and Industrial Energy Pricing (BGS-CIEP) customers and for the smaller, Residential Small Commercial Pricing (BGS-RSCP) customers. Our work included an examination of the processes used to provide similar services in other jurisdictions. Their terms for BGS-like services differ, including titles such as Standard Offer Service (SOS), Default Service (DS), or Provider of Last Resort (POLR) Service.

The BPU issued an RFP addressing the following elements of New Jersey BGS Administrative Costs:

- Definition, formulation, and application of Administrative Costs
- Outside consultant and patent-related legal costs
- Reasonableness of Administrative Costs
 - Overall
 - Outside Consultants
 - Patent-Related Legal Costs
- Calculation and examination of each EDCs common and individually incurred Administrative Costs
- Administrative Cost Allocations
 - Of commonly-incurred Administrative Costs among the EDCs
 - Among Customer Groups
- Methods for Recovering Administrative Costs
- Potential for standardizing components and treatment of Administrative Costs
- Compliance with BPU orders, regulations, and other mandates involving Administrative Costs.

Over the course of 22 weeks we conducted a dozen interviews and work sessions, and issued and reviewed the responses to 80 data requests. The work sessions included on-site testing of invoices, account entries, and related financial information. This report presents the results of our audit, which examined BGS Administrative Costs for the 2013, 2014, 2015, and 2016 BGS periods, which constituted the audit period. The BGS work performed by an Auction Manager selected by the EDCs comprised the largest single source of BGS Administrative Costs. We used the invoices of the firm use the period from June 1 through May 30 to define what for our purposes became a “BGS Period.” This period matches the “supply year” used for each supply contract awarded in the annual auction process. We used the following 12-month periods to divide the four-year audit period specified by the RFP:

- 2013 BGS Period – June 1, 2012 to May 30, 2013
- 2014 BGS Period – June 1, 2013 to May 30, 2014
- 2015 BGS Period – June 1, 2014 to May 30, 2015
- 2016 BGS Period - June 1, 2015 to May 30, 2016.

II. BGS Process Elements

A. Background

A review of the BGS Administrative Costs requires an understanding of the process and its elements that drive these costs. The nature and frequency of the elements comprising the New Jersey BGS process had a substantial impact on the costs incurred to secure and manage supply procured in annual statewide auctions for all four of the state's EDCs. Understanding these BGS process elements and how they compare to those used in other states lays a foundation for assessing BGS Administrative Costs. Two basic drivers produce BGS Administrative Costs:

- The nature and complexity of the process elements executed
- The efficiency with which the EDCs provide for and execute those elements.

We undertook this review to verify the effectiveness of execution, based on the design and intent of the BGS process elements. That review underlies assessment of the reasonableness of overall BGS Administrative Costs. However, in comparing the New Jersey BGS process elements with counterparts in other jurisdictions, we found here a comparatively high level of complexity and sophistication. We therefore also examined how that comparative level compares with the New Jersey's BGS Administrative Costs incurred during the audit period. As this chapter concludes, we find much to commend in the elements of the New Jersey's BGS process, and found nothing inherently excessive in them. Accordingly, we do not intend this chapter's discussion of Administrative Costs driven by design of key features of New Jersey's BGS process as an implicit recommendation to change the features involved. We simply seek to observe where less-costly alternatives may exist. Assessing the value of those alternatives in relation to costs is more appropriately left to the BPU, in consultation with the many stakeholders involved.

We examined the elements of the New Jersey BGS process in comparison with those of other jurisdictions for which we had or, as part of this audit, could gather meaningful information. We surveyed other jurisdictions that employ a BGS or similar approach (for example, Standard Offer Service or Default Service) to serve the loads of customers who can, but do not, choose suppliers other than the EDC that delivers energy to them

Direct comparisons proved difficult, given four aspects that distinguish New Jersey practices from those of many or most other jurisdictions. First, New Jersey's use of the descending clock auction (DCA) approach distinguishes it from most other jurisdictions for which we have information. The methods of the distribution utilities of other jurisdictions vary, but more commonly employ a single, sealed-bid approach. That approach confines bid receipt to a specified time window on a specified business day, with Maryland and the District of Columbia offering examples in the mid-Atlantic region. The second factor distinguishing New Jersey from most other jurisdictions is the more typical employment of separate procurement elements for each of their EDCs in other jurisdictions (which sometimes have only one EDC). New Jersey uses a common, single approach for all state EDCs. Third, New Jersey auctions take place over multiple days, rather than employing the single-day approach that dominates in other jurisdictions. Fourth, some other jurisdictions employ multiple auctions each year (quarterly, for example), in contrast to the once-per-year approach of New Jersey. Factors such as these make the drivers of administrative costs different.

Some of these differentiating factors push costs higher - - but some lower. A multi-EDC process offers options for economies of scale - - a single-EDC process much less so, if at all.

The descending clock and multi-day aspects of the New Jersey auctions add significant complexity compared to other jurisdictions on the whole. Accordingly, these aspects of the auction element add significant costs. The use of this approach by all four New Jersey EDCs, however, provides some offset to these added costs. More significantly, as we will describe, the New Jersey approach produces a comparatively-high level of transparency and control. These two attributes have value, which provides another justification for added complexity and costs. We have learned nothing to question the view that the BPU and stakeholders have remained comfortable for more than ten years with the qualitative factors that make the New Jersey approach more transparent and controlled. Certainly, the strong position of some EDC affiliates in the relevant supply marketplace underscores the importance of transparency and control.

Below we discuss costs that come with producing transparency and control. However, we did not find cost differences of a magnitude that warrant a conclusion of overdesign or undue complexity. The question instead focuses on one's view of the "value" that some drivers of New Jersey BGS Administrative Costs produce. The following portions of this chapter seek to provide the information that will permit the BPU and stakeholders to form their judgments about the relationship between value and costs as they exist now, and how that relationship might change (*e.g.*, reduced cost but lower perceived value) under alternative auction formats. The auction-related element of the New Jersey BGS process proved to be the one most subject to cost changes through adopting simpler approaches.

Despite differences among jurisdictions for which we have meaningful information, some key elements of supply acquisition remain broadly common. These common elements include bidder communication, affiliate participation, credit and collateral, system security, and process integrity, which we discuss in this chapter.

B. Findings

1. Overall Administrative Costs

The available data indicates that the New Jersey BGS process produces comparatively high costs versus other jurisdictions. It produced approximately \$2.2 million per year in external (common) Administrative Costs. During the audit period, ACE has recorded amounts approaching \$1 million in internal costs (see Chapter III, Finding #4). The other utilities did not record internal costs, but, assuming similar amounts at PSE&G and JCP&L produces a statewide cost total of some \$5 million, or an average of \$1.6 million for each of these three EDCs.

Total cost information from other jurisdictions is not widely available, but some data points do exist. All-in estimated costs for PECO procurement of BGS-type supply amounted to about \$1.6 million per year, based on a two-year cycle cost of \$3.1 million for the design and implementation of its process. Moreover, PECO has just moved to a longer, four-year cycle between formal process reviews. The stakeholders cited extending the cycle as reducing costs, particularly by spreading regulatory process costs over a four-year period. We calculated ongoing annual costs at \$1.3 million, based on the most recent costs and the switch from a two- to four-year cycle.

We have information about external, but not internal costs for some jurisdictions that employ quarterly and twice-yearly auction processes, using a first-and-final approach. They average less than \$300,000 per year to support quarterly auctions, as compared with New Jersey's \$2.2 million to support a single annual auction. It is likely that some of the utilities for whom supply is secured bear some internal costs for services and systems included in the New Jersey Auction Manager's costs. However, it remains clear that processes including a DCA like that employed in New Jersey are comparatively costly.

Despite the substantial differences that may exist on an absolute cost basis, New Jersey Administrative Costs remain a very low percentage of the value of the contracts produced. The New Jersey BGS process produces supply contracts with values between \$2 and \$3 billion per year, with an assumed \$5 million in combined internal and external Administrative Costs representing less than .025 percent of those annual contract values.

2. Auction Manager Costs

The costs of the Auction Manager for the EDCs comprise the largest single source of BGS Administrative Costs in New Jersey. The following table summarizes the Auction Manager's invoiced charges for the four BGS periods included in the audit scope.

Summary of Auction Manager Hours and Costs

Year	2013	2014	2015	2016
Professional Expenses				
Regulatory and Rules	\$209,519	\$189,431	\$222,256	\$145,036
FAQ's Bidder Info Data	\$539,685	\$367,738	\$490,072	\$393,364
Mark to Market	\$40,620	\$29,455	\$29,983	\$38,583
Steering Comm & Mgt	\$32,040	\$49,139	\$81,968	\$52,618
Software & Auction Admin.	\$380,055	\$349,789	\$367,919	\$350,086
Miscellaneous	\$321	-	\$3,126	\$205
<i>Total Hours-Based Costs</i>	<i>\$1,202,240</i>	<i>\$985,551</i>	<i>\$1,195,324</i>	<i>\$979,891</i>
Other Costs				
Miscellaneous	\$55,567	\$38,333	\$46,498	\$45,927
Outside Services	\$53,265	\$65,993	\$69,494	\$0
Software - Optimal Auc. Inc.	\$216,000	\$218,000	\$220,000	\$218,500
Website Maintenance	\$0	\$0	\$4,685	\$0
Affiliated Consultants	\$0	\$0	\$105,630	\$205,202
Telephone	\$1,097	\$0	\$0	\$0
Postage & Freight	\$1,576	\$1,803	\$334	\$1,413
Travel, Meals & Lodging	\$41,663	\$69,439	\$71,513	\$45,034
Misc. Credit	\$0	\$0	-\$768	\$0
<i>Total Other Charges</i>	<i>\$369,168</i>	<i>\$393,568</i>	<i>\$517,386</i>	<i>\$516,076</i>
TOTAL BILLED	\$1,571,408	\$1,379,119	\$1,712,710	\$1,495,967
Hours Billed by Category				
Regulatory and Rules	599.25	537.5	538.75	391
FAQ's Bidder Info Data	1,721.50	1,159.00	1,664.00	1,294.75
Mark to Market	169.5	153.5	158	168.5
Steering Comm & Mgt	88.75	148.25	222.5	137.5
Software & Adm. Of Auction	1,439.50	1,131.50	1,136.00	1,127.25
Miscellaneous	1.25		15.25	1
TOTAL HOURS	4,020	3,130	3,735	3,120

Hours spent by Auction Manager personnel have comprised the largest individual component of their charges, with costs for software that provides the auction bidding platform and “affiliated consultants” accounting for most of the rest. Over the audit period, the annual total Auction Manager bill has varied from \$1,379,119 to \$1,712,710 -- a range of \$333,591 -- driven by fluctuations in workload. The costs for 2015 were particularly high due to additional needs to address Regulatory and Rules, Bidder Information, and Steering Committee issues. In 2016, many of the hours billed by Auction Manager employees were displaced by affiliated consultants. The overall effect in 2016 was a total bill close to the four-year average.

3. Overall BGS Process Description

The Electric Discount and Energy Competition Act of 1999 (EDECA) requires the EDCs to undertake BGS procurements at prices consistent with market conditions. The EDCs have been using a common, annual auction process to secure energy requirements since 2002. The EDCs have procured these requirements using the DCA process each February, largely run by the EDC-selected Auction Manager and overseen by a BPU-selected monitor.

A clear and long-standing set of related elements provide for procurement consistent with market conditions. The BGS’s pre-auction and auction process elements comprise some of the country’s most complex elements, making them among the costliest on an absolute basis. The common, four-EDC approach mitigates some of the costs added by the complexity and comprehensiveness of the New Jersey process. Moreover, when expressed as a function of the megawatt hours secured annually through the process, BGS Administrative Costs are small (in the range of \$0.12 /MWh, depending on the amounts procured in any given year). The following table displays the per MWh costs of the auction, including estimated internal costs presumably incurred by PSE&G and JCP&L at the same annual level as ACE.

Per MWh BGS Costs

Costs	\$	\$/MWh*
Common	2,225,590	0.057
Direct (ACE, actual)	882,277	0.023
Direct (PSE&G, est.)	882,277	0.023
Direct (JCP&L, est.)	882,277	0.023
Total	4,872,421	0.124

**Based on 39,185,878 MWh procured by all four NJ EDCs in the 2016 BGS Auction.*

The New Jersey BGS process begins with annual preparation and stakeholder review of a procurement process proposed by the EDCs each July. Following discovery and comments, the BPU makes a final determination about the auction process for the year. The process involves an extensive series of steps repeated each year:

- July – October
 - EDCs prepare (with assistance from the Auction Manager) and file in July a comprehensive proposal for all aspects of the procurement process
 - Stakeholders file initial comments
 - BPU holds a hearing
 - EDCs and stakeholders file final comments
 - BPU decision establishes all aspects of the BGS process for the year
- July – November
 - EDCs make a compliance filing to reflect the requirements of the BPU’s decision
 - EDCs and their BGS process manager (Auction Manager) review and reach agreement on procurement protocols with the consultant who monitors the process for the BPU
 - EDCs, using their Auction Manager, begin an FAQ process that allows potential bidders to pose questions
 - Bidders make prospective submissions on instruments to satisfy credit requirements for review by EDCs and their Auction Manager
 - Auction Manager conducts a webcast for bidders
 - Auction Manager posts illustrative forms by which bidders apply to participate in the procurement process

- November – February
 - Auction Manager announces auction parameters
 - Auction Manager posts final documents
 - Auction Manager opens the website used by bidders to make online applications
 - Auction Manager conducts a second bidder webcast
 - Auction Manager reviews bidder applications
 - EDCs assess bidder creditworthiness
 - Auction Manager issues an Interim Report
 - Auction Manager conducts a third webcast, this one for registered bidders
 - Auction Manager conducts on-line Trial Auctions
 - Auction Manager conducts the actual, on-line auctions across a multi-day time span, separately but concurrently addresses both BGS customer groups
- February – May
 - Auction Manager prepares a Final Report
 - BPU reaches a decision on auction results
 - Auction Manager prepares documents; EDCs execute supply contracts
 - EDCs, using their Auction Manager, conduct required on-going mark-to-market accounting
 - EDCs finalize rates to reflect contract prices
 - EDCs post auction results.

4. *Pre-Auction Process Elements*

a. Overview

Pre-auction communication begins with marketing the auction to prospective bidders. This opening process comprises a key step in ensuring a competitive auction - - one that generates the participation of as many responsible bidders as possible. Most New Jersey BGS auction participants are large, established power suppliers or traders who have been participating in the New Jersey process for many years. Therefore, while it remains valuable to market the auction to participants, it has become more important to ensure bidders' awareness of schedule and any process element changes. Nevertheless, new entrants do appear from time to time, making regular communication with the power supply community important in attracting potential new bidders.

The New Jersey EDCs need to make clear to bidders the purpose, nature, requirements, and expectations for participation in the BGS auction. Bid day is not the time to learn about systems or processes; early, pre-auction communication of these items is critical. The New Jersey BGS process operates under a clear schedule and vehicles to provide this information, first to prospective, and then to approved, bidders.

Training potential bidders in use of the web-accessed bidding system appropriately focuses on promoting full understanding of auction scope, mechanics, system use, and back-up procedures. These features make it simple and direct for suppliers to make bids and to respond to unanticipated problems (such as access to the on-line bidding system). In New Jersey, available training, combined with clear and accessible procedures, guidance, information, and simulation serve to support the most robust bidder participation possible.

Establishing the credit standing of potential bidders forms another key pre-auction step. The EDCs need to apply consistently and objectively a set of clear bidder credit and collateral requirements. They also need to execute a means for meeting other appropriate qualifying requirements and employ sound procedures, forms, and deadlines to facilitate and regularize bidder qualification. There should be clear documentation of what the EDCs require of prospective bidders, with easy-to-locate and use forms, supported with clear instructions for completing them.

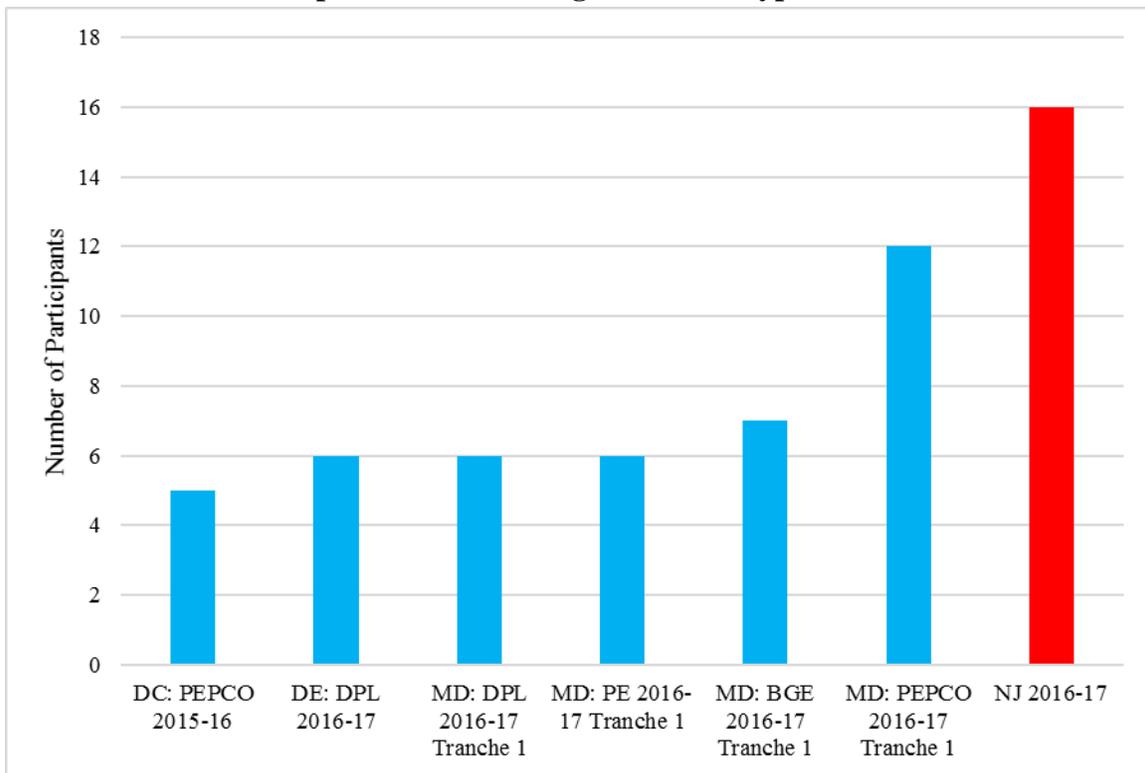
The EDCs should also provide a readily-accessible platform for the receipt of bidder comments and questions and for the dissemination of responsive information in a manner that promotes equal access by all potential bidders to information provided. Finally, bidders should have clear, notice and knowledge on what to do in case of a malfunction of the bidding system on bid day, including thorough understanding of backup methods for bid submittal.

b. Outreach

Our criteria for success in designing and executing an effective BGS procurement process begin with the need for process elements to provide strong outreach to the full range of potential suppliers. Marketing of the New Jersey procurement has been designed to attract a strong field of bidders. All things equal, more bidders mean more robust competition which, in turn, can lead to lower bid prices.

National Economic Research Associates, Inc. (NERA) has served as the EDC's Auction Manager for many years. The Auction Manager leads performance of the outreach function for the New Jersey procurement processes. The Auction Manager has contacts at and makes contacts with a wide range of regional suppliers. NERA has an extensive and respected presence in the energy supply marketplace, which enhances New Jersey's ability to draw the attention and interest of suppliers. The result of the outreach efforts promotes robust participation in New Jersey auctions. Over the last several years, New Jersey BGS participation exceeds what we have observed in other regional BGS/SOS procurements. The chart below shows how participation in New Jersey's BGS auction (red bar) compares to other auctions in the region (Maryland, Delaware, and the District of Columbia) for 2016. The bars show participation in auctions to supply all customer classes. We could not determine each specific year's number of bidders in BGS-type auctions for PECO's southeastern Pennsylvania service territory. However, it ranged between 9 and 13 participants in recent years, which provides another regional reference point.

Participation in Other Regional BGS-Type Auctions



Several factors help explain New Jersey’s comparatively-high participation levels. First, the “one-stop” BGS New Jersey auction allows bidders to compete for BGS load at four companies at once. This combination enables suppliers to evaluate opportunities to serve four different load profiles for both the RSCP and CIEP load. Second, the sheer volume of load available to serve in New Jersey makes many tranches available for many winners. Third, the Auction Manager’s outreach initiatives were strong.

We found the New Jersey outreach activities more extensive than those we observed in other jurisdictions. Market stability, the regularity of the New Jersey process, and strong competition in the industry might argue for more modest efforts theoretically, but the notable strength in supplier participation levels offers a strong basis for continuing efforts that have clearly proven successful.

c. Bidder Responsibilities and Expectations

Our second criterion for evaluating the effectiveness of supply acquisition holds that those managing the acquisition should employ processes that make abundantly clear to bidders the purpose, nature, requirements, and expectations for participation.

Acting on behalf of all four EDCs, the Auction Manager performs several functions to inform prospective bidders on key auction elements. The Auction Manager publishes an overview of the process on the *BGS-Auction.com* website. This website provides a central repository of information and data about the BGS auction. The Auction Manager uses it to disseminate many types of information, which we discuss later in this report. The Auction Manager also provides

training in the form of presentations describing the methods that bidders will use and expectations of them while participating.

We found the information provided to prospective bidders thorough, clear, and adequate in describing the purpose, nature, requirements, and expectations surrounding BGS processes. Our comparative review against approaches in other jurisdictions found no gaps in this aspect of effective supply acquisition management. New Jersey employs practices equal to or exceeding (and generally better organized than) those of those jurisdictions.

d. Training and Simulation

Our third criterion for evaluating procurement effectiveness holds that training and auction-process simulation comprise important elements in sustaining a robust field of active bidders. It also spurs competition among them, and ensures that they can make binding offers without substantial chance of error. Training and simulation prove particularly important for both new suppliers or new personnel bidding from long-time participants. Substantive changes to the processes or systems used for BGS auctions make training and simulation important for all.

We reviewed the materials and processes that the Auction Manager has designed and used for training. We found these materials comprehensive, explaining each of the critical elements of the procurement process. These elements extended from pre-bid and qualifications to submitting bids in the online system. We found the Auction Manager's efforts in this respect comparatively very strong, and certainly sufficient to support creation of a pool of bidders fully prepared to compete in the annual auction.

We found the online simulation of the bid system particularly noteworthy. The simulation provides users with a complete experience of participating as a qualified bidder. Simulation begins with the provision of user names, passwords, and a link to the bid system. Once logged in to the bid system, the user is shown how to submit bids to provide power at the price set for each round, and to perform all related functions. Completion of training and simulation should make any bidder fully capable of participating in the actual auctions.

The training and simulation provided by the Auction Manager constitute a best practice, when compared to the other jurisdictions about which we have meaningful information. Typically, other jurisdictions provide basic instructions, and rely on bidders to ask ad hoc questions to prepare themselves for auctions. At least one other jurisdiction that uses a sophisticated auction platform offers suppliers an online simulation of the system as well. Certainly, the complexity of the auction element of the New Jersey BGS process warrants additional sophistication in training and simulation. Thus, one should expect top-notch efforts in New Jersey - - an expectation that we found fulfilled. While a move to a simpler auction process, such as sealed bids, would lower the costs in accomplishing this element of the New Jersey BGS process, we found these activities efficiently executed, given the auction process used.

e. Credit and Other Qualification of Bidders

Our fourth criterion for judging the effectiveness of supply procurement holds that a comprehensive, transparent, evenly-applied process should exist for timely qualifying prospective suppliers who have expressed interest auction participation. Success entails providing suppliers

with access to the required application forms and providing clear instructions for the qualifying process. Particularly in markets with a strong affiliate presence, effective procurement requires fair and uniform application of a sound set of application (credit and otherwise) standards. Equally important is keeping the process as straightforward as possible, to ease the burden of meeting information requirements, to facilitate prompt application decisions, and to provide for corrective measures to close gaps that would otherwise lead to disqualification.

Our review of credit and qualifications standards, forms, and supporting information found access to application materials and forms adequate, with measures ensuring quick and fair responses to prospective bidders well established. The New Jersey process supports prompt turnaround times, and accommodates corrective action by bidders to any application shortcomings or errors. This element of the New Jersey process further underscores the value placed on encouraging robust supplier participation.

New Jersey’s approach to credit and qualification processes compares favorably with those we found in other jurisdictions for which we have meaningful information. Other jurisdictions have experienced delays in credit decisions and the overall qualification process. Delays in making credit decisions can risk disqualification of suppliers who may prove to be strong competitors, once bidding commences.

f. Data Security

Our fifth evaluation criterion holds that effective management of BGS-type processes requires appropriate maintenance of the security of a variety of forms of confidential or otherwise sensitive information. Before auction day, the process of qualifying bidders, described above, relies on the submission of sensitive financial information. Credit and other confidential operational information they provide must remain secure from access by EDC affiliates or other potential bidders. During the bidding process, ensuring that bid information remains confidential must be a first priority. Sufficient steps must be taken to avoid giving advantage to any participants - - particularly, but not solely, when affiliates participate. Following completion of bidding, it is essential to maintain any required confidentiality as well.

The New Jersey process operates under clear and effective measures for protecting confidentiality. The EDCs’ use of an outside Auction Manager in a comprehensive, lead BGS management role provides a further, visual indicator of impartiality, given that such a role is more generally performed by EDC management employees. We view this use of the Auction Manager as a central strength of New Jersey’s BGS process.

g. System Testing and Validation

Our sixth criterion for judging effectiveness holds that adequate testing and validation of systems used to conduct procurement processes must take place to ensure smooth and uncompromised operation. New Jersey runs a single auction session each year, which contrasts with the more typical experience of multiple sessions each year (often quarterly). The lesser frequency makes it even more important for the systems to operate without malfunction or compromise. New Jersey’s approach is also more complex and involves higher than average number of participants. For these reasons, testing and validation of systems ahead of the bid day has central importance.

The New Jersey Auction Manager’s role and approach have proceeded with relative stability for a long period of time, carried out by much of the same staff and with the same systems. The Auction Manager provides for systems testing in advance of bid day to ensure that everything works according to plan. We found regular testing of bid systems to comprise the norm in the other jurisdictions for which we have meaningful information, making the New Jersey processes typical and adequate.

h. Bidder Feedback Platform

Our seventh evaluation criterion focuses on the value gained by incorporating a continuous improvement process into management of BGS-type processes. This process should provide a readily accessible platform for bidder comments and questions and for the dissemination of responsive information in a manner that promotes equal access by all potential bidders to provided information.

The Auction Manager plays a central role in a New Jersey improvement process, which drives a substantial portion of its consulting fees. The Auction Manager conducts an ongoing, year-round process that enables suppliers to submit questions that inure to the benefit of all prospective bidders. Upon submission of questions, the Auction Manager assigns them to the appropriate expert for research and response. Questions and responses are made available to all prospective bidders in a database on *BGS-Auction.com* website. We found New Jersey’s process for bidder feedback in New Jersey the best among those about which we have meaningful information.

5. *The Annual Auction*

a. Accountability and Responsibility

The BGS auction in New Jersey operates as a complex, annual, multi-day event. It involves substantial two-way communication with prospective bidders before the auction, and real-time information provided to suppliers on bid days. Given the number of functions that must proceed smoothly to allow the auction to proceed, it is critical to establish and execute clear accountability and responsibility for the conduct of all preliminary, bid-day, and post-bid-day procurement activities.

Outreach efforts that include the *BGS-Auction.com* website, presentations, and the submission of questions and answers allow the auctions to run effectively. We found a clear delineation of responsibilities for all required functions. A review of process and system documentation and interviews with process owners and contributors found all key areas well-staffed with appropriate resources.

The comparatively large scope and complexity of the BGS procedures impose personnel requirements that make it impracticable to compare resource needs with those of other jurisdictions. The tasks performed by the New Jersey EDC’s Auction Manager range from routine administrative tasks to highly complex consulting work requiring sophisticated professional judgment. We found overall that the Auction Manager and the EDCs assigned resources at levels and of types commensurate with the complexity of the overall process.

b. Bid System Security

Our evaluation criteria hold that, to promote bid security, the auction process should provide and employ a secure, accessible, access-controlled system for receipt, acknowledgement, and analysis of bids received. The bid system itself provides the foundation of system security, complemented by the established associated processes.

The New Jersey BGS auction employs a high-quality system enabling easy, secure supplier access to the bidding platform. It provides easy-to-understand feedback and information to suppliers from start to finish, and does so in a secure manner.

We found the New Jersey BGS auction element “high end” when compared to systems used in other jurisdictions. Procurement processes in other jurisdictions more typically (although not universally) use simple closed-bid platforms, with some cumbersome and prone to disruptions that take manual intervention and substantial verbal communication between the utilities and the bidders. Such communications create opportunities for breaches that can affect integrity of the auction. New Jersey’s processes preclude much of that, making them superior.

c. Backup Bid Processes

Another of our evaluation criteria holds that power-supply procurement efforts require a backup plan to address instances of system disruption. The backup plan must be effective for the collection of bidder submissions. It must be clearly communicated, understood, and capable of rapid execution by all parties, who must understand it fully before the occurrence of any events that require its use. The process must provide a readily-accessible backup method for bid receipt, acknowledgement, and analysis of cases of principal system failure. It should provide advance knowledge and verify understanding of backup method use.

The New Jersey BGS process incorporates a high end, custom bid system that, with mediation from Auction Manager resources as required, “runs” the DCA, complemented by pre-bid testing and validation. BGS auctions have experienced infrequent need for backup bid submission. An effective backup plan exists to address such instances. The backup submission method consists of verbal communication with the Auction Manager by telephone. Adequate measures apply to keep bidders well aware of the telephone number to reach Auction Manager staff in the bid room. Staff accepts bids only from callers who provide bidder-specific security keys (passwords) assigned to them in advance. Recordings memorialize all conversations.

As is true for many of the New Jersey BGS processes, those governing backup bidding lead the industry insofar as the data we have indicates. The New Jersey processes effectively serve to minimize the potential for confusion, loss of competitive offers, and potentially questionable submissions.

d. Oversight

Another of our evaluation criteria holds that power supply auction management should provide an effective means of oversight of all material preliminary, bid-day, and post-bid-day procurement activities. This includes activities by EDC employees and external resources. Best practice calls for a third party to oversee these processes.

The Auction Manager serves as the primary provider and manager of BGS auction functions, from pre-bid qualification and bidder training to bidding to declaration of winning bids. The BPU has also retained an outside consultant, presently an economic consulting firm, to monitor the BGS processes. This firm has provided a comprehensive review of BGS processes (employing a standardized checklist of required and expected activities, behaviors, and results), which it documented in a formal report issued after each yearly auction. The firm's review and its report provided an appropriate source and level of review of BGS activities.

Retention of such an outside source of assistance for the utility regulatory authority comprises a fairly-typical practice among the jurisdictions for which we have meaningful information. These independent, outside sources generally oversee auction processes to ensure adherence to policy and orders and to ensure integrity of the processes and systems. Particularly the use of the detailed checklist makes the New Jersey process clearly more structured and organized, and reflects best practice.

e. Bid Day Communication

Keeping communication between buyers and sellers to a minimum comprises an important criterion by which we measure the effectiveness of auction processes. Minimizing such communications between the EDCs, the Auction Manager, and bidders serves to mitigate a principal auction risk - - disclosure of information about participation and competing offers and other information that could influence bidders to believe that offering less than their best prices may prove successful. The clarity, transparency, and priority given to communications controls also serve to inspire the confidence it takes to ensure the most robust participation achievable.

Those filling roles like that of the New Jersey EDCs' Auction Manager amass a great deal of highly-competitive information before and during the auction. Ensuring that this information remains clearly and completely opaque to potential and actual bidders requires a structured and focused approach and methods. The Auction Manager and the EDCs must ensure that all bid-day communications with bidders remain within bounds, transparent, documented, and governed by clear policies to maintain the integrity of bid information. At the same time, it is important to communicate process information to bidders as needed, including bid round prices. Effective performance also depends on establishing and executing clear accountability and responsibility for all communications during bid day.

On bid day, communication with bidders takes on enhanced importance, and involves special issues. At no other time does communication with bidders prove so critical, and at no other time is it so sensitive and worthy of rigorous scrutiny. The process for communicating with bidders must strike a balance between providing timely, accurate information and maintaining integrity of the system and bidding processes.

The use of an automated approach to provide an online method for most bid-day communications in New Jersey forms a central control element. All information required to understand the status of any round of the auction transfers through the bid system. This channeling eliminates the need for ad hoc communications with bidders to provide tranche details. As with any system, however, there remains a need to address queries by bidders experiencing problems, *e.g.*, with system access

or use. We consider phone communications problematic during auctions - - they should be strictly limited. There simply exist too many means for pre-arranged methods for communicating inappropriate information through content that may seem innocuous. In fact, it does not take words at all to communicate - - time gaps and accentuation can suffice.

The Auction Manager’s staff comprise the sole source of telephone communication in those limited cases where required. Moreover, the Auction Manager records all calls. These methods reflect a best practice. This control minimizes the risk that a caller will learn inappropriate information about the auction. New Jersey’s bid day communications protocols exceed those of other jurisdictions about which we have meaningful information. Call recording in New Jersey stands as a particularly noteworthy feature among those that maintain the integrity of the bidding process.

f. Affiliate Monitoring

Three of the EDCs of New Jersey, like those in many other jurisdictions in the region, operate where affiliate companies have a strong presence in the relevant energy markets. The prevailing regional approach in such cases permits affiliate participation in BGS or similar type procurements. Permitting affiliate access to such procurement opportunities responds appropriately to the need to maintain a strong level of competition, which has relevance to minimizing customer costs. However, it remains important to monitor that participation to ensure that relationships with the EDCs does not provide unfair advantage - - which can lead to increased customer costs.

The markets relevant to New Jersey, equally true in the remainder of the mid-Atlantic region, include affiliates comprising some of the nation’s largest generating companies, holding significant generating capacity. Effectively monitoring their bid activity comprises an essential element in ensuring process integrity and lowest cost for customers. We have also discussed earlier in this chapter the need for ensuring even-handed credit and other qualification processes. Discrimination in credit qualifying or failing to hold confidential the financial and other information about those who compete with EDC affiliates would threaten fair competition and price optimization substantially.

The New Jersey Auction Manager performs testing to identify potential behavior that may warrant further investigation. The nature of the New Jersey bidding process also makes it appropriate to test for collusion among unaffiliated bidders as well. The Auction Manager’s testing considers this need. We did not demand access to the specific and proprietary algorithms used for such testing, but understand them to focus on how offers from one bidder on various tranches compare to those of other bidders. When an indication of a potential problem arises, the Auction Manager investigates the history of bids more thoroughly under the guidance of an “academic auction expert” standing by onsite in the Auction Manager’s Newark bid room.

The sophistication of New Jersey’s processes leads among those jurisdictions for which we have meaningful information.

6. Performance Improvement Process

The Auction Manager (in addition to performing work for the next year’s auction) continues through the year to exercise administrative functions. The Auction Manager guides the BGS process element of executing binding contracts with winning bidders. The Auction Manager also gathers and analyzes feedback from bidders about the effectiveness of the BGS process and its elements. An important criterion in successful management of BGS-type processes lies the use of a performance improvement process that engages suppliers and the EDCs in providing and discussing input and recommendations to improve those processes. Providing suppliers and stakeholders a robust forum for communication on areas that may warrant improvement and executing an established process for taking necessary action offer important indicators of effective process management.

Long-term viability of a procurement process requires evolution and occasionally step-function changes to keep pace with regulatory, power markets, bidder preference, and technological development. The Auction Manager takes a lead role in guiding the BGS process improvement process. The Auction Manager reviews submissions by stakeholders addressing potential areas for improvement in any aspect of the BGS process. These recommendations may generally address areas that may warrant attention or detailed measures to address specific concerns. The Auction Manager analyzes all problem identifications and recommendations, conducting research, and providing views on the potential for improvement adoption. Other jurisdictions for which we have meaningful information conduct a wide range of performance improvement processes (PIP). The New Jersey process compares favorably, particularly in its use of a third party (the Auction Manager) in the lead role.

7. Board Consultant Processes

The NJ BPU retains a consultant (Board Consultant) to monitor the New Jersey BGS process. The Board Consultant reports on the overall BGS process, assesses auction performance, and recommends whether the BPU should certify the auction results. The primary deliverable of the Board Consultant is an annual report that provides in comprehensive detail a review of all aspects of the year’s BGS process.

The Board Consultant’s final report provides an overview of RSCP and CIEP auctions, and reviews overall competitiveness in the market, specifically addressing participation. It also includes recommendations that the Board Consultant has regarding the process. A central feature of the report takes the form of a “checklist” for the RSCP and the CIEP auctions, as prescribed in detail by the BPU. It details performance against a long list of attributes.

The comprehensive and detailed checklists enable the Board Consultant to report directly on all aspects of the auction in an organized and easily-communicated manner. The components range from pre-auction communication with bidders, preparation of bidders, security, and how the process went. Complemented substantially by the checklist, the BPU’s monitoring process gives it key information appropriate for its regulatory oversight of the BGS process.

8. Justification for the DCA Approach

Dynamic auctions, like the DCA used in New Jersey, make more information available to auction participants, and several rounds of bidding enable bidders to accept or reject lower prices to signal willingness to serve load at a specific price. In their simplest form, sealed bid auctions require each participating supplier to set its own, first and final, offer price. The DCA approach differs fundamentally in how it develops prices. The Auction Manager sets prices by round for each tranche. Suppliers then accept the posted price, or do not. An opening price set by the auction-manager starts the initial round. Subsequent rounds, at ever decreasing posted prices, continue if sellers offer more than enough blocks to cover the blocks required by the buyers. Bidding continues until it reduces excess supply offered to zero. Final price determination applies the following scenarios:

- Tranches bid in the final round equals the tranches needed - - price of the final round
- Tranches bid at the final round price and the number of tranches withdrawn in the final round equals or exceeds the number of tranches needed - - exit price (between the price of the final round and that of the previous round)
- Tranches bid at the final round price and the number of tranches withdrawn in the final round are less than the number of tranches needed - - price of the previous round.

DCAs provide the method for energy procurement in various locations throughout the world. In the U.S., their notable uses include, but are not necessarily limited to, the New Jersey EDCs for BGS, by ISO-NE for procuring capacity, by Illinois utilities for Standard Offer Service (SOS), by Delaware utilities (in a modified form) for SOS, and by Ohio utilities for Standard Service Offer (SSO). For the purposes of this discussion, BGS, SOS, and SSO serve the same purpose - - providing energy for retail customers who do not choose alternate suppliers.

Minimizing purchase prices comprises the goal of reverse auctions. There is no consensus on whether DCAs or sealed bid auctions prove more effective in achieving that objective, as the EDCs and the Auction Manager acknowledge. Proponents of DCAs have contended that the transparency of information spurs competition, which leads to the best (lowest price) outcome for the buyers. The DCA format permits suppliers to know what prices they must accept to win each auction. A bidder understands that the decision to accept the price will determine whether it remains in the running or has been eliminated. DCA proponents assert this reason as the basis for confidence that the lowest prices have resulted. Bidders need to push the price lower to win the auction.

This dynamic competition does not exist for sealed bid auctions, which often use simple, “first and final” bid price submissions. The sealed-bid format forces suppliers to bid at whatever price they choose. They do so knowing that they have but one chance to offer the lowest prices - - necessary to beat the competition. Aggressive bidders may thus bid less than needed to win, accepting very small margins to give themselves the best chance at winning. The result in these cases should be the lowest price a bidder is willing to accept. The DCA only requires that suppliers agree to supply at the current round price, regardless of whether they would accept lower prices.

Arguments in support of both DCA and sealed-bid approaches have theoretical merit. The problem is that we have found no convincing evidence in support of either as the preferred method. Were the two approaches similar in costs to conduct the auctions each requires, one might consider the lack of clarity tangential. However, there is evidence that the costs to conduct the DCA approach

can prove significantly more than other alternatives. Sealed bids, for example, can be taken in a single session, with the winner directly determined by comparing prices. The New Jersey DCA requires several rounds over several days, making it labor intensive. It requires custom auction software and pricing algorithms. In New Jersey, the DCA approach has indirectly caused significant costs - - in the form of substantial annual legal expenses, as the next section discusses. The EDCs incur these expenses to address patent claims.

9. Patent-Related Legal Costs

a. Origins and Nature of BGS Patent Issues

The BGS process has been subject to assertions of patent infringement since at least 2001. Assertions beginning at that time eventually came to involve three business entities who took the position that the New Jersey process infringed on patents they hold. Their assertions have indicated potential liability not only on the part of the New Jersey EDCs, but the State of New Jersey as well.

On October 4, 2001, the BPU conducted a hearing in Docket No. EX01050303 to take comments on the EDC-proposed process for obtaining basic generation service for the period from August 1, 2002, through July 21, 2003. A witness stating that he ran an investment firm, Geophonic Networks, appeared at the hearing. He described firm investments in telecommunications and energy ventures that included “patents and software.” He stated that these patents included one applied for four to five years earlier, issued on April 4, 2000, and relevant to the BGS auction process.

The witness described the patent as specifically covering “the running of an auction by a Local Distribution Company, a Utility on behalf of the end users or to resell to the end users.” This very broad statement covered far more than the specific approach employed in New Jersey, extending per the terms he used, to competitive processes used in many jurisdictions.

A July 12, 2002, letter from counsel for Geophonic Networks to the President of the BPU stated that his client held a patent that “...covers auctions for the provision of energy such as the BGS auction approved by the BPU on December 11, 2001 and held on February 4 – 13, 2002.” The letter offered to provide the four EDCs a license for use in conducting BGS auctions, subject to royalty payments. The letter cited a prior, November 2, 2001, letter offering such a license to the EDCs and to the BPU.

Following the next BGS auction, held in February 2002, a November 6, 2002 letter from Geophonic Networks’ counsel appeared to threaten the State of New Jersey as well. The letter asserted that the BPU’s “...extensive involvement in the development and implementation...” of the February 2002 BGS auction process meant that the BPU itself had also infringed or induced infringement of the Geophonic Networks patent. The letter thus implied potential state liability related to the claimed infringement.

The EDCs have also reported statements about patent infringement at BPU hearings by “Ausubel.” Lawrence M. Ausubel holds many patents associated with auction processes, some of them dating to the 1990s. He has continued the pursuit and acquisition of auction-process patents since that time. He has, according to the EDCs, a business connection with Efficient Auctions, a third party who has made patent claims involving the New Jersey BGS. The EDCs received letters addressing BGS process infringement on patents continuing into 2011, but report no further communications with these sources after that time; *i.e.*, some six years ago.

Our research has disclosed no use by any of the three holders of the ideas covered by the patents in their own business (auction operations). A Mr. Ausubel has published many papers on auctions before and after introduction of the New Jersey BGS process, and has been identified in the literature (citing a 2004 paper) as the eponym for a process for “...finding optimal bidding strategies for a dynamic multi-unit auction, which is usually referred to as an Ausubel auction with dropout information.” The website of a firm titled Efficient Auctions, LLC states that it “...is a provider of intellectual property for advanced auction applications.”

The Efficient Auctions website cites use of proprietary software to conduct a number of energy auctions in Europe, but the direct references date back 10 or more years and the links to specific European conductors of the auctions cited do not appear to be active.

We are not privy to the motives of the patent holders whose assertions of past infringement involved New Jersey BGS processes. Finally, it is neither uncommon nor necessarily improper for the holder of a patent who has not undertaken efforts to use it directly or to hold it out for licensing to find it objectionable for another to use it without compensation. Our focus was not to judge the intent, motives, or claims-legitimacy of the patent holders involved here, particularly given the vagary and complexity of a patent process. Our intent was only to examine the impacts of their actions and interests on BGS Administrative Costs. As we will explain below, the cost consequences for New Jersey customers of the EDC’s responsive actions have been and will continue to be significant.

b. The Patent Infringement “Industry”

Participants in U.S. business and industry commonly interaction with two forms of patent-holding entities that do not operate the processes those patents address. The first group consists of those who develop patentable ideas for licensing to others. The second consists of those who approach users of processes or other ideas claimed to be patent-protected, with the intent of securing monetary settlements, backed by explicit or implicit threats of patent infringement litigation. Industry literature observes that some who engage in such practices simply buy existing patents, while others secure their own patents, but do not use them or hold themselves out to license them to others who do to carry out business operations.

The ability to do so by what are termed non-practicing entities (NPEs) has been enabled by a longstanding U.S. Patent and Trademark Office policy to issue patents freely. Published data shows only a 25 percent success rate in infringement litigation by NPEs who do not operate businesses that make use of

their patents. The literature supports the existence of a plethora of very broad and vaguely-defined patents, a phenomenon making resolution of infringement claims a commonplace occurrence.

NPE reliance on patents to claim infringement to secure payment of compensation has become much more than a cottage industry. Its impact on the American economy was measured at almost \$30 billion per year a number of years ago. Very recent research by economists Ian Appel, Joan Farre-Mensa, and Elena Simintzi reports that patent litigation has increased by a factor of 10 since 2000, with over two-thirds of lawsuits filed by NPEs, and with filed suits likely representing but a small fraction of the total number of claims settled or otherwise not reaching the courthouse door.

The recent research confirms the results of a 2014 study by PwC, finding that businesses not practicing in the area covered by their patents (NPEs) accounted for two-thirds of patent suits filed, representing an increase from about one quarter five years earlier. The same study found a 25 percent increase over prior years in the number of actions filed. The study also found royalties the most frequently applied method for compensating successful plaintiffs. That form of award (assuming it to be made as a percentage of revenues involved in New Jersey’s annual BGS auctions) would have [REDACTED]

The PwC study found that NPEs do not prevail often (in about a quarter of cases), but the costs of even successful defenses are high. Awards following an unsuccessful defense likely would run many times higher, particularly here, where even small royalty rates applied to the large dollar value of auction-produced contracts could prove extreme in relation to annual BGS Administrative Costs. Assessing patent-related risks also requires consideration of the nature of the patent rights creating risk for the BGS process. A review by U.S. General Accounting Office cited the belief of “stakeholders knowledgeable in patent litigation” that “patents with unclear property rights” (citing software-related patents) comprised a key factor in patent litigation growth.

Some moderation of the magnitude of the infringement-litigation threat has occurred in recent years:

- Tightening of U.S. Patent and Trade Office scrutiny of patent claims
- Requiring filing of claims in states where the defendant is incorporated, as opposed to choosing notoriously plaintiff-friendly jurisdictions
- Eliminating injunctions (which provided leverage in securing increased levels of damages or settlement amounts) against defendant’s use of technologies patented by non-practicing entities
- Eliminating lost profits as a basis for damage awards for non-practicing entities
- Creating the possibility that unsuccessful plaintiffs must pay defendants’ litigation costs.

A substantial body of opinion holds that such recent mitigating factors and a climate of increasing intolerance for what are termed “patent trolls” have diminished the leverage that claimers of infringement can apply, and has moderated the size of the demands they make for compensation to avoid litigation. Whether or not reflecting such beliefs, those who have sought from the EDCs compensation based on patents related to the BGS processes have been mute now for many years.

c. The EDC’s Response to BGS Patent Issues

The EDCs faced patent issues early in the period that the literature described above addressed.

[REDACTED]

We have not found a model for the approach of using a patent-threatened auction approach while “inoculating” against the threat of infringement claims. Other acquirers of capacity and energy from electricity markets use similar auction processes. We are not aware, nor are the EDCs current legal representatives, of such claims involving the acquisition of BGS type supply through competitive processes. The EDCs do not appear to have undertaken efforts to identify others using similar auction processes.

[REDACTED]

The engagement letter from counsel established a rate of \$425 per hour for the attorney overseeing the representation, with a higher, \$450 rate set for any legal opinion and litigation-service work that might ensue. The EDCs have undertaken significant activities to protect against patent infringement claims since then, based upon opinions of outside counsel about the risks posed such claims, including the costs that could be required to defend against them, regardless of outcome.

The EDCs have also proactively made a broad range of patent claims, 107 in total, seeking to provide very broad coverage over the BGS processes, thus mitigating the threat of infringement of patents continuing to be sought by others. The U.S. Patent Office Examiner divided these filings into five groups. The EDCs secured a patent for the first group in 2003, eventually securing a total of five patents by 2012. Four more patents remain pending. Fees to maintain these patents contribute a nominal amount to annual BGS costs associated with patent issues. The vast majority of the annual costs arise from hourly charges for legal work, with other fees and expenses amounting to [REDACTED]

d. Patent Issue Amounts at Risk

No patent claims against the EDCs have resulted in settlements, judgments, or other forms of payment to the patent holders who have corresponded with the EDCs. Therefore, the only patent-related costs directly incurred so far involve the annual expenses of counsel retained to address them. Some information about potential liability exists, but it is at most illustrative, and does not constitute a judgment about likely amounts at risk. A November 6, 2002, letter from counsel for Geophonic Networks cited a license fee previously proposed to the EDCs. That proposal, 0.50 percent of the total aggregate BGS energy involved in the February 2002 auction would have produced for Geophonic Networks a total payment of [REDACTED]

[REDACTED]

Thus, traditional risk analysis (likelihood or percentage probability of a risk’s occurrence times the dollar consequence of such occurrence) suggests that the risks of losing a patent infringement case [REDACTED]. A second source of risk having a calculable value performed in a similar way arises from the need to defend an infringement case. The costs of defense would be substantial, even should a plaintiff prove unsuccessful in securing a favorable judgment. The EDCs have not performed any analyses designed to calculate the value of a potential infringement award or of the costs of defense of an infringement proceeding.

CNET cited the *Report of the Economic Survey 2011* by the American Intellectual Property Law Association (IPLA) as listing \$2.8 million as the average costs of patent lawsuit defense for cases where the amount at risk ranged from \$1 million to \$25 million. The amount rose to \$5 million for cases with higher amounts at risk. EDC’s counsel, speaking some six years later, cited patent-litigation defense costs that might fall in the range of \$5 million. *IP Watchdog* cited an IPLA observation, apparently from the same report, that over 60 percent of all patent suits plaintiffs comprised so-called “non-practicing entities” manufacturing no product, but relying on litigation as a key source of revenue.

e. Patent Claimants

The EDCs report a lack of knowledge about the business operations and of any other similar infringement claims from those who have raised issues about BGS infringement. A web search for “Geophonic Networks” and for the witness speaking before the firm at the BPU disclosed no firm websites, but did produce the following basic information:

Geophonic Networks Inc is a privately held company in Summit, NJ. Categorized under License Services. Current estimates show this company has an annual revenue of less than \$500,000 and employs a staff of approximately 1 to 4.

A listing citing the firm doing business at a reported Geophonic Networks address describes the business at this location as “Auto Registration Tags and Titles.” Another listing showed a Summit-based Geophonic Networks, listed as “Interior Designers & Decorators.” Another listing from the same service describes the firm as follows, locating it in town five miles away, and listing the business at this location as computer repair service:

Geophonic Networks Inc is a privately held company in Madison, NJ and is a Single Location business. Categorized under Computer Services. Our records show it was established in 1993 and incorporated in New Jersey. Current estimates show this company has an annual revenue of 240,000 and employs a staff of approximately 3.

f. Mitigation of Patent Infringement Exposure

[REDACTED]

g. Patent-Issue Expenditure Levels

The EDCs have expended and expect to continue to expend

Counsel bills by the hour at pre-set hourly rates.

C. Conclusions

1. New Jersey operates what clearly comprises the most sophisticated, well-controlled process for securing BGS-type supply in the region.

All New Jersey BGS processes match or exceed those of other jurisdictions for which we have meaningful information in formality, sophistication, structure, and control. Together, these processes maximize confidence in the production of results that:

- Encourage maximum bidder participation
- Provide a user-friendly, fully-informative experience for bidders in the auction and in activities leading to and including the making of supply offers
- Produce qualified bidders without inappropriate discouragement or rejection of any
- Establish on a timely basis predictable, regular terms and conditions for the complex agreements it takes to form enforceable supply agreements
- Ensure that all bidders, affiliated or not, have ready and equal opportunity to make binding supply offers
- Choose impartially and effectively from among the offers made by bidders for supply contracts
- Provide effective common processes for addressing contract execution and administration.

Taken together, the New Jersey BGS processes are highly effective (and in many respects industry-leading) in ensuring a BGS process that serves customers and markets well. We describe below the mixed results in terms of resulting Administrative Costs. The common, four-EDC auction process produces economies. However, the complexity and sophistication of most BGS elements (including but not limited to the actual auction process) more than offset them.

New Jersey operates an exceptional process, but does so at a premium cost. The use by other jurisdictions of simpler processes, such as sealed bids entered during a short time window (several hours, for example) on a single day produces lower administrative costs. Maryland and the District of Columbia use such an approach, for example.

The available literature, confirmed by the view of the New Jersey Auction Manager, does not support a conclusion that the multi-day New Jersey auction process produces lower costs. Thus, satisfaction with comparatively higher Administrative Costs in New Jersey must lie in the comfort of the exceptionally well-controlled processes it employs.

In addition to its comparatively high direct costs of operating all elements of the New Jersey BGS process, the EDCs have faced [REDACTED]

[REDACTED] The EDCs have made and expect to continue to have to make expenditures in [REDACTED]

[REDACTED] Moving to a simpler (*e.g.*, sealed bid process) would eliminate the need for such measures, whose continuing nature makes them an added costs of operating New Jersey's BGS processes.

Combining the premium associated with direct costs and the patent legal measures, it is reasonable to conclude that the total amount added to New Jersey BGS Administrative Costs for the more complex structure and controls made available, lies in the range of \$750,000 to \$800,000 per year, plus the value of the residual risk of patent litigation remaining. The patent legal measures mitigate the chance of patent litigation, which would impose substantial costs to defend, and very much more in the event of an award for infringement. [REDACTED]

New Jersey's BGS processes operate in a highly sophisticated, very well structured, and tightly controlled manner. The added costs experienced therefore produce value - - albeit a value apparently not sufficient to cause most other jurisdictions to secure it through the adoption of similar sophistication, structure, and control. Third-party providers offer New Jersey the highest quality BGS services we have experienced or about which we have gained meaningful information. The depth and breadth of services provided by the Auction Manager are unmatched from what we know. Even at a cost premium well exceeding a half million dollars per year, we certainly would not conclude that they do not produce corresponding incremental value. The costs are necessary to produce an extremely high-value operation and one that operates in an environment that must survive close scrutiny. [REDACTED]

2. Highly robust BGS auction participation exemplifies the benefits of the outreach, communication, and auction control elements of the New Jersey BGS processes.

Effective bidder outreach has consistently contributed to the BGS auction's comparatively very large field of competitors. The EDCs' Auction Manager manages outreach activities, and effectively communicates with the widest possible range of regional suppliers. Comparative participation levels show the success of efforts to cultivate a broad community of bid participants. While it can be said that the auction process itself cannot be shown to produce lower prices, it is axiomatic that the more robust bidder participation, the more likely it is to optimize prices secured.

Clearly, the New Jersey BGS auctions have drawn participation at levels greater than experienced in other regional BGS-type procurements. Training for potential bidders who have become eligible to participate was effective in preparing suppliers to be competitive in the bid process. Compared to the other jurisdictions with which Liberty is familiar, the training and simulation in New Jersey is superior.

3. The bid system and its implementation are of the highest caliber.

The New Jersey BGS auction platform is a highly sophisticated system designed to most effectively implement descending clock auctions. The platform balances ease of use with complex behind the scenes algorithms to optimize supplier competition for the best outcome (lowest prices).

4. The performance improvement process (PIP) is best in class and leads to state of the art systems and processes in New Jersey.

As compared with other jurisdictions, New Jersey’s PIP process encourages input and effectively evaluates improvement opportunities.

5. [REDACTED]

Communications from two patent holders began shortly after the inception of the New Jersey BGS process. [REDACTED]

[REDACTED] Industry literature supports that basis qualitatively as the most common one for calculating damages in successful infringement litigation. Assuming for the sake of argument (and with no intent to validate that assumption) the legitimacy of requests for compensation, the annual amount of exposure suggested by that calculation basis [REDACTED]

[REDACTED]

[REDACTED]

However, any such view would be tempered by continuing patent filings in the area of energy auctions. Moreover, dampening effects on the ability to use infringement claims successfully may be relevant in gauging future exposure as well.

6. [REDACTED]

The EDCs’ retention and use of outside counsel occurred largely across a period of great acceleration in the use of patent infringement threats by non-practicing entities. [REDACTED]

[REDACTED] A review of some of the content of the patents at issue here confirms the problem of breadth and vagueness that the EDCs, along with U.S. industry generally, have faced in addressing potential infringement liability. At least one of the patent holders has a visible reputation in the field of auction conduct and both held patents to some extent (we have no basis for a legal opinion on their ultimate valid scope or the merits of relating them sufficiently to BGS processes) at least generally applicable to the types of processes employed as part of New Jersey’s BGS program.

Our review of the actions of counsel and of the amounts of efforts and charges involved displayed no reason to suggest over-reaction or over-zealousness on an historical basis.

The amount of legal effort involved amounted to about [REDACTED]

7. [REDACTED]

(Recommendation #1)

[REDACTED] The EDCs have not undertaken an analytically-founded risk analysis to measure the value of annual expenditures on patent risk mitigation against the level of risk mitigation (measured in dollars) produced. [REDACTED]

The well more than [REDACTED] likely to be spent in future efforts already anticipated warrants a more focused analysis of the value expected from those efforts. Risks and their magnitudes have changed since the EDCs began their mitigation efforts. How and by what dollar magnitude has not been examined. The significance of the now long years of silence from the two patent holders should be evaluated. Staying the course in mitigation efforts needs to be supported by more than “momentum.” It requires a quantitative balancing of the degree of risk mitigation provided (expressed in dollars) against the amounts spent to produce that mitigation. Such analysis comprises a core element of modern thinking on risk management, and an element that needs to be applied here to annual costs that have become a normal, recurring cost to customers.

8. Other auction methods present more effective means of infringement risk mitigation, but a change to them would lose any values uniquely provided by the current BGS descending clock auction process. *(Recommendation #2)*

There is another potential infringement mitigation option to applying legal efforts. [REDACTED]

[REDACTED] it also becomes relevant to place a value on the benefits that the particular New

Jersey approach produces, when compared with other successfully and commonly-used practices, such as sealed bids submitted within a several-hour window on a given day.

Circumstances warrant such a valuation process (whether quantitative or not), because a change to another auction process appears to present a suitable mitigation effort - - and one that, unlike the use of legal efforts, is certain of success. A change would:

- Avoid the approximately [REDACTED] expected to be spent annually on patent-related legal expenses
- Eliminate the defense costs and infringement liability risks that remain despite those expenditures
- Produce a reduction in direct BGS costs to the extent a simpler auction process replaces the current one.

The next table shows (by line item) average New Jersey BGS Auction Manager costs for the years 2013 through 2016. Combined, the Auction Manager’s two principal billing categories (*Professional Services* and *Other Charges*) averaged about \$1.6 million annually during this period. The chart also shows at the line-item level potential cost reductions from moving to an approach like the “first and last” sealed bid process commonly used in other jurisdictions.

The table reflects our view that a significant number of line items would show little or no changes. In preparing the table, we sought to retain the scope and level of efforts in the other BGS elements as to which New Jersey occupies a leading-edge position. Nevertheless, in our estimation a change from the DCA approach to a simpler sealed-bid process has the potential to save costs at or above \$500,000 per year, in addition to the [REDACTED] or so that the change would save in patent-related legal costs.

We believe that the change to a sealed bid process would have impacts on the FAQ, Bidder Information and Software and Administration of Auction categories. Pre-auction bidder interaction can be expected to fall over time. The need to provide market and operational data to prospective bidders would remain largely intact. Replacing the complex, lengthy DCA approach would save substantial professional time now required of the Auction Manager.

Costs in the Other Charges category would fall or be eliminated entirely. Most notably, costs for Auction Software would be eliminated, although, as the chart shows, we have added back an estimate of bid system costs for a streamlined bidding substitute. Costs for affiliated consultants, largely responsible for providing DCA and other auction expertise, could be eliminated. Finally, outside services, such as those used for outreach, could be reduced.

Potential Auction Manager Costs

Category	2013-16 Average	Change		Revised Amount
		%	Amount	
<u>Professional Services</u>				
Regulatory and Rules	\$191,561	0%	-	\$191,561
FAQ's Bidder Info Data	447,715	-50%	(223,857)	223,857
Mark to Market	34,660	0%	-	34,660
Steering Comm & Mgt	53,941	0%	-	53,941
Software & Adm. Of Auction	361,962	-60%	(217,177)	144,785
<u>Misc.</u>	<u>913</u>	<u>0%</u>	<u>-</u>	<u>913</u>
Total Professional Services	1,090,752	-40%	(441,035)	649,717
<u>Other Charges</u>				
Outside Services	47,188	0%	-	47,188
Auc. Software - Optimal Auc. Inc.	218,125	-100%	(218,125)	-
Affiliated Consultants	77,708	-100%	(77,708)	-
Travel, Meals & Lodging	56,912	-50%	(28,456)	28,456
<u>All Other</u>	<u>49,116</u>	<u>0%</u>	<u>-</u>	<u>49,116</u>
Total Other Charges	449,049	-72%	(324,289)	124,760
<u>Added Costs from Changed Bidding</u>				
Replacement Bid System	-		100,000	100,000
Total Charges	\$1,539,801	-43%	(\$665,324)	\$874,477

9. New Jersey’s BGS Administrative Costs run comparatively higher with most jurisdictions in the region, but not unexpectedly, given the larger effort required to run the New Jersey process and the transparency and control advantages provided.

We have explained earlier that the New Jersey process includes important elements that promote robust bidder participation and provide exceptional controls over the procurement process. While it is not clear that simply changing the auction process itself would jeopardize them, there is substantial value in ensuring that they remain strong.

10. The descending clock auction (DCA) is comparatively more complex and expensive than simpler auction methods used in other jurisdictions in the region. (Recommendation #2)

There is not a sound empirical basis for concluding that the DCA approach produces superior outcomes. Three factors impose a material cost premium in using it:

- The direct costs of auction design, preparation, and execution
- The legal costs associated with patent infringement claims
- The value of the risks of patent defense and of litigation awards - - risks mitigated but not eliminated by the patent legal work.

Given its other values (e.g., transparency and controls), the DCA may well remain viewed by the BPU and stakeholders as the preferred approach. We found no basis for concluding that the Auction Manager and the EDCS manage the BGS process (including the auction) ineffectively or inefficiently. If there is a question that remains to be answered, it lies in comparing the values of

the current approach against the costs that can be avoided by changing to other alternatives commonly found acceptable by other jurisdictions.

D. Recommendations

The quality and control of the BGS processes in New Jersey leave it above criticism. The only issue our work has identified is the value proposition of producing such a high quality, well-controlled set of processes, particularly considering the annual cost of addressing patent risk, and the residual infringement risk that remains despite those expenditures. Long experience with the process certainly leaves the BPU, its Staff, and stakeholders in the best position to value the processes' assets. If it helps in making judgements for the future, our work has done so by improving transparency of several factors:

- Far from exhibiting gaps, the New Jersey processes set the standard in an area of high customer cost impact and of high risk of compromise in the absence of solid structure and comprehensive controls
- Trimming some process elements (including the auction process) might produce direct savings of about \$500,000 per year, and leave the state with what remains a leading set of processes
- A change in the auction process from one for which others claim patent protection could also eliminate:
 - Annual expenditures in the range of [REDACTED] for at least the next five years
 - Litigation defense and damage liability risk valued by the chance of occurrence time the magnitude of the exposure should occurrence happen.

The amounts involved [REDACTED], but, they comprise, even after considering [REDACTED], a small part of the multi-billion-dollar value placed under contract after the annual auctions. Therefore, continuation of the status quo remains one of the reasonable options. With these factors in mind, we offer two recommendations.

1. Conduct an analysis of infringement risk that comports with prevailing methods of risk management. (Conclusion #7)

Utilities have moved generally to the use of risk management methods that encourage:

- Quantification of risk through a process that multiplies likelihood (%) of occurrence by consequence (\$) should the risk come to fruition
- Making such calculation on a before-mitigation and after-mitigation basis
- Valuing mitigation measures by comparing their costs with the difference between the before-and after-mitigation risk calculations.

The EDCs can apply that process to the legal measures it takes to mitigate infringement risk in a straightforward manner, requiring only nominal time and effort. They should apply it to two principal risk sources:

- Defending and winning an infringement action
- Defending and losing an infringement action.

Customers bear significant costs each year for these mitigation actions. A calculation that is transparent to the BPU, relies upon substantiated assumptions, and relates dollar benefits gained

to expenditures made is important in ensuring that a long-continuing approach in the face of evolving circumstances continues to be sound.

While the costs involved [REDACTED], they do represent a very small percentage of the total value of the contracts that the auctions produce each year. Should only a marginal difference between cost and value result from a sound analysis, an appropriately-conservative approach may well justify continuation of the current approach. The problem that exists now is that the EDCs cannot provide a clear sense of the value that the current mitigation strategy provides. That absence does not call the strategy's application into question historically, when circumstances differed. The issue is justifying continuation future expenditures likely to well exceed [REDACTED], just across the period for which the EDCs can currently provide a projection.

2. Evaluate the net cost and BGS-quality impacts of transitioning to a simpler auction process. (Conclusion #8 and #10)

New Jersey operates an overall BGS process that we found very well structured, strongly supportive of robust bidder participation, and extremely well-controlled to ensure regularity, transparency, and objectivity. We would not recommend changes that would diminish any of these attributes. The New Jersey process also includes a complex, multi-day auction process that functions well, [REDACTED] and adds direct costs for conducting the auction and indirect costs for bidder communication and training.

The process used is not demonstrably productive of lower contract prices than simpler, less expensive to conduct processes involve. [REDACTED]

[REDACTED] It is not clear that changing it would diminish the other, important hard to quantify values the New Jersey BGS processes combine to produce. However, any consideration of change to the auction process should confirm that lack of diminishment.

These factors warrant a focused review of the changes in costs and other values that a simpler (*e.g.*, sealed bid) process would cause. Beginning with our base observation that a reduction in total costs in the range of \$750,000 to \$800,000 may be possible, we believe that a more careful quantification of costs and an objective analysis of the ability to preserve the other values produced is in order.

As described in Recommendation #1, a marginal difference in costs would not call for a change. Neither would an unavoidable loss in other values. However, our starting “marker” for potential savings is substantial enough to warrant an analysis that will determine whether it remains appropriate to conduct auctions in the current manner. We do not think that the analyses involved would take substantial time or cost. Clear and comprehensive documentation is important.

III. Administrative Cost Definition, Formulation, and Application

A. Background

This chapter addresses how the EDCs define, calculate, and apply BGS Administrative Costs. It catalogues each EDC’s breakdown of Administrative Costs by source, identifying those directly incurred and the substantial, commonly incurred charges for outside services allocated among the EDCs. This chapter also addresses the merits of standardizing what costs should be classified as BGS Administrative Costs.

We collected data from the EDCs through data requests, interviews, and on-site examination to gain an understanding of how each defined its BGS Administrative Costs for the audit period. We determined the components into which each EDC breaks down its Administrative Costs. We examined the division of costs between direct and indirect sources, and we determined what costs and by what methods the EDCs allocated commonly-incurred Administrative Costs among them. New Jersey has used a single annual process to produce segregated, but concurrently held auctions. The EDCs used many common methods and systems and outside resources to design, conduct, and support the main elements of the BGS process. This approach meant that the EDCs incurred the majority of their expenses accounted for as Administrative Costs during the audit period on a common basis, making allocation of that portion of Administrative Costs among the four EDCs not only a necessity, but a principal driver of each EDCs annual costs.

We explored the justifications for each EDC’s definition, classification, and determination of Administrative Costs. We identified the material processes, classifications, and methods for populating costs that the four EDCs incur commonly and what distinguishes them from each other. We also reviewed and tested the accuracy of the calculations and the reasonableness of the processes and methods.

We employed the following evaluation criteria in determining the appropriateness of the definition, formulation, and application of methods to capture BGS Administrative Costs:

- The EDCs should have and employ clear and comprehensive definitions of what costs to classify as BGS Administrative Costs
- The EDCs should have and employ clear and defined processes governing accounting that drives recovery of BGS Administrative Costs
- The EDCs should have and employ structures effective in recording costs consistently with regulatory requirements and guidance
- The EDCs’ overall accounting policies, practices, and resources should be sufficient to support accurate, complete recording of BGS Administrative Costs
- Accounting records and reports should be sufficient in scope, content, transparency, and reliability to permit efficient outside testing designed to verify accuracy and completeness testing, considering factors that include:
 - Consistent and accurate reporting of cost, including timely adjustments, if and as required
 - Maintenance of and access to primary sources (*e.g.*, invoices and time records)
 - Recording of costs in appropriate general ledger accounts

- Use of consistent and reasonable allocation factors for recorded costs
- Accounting for and explanation of material differences in experienced costs
- The EDCs should treat cost differences claimed for recovery in accord with BPU requirements and guidance.

B. Findings

1. Definition of Administrative Costs

No formal document provides a comprehensive, clear definition of BGS Administrative Costs at any of the EDCs. We examined the Company Specific Addendum (CSA) Compliance Filings made in response to the Board’s November Orders from 2013 through 2016 regarding the current year and addressing BGS Accounting and Cost Recovery. Each provides only a very brief description of Administrative Costs:

- PSE&G, JCP&L, ACE: “Any administrative costs associated with the provision of BGS-RSCP and BGS-CIEP service.”
- RECO: “Any incremental administrative costs, including any costs related to compliance with Renewable Portfolio Standards, associated with the provision of BGS service.”

Despite the lack of a formal, comprehensive, documented definition, the components of commonly-incurred Administrative Costs appear clear and commonly understood. The costs of services provided by the Auction Manager comprise the largest category of these commonly-incurred costs. The Auction Manager’s invoices provided a clear and consistent categorization of its portion of the commonly-incurred costs. That categorization consistently divided its costs into: Regulatory and Rules, FAQs, Bidder Info Data, Mark-to-Market, Steering Committee & Management, and Software & Administration of Auction. The Auction Manager’s invoices also included more detailed subcategories addressing services provided through other outside contractors (*e.g.*, auction software licensing and support services).

We found these categories useful in assessing what and how much effort the Auction Manager expended in serving the EDCs. The consistency of the categorization allowed trending of Auction Manager work efforts and costs over time. The invoices of the Auction Manager implicitly provided a commonly accepted definition of its portion of commonly-incurred Administrative Costs. The next two largest categories of commonly-incurred costs, when added to the costs of the Auction Manager, comprised most of the common costs. The EDCs appear also to have commonly considered them as part of BGS Administrative Costs. Coming from two providers with well-scoped services, the lack of a formal definition including them as BGS Administrative Costs commonly incurred and recoverable through tranche fees appears not to have produced any inconsistent treatment in the audit period.

As we will describe below, there was no uniformity of treatment of Administrative Costs that each EDC incurred individually. The EDCs do not recover these costs through tranche fees, but through the annual reconciliation mechanism. As we will explain, the lack of clear definition regarding these Administrative Cost sources is more problematic. Nevertheless, describing the commonly-incurred costs in recognized definitional documents along with the individually incurred ones is good practice, and one the EDCs should adopt.

2. *Components of Commonly-Incurred Administrative Costs*

The EDCs defined and described the common Administrative Cost “components” which relate directly to the statewide BGS auction process that they share on a proportional basis as follows:

- Preparing and conducting the auction, including all pre-auction development work, developing and printing manuals, developing and maintaining a website, etc. as provided by its Auction Manager.
- Legal costs of BGS patent claim defense - - Law Firm of Stroock & Stroock & Lavan LLP during the audit period.
- Oversight of auction process on behalf of the BPU, including a report on the validity of auction results - - Boston Pacific (now part of Bates White) was the Board’s Consultant during the audit period.
- Office space at “Gateway One” in Newark, NJ for NERA Auction Manager.
- Facilities to conduct auction bidder information sessions, including meeting rooms, AV equipment, etc.
- Facilities to view auction in real time (February of each year) at “Gateway One” in Newark, NJ, including rooms, internet hook-ups, etc.

We found these common costs consistently identified and allocated accurately under the established “allocation ratios” during the audit period. As determined by and confirmed in the annual BGS proceedings, each year’s allocations of common costs used the EDCs respective load portion of the total of the four EDCs’ loads as the applicable factor. The BPU invoices to the individual EDCs for their share of the BPU Consultant service fee also clearly identified each of the EDC’s applicable factor which the Board approved for each of the BGS periods.

3. *Directly-Incurred Administrative Costs*

We did not find a consistent approach among the EDCs for defining non-common (*i.e.*, “directly incurred”) BGS Administrative Costs. Each presumably employs similar types of efforts to complement those of the outside resources used commonly. However, the annual amounts accounted for as directly-incurred BGS Administrative Costs ranged from zero to an amount approaching \$1 million during the audit period.

RECO assigned no directly-incurred costs to BGS Administrative Costs during the audit period. PSE&G and JCP&L included only limited amounts and assigned different types of costs to this category. PSE&G’s limited costs included printing for an annual environmental information disclosure label issued in compliance with N.J.A.C.:8-3.1 and PJM fees for access to a system required to submit an annual Renewable Portfolio Standards (RPS) compliance report. JCP&L’s limited directly-incurred costs were for public meeting notice, court reporter, and printing expenses.

ACE’s approximately \$900,000 in annual, directly-incurred BGS Administrative costs for the last year for which we had data resulted from its being the only New Jersey EDC to include personnel/affiliated costs and expenses. These costs, for services provided by an affiliate, included time charges for personnel performing functions in the areas of energy management system, IT customer care, load settlements, market settlements, power procurement services, and supply customer energy. We expected to find support in such functions from internal EDC resources - -

support that typifies what we would expect the other EDCs to have provided through internal resources as well. However, our examination determined that the other three EDCs do not provide even for the recording, let alone the charging of employee time to BGS Administrative Costs. Beyond charges for affiliate time, ACE, like PSE&G and JCP&L, also recorded other small amounts of directly-incurred expenses as BGS Administrative Costs:

- Outside IT Contractor - - Customer Solutions
- Limited Mail Services & Other ancillary expenses
- General - - Fees/Licenses
- SOS/BGS Tracking System
- Power Procurement Residuals.

4. Summary of Audit Period Administrative Costs

The table on the next page details the Administrative Costs of each EDC for the last (2016) BGS year of the audit period. An appendix to this chapter provides summary schedules of the commonly- and directly-incurred Administrative Costs for each EDC over the four BGS years that comprised the audit period.

The definition and the magnitudes of the commonly-incurred Administrative Cost components remained generally consistent throughout the audit period. Consistency in the types of services provided and in the elements of the BGS process through this period promoted that steadiness, as did the continued use of outside firms long used to working in similar capacities in New Jersey.

The services provided by the Auction Manager prior to and during the audit period remained largely unchanged. The EDCs switched law firms, but that change came to maintain access to the same lead lawyer who had served them in patent-issue work since 2002. The BPU consultant nominally changed, but due only to consolidation with another firm. Even the office space, comprising a small part of the commonly-incurred costs, did not change materially. The Gateway One location remained the same and an October 2014 extension moving lease expiration out to the end of 2019.

The directly-incurred components of each EDC's BGS Administrative Costs also experienced little change, except for the addition of two additional affiliate-employee-provided ACE services beginning in June 2013, for an SOS/BGS tracking system and power procurement services.

2016 BGS Administrative Cost Summary

(Table is Partially Confidential)

	<u>PSE&G</u>	<u>JCP&L</u>	<u>ACE</u>	<u>RECO</u>	<u>Total</u>
<i>Allocation Ratio</i>	54.10%	31.86%	11.69%	2.35%	100.00%
Common Costs (recovered through tranche fees)					
Auction Manager*	\$771,639	\$499,162	\$188,678	\$36,910	\$1,496,390
Board Consultant	\$146,151	\$169,843	\$31,581	-	\$347,575
Rent Office Space	\$63,971	-	-	-	\$63,971
BGS Bidder Sessions	\$9,463	-	-	-	\$9,463
Auction Viewing Room	\$7,316	-	-	-	\$7,316
Directly-Incurred (recovered through reconciliation mechanisms)					
PJM	\$1,500				\$1,500
Environmental Label	\$9,329				\$9,329
Printing		\$424			\$424
Legal Notices		\$38,895			\$38,895
Court Reporter		\$479			\$479
IT-Contractor Cust Sol IBM			\$21,296		\$21,296
Mail Services & Other			\$89		\$89
General-Fees & Lic					
SOS/BGS Tracking System			\$61,865		\$61,865
Power Procurement Residuals			\$90,183		\$90,183
<i>Subtotal</i>	\$10,829	\$39,798	\$173,433	\$0	\$224,060
Employees					
Energy Mgt. Sys. Support			\$90,361		\$90,361
IT Customer Care Sys.			\$17,044		\$17,044
Load Settlements			\$90,564		\$90,564
Market Settlements			\$272,647		\$272,647
Power Procurement			\$237,764		\$237,764
Supply Customer Energy			\$464		\$464
<i>Subtotal</i>	\$0	\$0	\$708,844	\$0	\$708,844
Total Directly-Incurred Charges	\$10,829	\$39,798	\$882,277	\$0	\$932,904
Difference	-\$3	\$0	\$13	\$0	\$10

* Includes Rent

5. Tranche Fee Recovery of Commonly-Incurred Administrative Costs

Tranche fees charged to successful bidders who enter supply contracts for BGS recover the commonly-incurred Administrative Costs. The tranche fee process does not include the EDCs' directly-incurred BGS Administrative Costs. An annual Reconciliation Charge Mechanism, described later in Chapter V, provides their recovery method.

Each auction provides for the procurement of established shares of EDC loads divided into amounts (tranches) that provide supply blocks deemed sound for dividing the resulting agreements. PSE&G calculates the tranche fees for all four EDC's, beginning with an estimate of the total BGS commonly-incurred administrative costs related to the BGS yearly period corresponding to each February's annual auction process. Allocation of those estimated costs occurs based on each EDC's load share, divided between the two BGS groups - - RSCP and CIEP. The next step divides the costs for each of the EDC's two BGS customer groups by the number of their tranches to be procured through the auction process, rounded to the nearest \$100.

The Auction Manager announces the tranche fees set to recover the estimated commonly-incurred BGS Administrative Costs just prior to the February BGS Auction. The EDCs collect the tranche fees by deducting their amount from invoices from the suppliers for their deliveries in the first delivery month under the contracts that result from the auction. June is the first month energy flow under those contracts. These deductions by each EDC from charges by its BGS suppliers offset the costs estimated to be incurred for the outside providers (*e.g.*, Auction Manager, patent-issues law firm, BPU consultant, and One Gateway rentals) as part of BGS Administrative Costs.

We reviewed each EDC's Tranche Fee process. The EDCs charged winning BGS suppliers based on estimates of commonly-incurred BGS Administrative Costs. The Reconciliation Charge Mechanisms referred to above, reconciled actual commonly-incurred Administrative Costs to those estimates. However, the reconciliations, which may produce over or under collections, did not result in changes to amounts charged to suppliers. The benefit or burden of variances from estimates comes in charges to BGS customers. In other words, suppliers had no interest in reconciliation; their final payments were as included in tranche fees. Charges to BGS customers (again divided into the two customer groups) reflected the effects of reconciliation of actual versus estimated costs.

We reviewed EDC policies and procedures addressing the development of tranche fee estimates, actual calculations, and their Reconciliation Charge Mechanisms. We also reviewed each EDC's Company Specific Addendum Compliance Filing and the notifications to successful supply bidders in the February auctions during the audit period. We found the tranche fee and Reconciliation Charge Mechanism processes, methods, and calculation formulas consistently applied across the audit period by all four EDCs. We found no revisions or alterations of and no challenges to tranche fees charged to the successful suppliers. Similarly, we found no material change in the processes or methods applied in connection with the EDCs' Reconciliation Charge Mechanisms.

6. BPU Requirements for Recording Administrative Costs

We reviewed BGS-related BPU Orders and Board Consultant Reports to identify recording requirements and guidance regarding Administrative Costs generally, and the tranche fee and Reconciliation Charge Mechanisms specifically. We also reviewed copies of EDC responses to the BPU's Docket No. ER12060485 directive requiring each to submit a description of the recovery mechanisms used and a description of the costs captured in applying the mechanisms. We also interviewed EDC and Auction Manager personnel about recording of the costs involved.

We found no systemic concerns about conformity of cost recording with BPU requirements. Finding #8 below, however, describes specific instances of error or omission found during our testing process.

7. Accounting Policy and Procedures

We reviewed the EDC and Auction Manager policies, procedures, and guidance covering all aspects of the performance of the BGS auction during the audit period. Notable documents included:

- Alternate guaranty process
- Application and associated forms
- Auction rules
- Supplier master agreement
- Application and credit protocols
- Confidential protocols
- Bidder information session and training materials
- Mark-to-market methods
- BGS auction calendar.

We also reviewed each EDC's accounting policies and procedures providing controls over accounting for BGS Administrative Costs. They varied somewhat, but all included elements generally appropriate for ensuring proper accounting for BGS Administrative Costs. As expected, systems, methods, and practices in existence generally provided appropriate accounting controls by each EDC. We found documented control methods for areas including revenues, purchases, vendor management, settlement, invoice approvals, general ledger entries, review and sign-off, and regulatory reporting.

We also sought to identify the EDCs' departmental and work group accountabilities and responsibilities for performing the work directly required to: (a) support BGS process elements (such as the February auction, for example), and (b) perform and control cost accounting. The departments and work groups operated under differing titles and with some differences in how they combined BGS-related functions. However, we found many commonalities in BGS functional and BGS accounting work performance. The common internal functions we observed included:

- Energy/Commodity Supply: auction management and energy supply procurement
- Settlements: supply oriented general invoices and related statements
- Legal and Regulatory: Rates, BPU proceedings, and compliance
- Rates and Revenue Requirements: tariffs, rates, and regulatory reporting
- Revenue & Expense Accounting: financial recording and reporting
- Information Technology: IT support for applications and electronic data management.

One can assume that all four EDCs provided internal services categories like these, but only ACE accounted for employee time, and included the costs for recovery from BGS customers through its BGS Reconciliation Charge Mechanism.

Process narratives and discussions with EDC personnel disclosed consistent definition and application of BGS costs accounting policies and procedures throughout the audit period. The EDC departments, workgroups, and leadership responsible and accountable for implementing and overseeing them remained stable as well.

8. Accounting Records and Reports – Analysis, Review and Testing

The following table summarizes tranche fee calculations for the audit period. We used this listing of costs from the EDCs to determine what testing to perform to verify the quality of execution of BGS Administrative Costs accounting policies, procedures, and controls.

Common Costs Included in Tranche Fees

(Table is Partially Confidential)

BGS Period	2013	2014	2015	2016
Tranche Fee Amounts (based on estimates)				
Auction Manager	\$1,575,000	\$1,450,000	\$1,710,000	\$1,600,000
Board Consultant	\$134,187	\$270,150	\$270,150	\$275,150
Office Space Rent	\$74,534	\$78,500	\$79,000	\$82,205
BGS Bidder Sessions	\$15,000	\$10,500	\$10,000	\$8,000
Auction Viewing Room	\$11,000	\$8,500	\$9,000	\$8,500
Reconciliation Charge Mechanism Amounts (based on reported actuals)				
Auction Manager	\$1,610,724	\$1,325,594	\$1,685,951	\$1,496,390
Board Consultant	\$143,411	\$270,100	\$186,376	\$347,575
Office Space Rent	\$75,365	\$80,634	\$62,857	\$63,971
BGS Bidder Sessions	\$8,747	\$7,761	\$8,673	\$9,463
Auction Viewing Room	\$8,872	\$9,316	-	\$7,316

Two important qualifications apply in using the data from the preceding table:

- The amounts reflect charges as booked. Auction Manager invoicing delays, which are recorded when invoices are received and described more fully in Findings #8a and #9 below, mean that a portion of the reported actual charges for a given year may have arisen from services performed in a prior BGS year.
- Three of the EDCs accounted for substantial portions of patent-related legal costs in a manner that included them in tranche fee calculations, but excluded them from treatment as BGS Administrative Costs in their Reconciliation Charge Mechanisms.

Accordingly, summarizing charges based on month of service-provision would produce different yearly amounts and, on whichever of the two bases stated, actual annual BGS Administrative Costs are understated by the omission of patent-legal costs. Each of these two qualifications had, as we discuss below, implications for the reconciliation of both commonly- and individually-incurred BGS Administrative Costs. Nevertheless, the information shown in the chart did prove helpful in

understanding overall sources and magnitudes of costs and served to direct our testing focus on the cost areas of greatest dollar magnitude.

We conducted a general review of and performed transaction tests on costs included in tranche fees and Reconciliation Charge Mechanisms. Our review began with a survey of major cost-related documents including contracts and invoices from the major outside providers of services (*e.g.*, the Auction Manager and the law firm providing patent-related services). We could perform only a limited review of law firm’s invoices, because the EDCs claimed privilege with respect to detailed descriptions of services provided. However, we were able to verify the daily hours and associated hourly rates for each lawyer who provided services within each bill. and the total monthly charge including the allocated cost to each EDC. We examined invoices and raised questions intended to verify: (a) the existence of proper justification for invoiced amounts, and (b) accounting entry accuracy and conformity with policies, procedures, and BPU requirements.

We conducted an on-site test of a sample of accounting entries. We found 22 categorized Administrative Cost types. We examined one month’s charges in each of the four audit periods for each of the four EDCs. If the month selected did not include all 22 elements, we reached into other months to find a charge for that element. In addition to this initial testing, we also sampled additional invoices and other documentation to analyze for appropriate general ledger treatment and for financial and regulatory reporting.

We reviewed invoices and other cost documentation using the following criteria:

- Accuracy of and compliance with contract terms defining services to be provided and rates
- Sufficient EDC management review and approval prior to payment
- Consistent and appropriate accounting classification
- Timely recording in the appropriate general ledger accounts
- Timely and appropriate review of adjusting entries for errors or omissions
- Reclassification of general ledger system net deferred balances to be recovered through the Reconciliation Charge Mechanism
- Reports submitted to the BPU.

a. Testing of Auction Manager Charges

Our testing found that services were billed in a manner consistent with the agreements under which the Auction Manager performed them, in terms of the nature, categorization, and rates of and for those services. The general magnitude of billings conformed to expected variations in service levels based on the variable nature of the Auction Manager’s work across a year. We found adequate support for charges for outside services provided to the Auction Manager, such as charges for software licenses and related maintenance services. The invoices we tested provided monthly details sufficient to relate charges to work performed in the Auction Manager’s major service categories; *i.e.*, Regulatory and Rules, FAQs, Bidder Information, Mark-to-Market, Steering Committee and Management, and Software and Administration of Auction. Supporting information identified services provided daily by person, and tied them to applicable rates for each of the contract’s allowed billing rates. We found adequate supporting documentation for outside provider charges and for travel, duplicating, and other miscellaneous expenses. We observed that

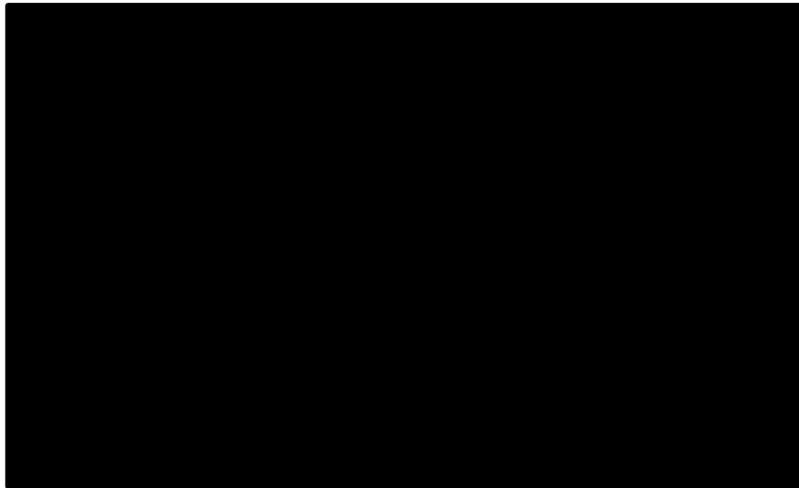
allocation of total monthly bills to each EDC occurred, as required, on the basis of an accurate calculation of its share of load requirements.

However, we did observe a billing lag as it relates to the time when monthly services provided were actually rendered and the actual bill date. One could expect that services provided for the month end of June 30th to be billed within approximately forty-five (45) days - - by August 15th. As discussed in Chapter VIII, the typical 45-day lag period increased substantially over the BGS audit period. In 2013, three of the months exceeded 45 days; in 2014, eight of the months exceeded 45 days; in 2015 and 2016, every month exceeded a 45-day lag. The number of billing lag days in 2015 ranged from a low of 53 days to a high of 106 days; in 2016 this became a low of 63 days to a high of 105 days.

The agreement with the Auction Manager empowers the EDCs to audit for a two-year period after the final payment under the agreement. No EDC conducted an audit during the four years we examined.

[REDACTED]

As we discussed above, three EDCs excluded substantial portions of patent-related legal costs from tranche fee calculation and reconciliation. The next table shows this phenomenon. From 2013 through 2015, JCP&L did not defer its share of patent-related legal costs, meaning they were not accounted for as BGS Administrative Costs for reconciliation purposes.¹ ACE charged the remainder of its fees to Transmission & Distribution Charges. RECO did not clear some balance sheet amounts to the Reconciliation Charge Mechanism, but reported an intention to do so in the future. In comments to a draft of this report, JCP&L stated that it has made the required correction.



Patent-Related Legal Costs Categorization
(Table is Confidential)

¹ In 2012, JCP&L did not defer [REDACTED].

We examined invoices from the law firm engaged to provide patent-related legal services to verify the application of correct pricing provisions and allocation of total amounts billed among the EDCs. A sample review of invoices showed adequate support in terms of a specification of hours charged by person and application of specified rates. Allocation of invoiced legal costs among the EDCs followed the required basis. We address below in subsection 9 of this chapter's findings certain errors and omissions discovered in our testing of the accounting for patent-related legal costs.

b. Testing of Board Consultant Charges

We did not find it necessary to perform testing of BPU Consultant costs. The EDCs receive only one annual invoice, which we found consistent with the amount of the contract, and whose allocation among the EDCs we found consistent with the required formula. The BPU Consultant provided during the audit period one service outside the scope of its principal contract. This service, provided during the 2013 BGS period, concerned a "Solar Renewable Energy Certificate" matter. We verified that this service came in response to a BPU directive, and we found charges for the service supported by a listing of hours worked at specific rates. We also found it allocated among the EDCs in the required shares, and ultimately included in the EDCs' Reconciliation Charge Mechanisms.

c. Testing of Office Space Charges

The Auction Manager's on-site work spaces during the audit period, as they have been for many years, were located at One Gateway Center in Newark. PSE&G entered into a lease agreement for 1,984 square feet of space there, with lease costs based on: (a) triple-net (three-component) charges for base rent, a share of common maintenance costs, and real estate taxes, and (b) parking, electrical, and minor miscellaneous expenses. PSE&G initially made lease payments to the lessor. The Auction Manager invoices to JCP&L, ACE, and RECO included their allocated shares of total lease costs. The Auction Manager's invoices to PSE&G included a credit for the Auction Manager's lease-related invoiced costs to JCP&L, ACE, and RECO. This charging and crediting process remained constant through the audit period and its design was appropriate for leaving each of the four EDCs with a correct share of total lease costs.

We tested four invoices - - one for each of the four BGS periods within the audit period. We found that PSE&G's credit equaled the total of the three EDC's charges. However, we discovered a problem with the allocation basis used in each of the four annual BGS periods. For the first three BGS periods, the problem caused PSE&G to bear a greater-than-appropriate share of lease costs, which meant correspondingly lesser-than-appropriate responsibility for the other three EDCs. The situation reversed in the fourth BGS period.

Our first test month was February 2013. The combined credit to PSE&G for the cost shares of the other three EDCS amounted to \$2,456.99 for that month. Dividing that amount by the combined allocation factors of the other three (45.36 percent) indicates total monthly lease charges of \$5,416.64. The base monthly rent charge for February 2013 under the lease (\$5,621.33) and PSE&G's booked amounts for total lease and other related charges (\$6,275.11) both differed from the credited amount.

Our second test month was March 2014, which showed unexpected differences as well. Combined credits to PSE&G totaled \$2,473.24, which indicates total lease costs of \$5,416.64, when divided by the 45.66 percent combined allocation factors of the other three EDCs for that month. The base rental for that month was \$5,745.33 and PSE&G booked total lease costs of \$6,663.29.

Our third test month was March 2015, whose combined credits to PSE&G of \$2,962.34 indicate lease costs of \$6,575.67 when divided by the 45.05 percent combined allocation factors. Base rent for that month was \$5,290.67 and PSE&G booked total costs of \$7,368.93.

Our fourth test month was March 2016. That month’s combined credits of \$3,320.82 produced indicated total lease costs of \$7,234.90, when divided by the combined 54.10 allocation factors. By contrast, base rent for the March 2016 was \$5,373.33 and PSE&G booked \$6,333.64 in total lease costs.

Allocations of these lease costs should closely approximate the established allocation factors. However, as the next table shows, results differed in each of the four BGS periods, based on the month we tested for each. The top section shows the correct allocation factors and the bottom section shows the actual percentages that each EDC bore of total lease costs.

Allocated Share of Audit Period Lease Costs

BGS Period	2013	2014	2015	2016	4Yr Totals
Established Allocation Factors					
<i>PSE&G</i>	54.64%	54.34%	54.95%	54.10%	54.51%
<i>JCP&L</i>	30.08%	30.56%	31.01%	31.86%	30.88%
<i>ACE</i>	12.86%	12.03%	11.69%	11.69%	12.07%
<i>RECO</i>	2.42%	3.07%	2.35%	2.35%	2.55%
<i>Totals</i>	100.00%	100.00%	100.00%	100.00%	100.00%
Allocation of Actual Lease Costs					
PSE&G Lease Costs	\$75,365	\$80,634	\$62,857	\$63,971	\$282,826
Actual Billed to JCP&L	\$19,592	\$19,786	\$18,594	\$25,657	\$83,628
JCP&L Share	26.00%	24.54%	29.58%	40.11%	29.57%
Actual Billed to ACE	\$8,343	\$7,954	\$7,010	\$9,414	\$32,721
ACE Share	11.07%	9.86%	11.15%	14.72%	11.57%
Actual Billed to Rockland	\$1,570	\$1,890	\$1,409	\$1,892	\$6,761
Rockland Share	2.08%	2.34%	2.24%	2.96%	2.39%
Three-EDC Credit to PSE&G	\$29,504	\$29,630	\$27,013	\$36,963	\$123,111
PSE&G Cost after Credit	\$45,860	\$51,003	\$35,844	\$27,008	\$159,715
PSE&G Share of Lease Costs	60.85%	63.25%	57.02%	42.22%	56.47%

d. Testing of Other Facilities’ Costs

PSE&G also incurred on behalf of all the EDCs costs for separate: (a) facilities used to view the auction in real time, and (b) facilities required to conduct bidder information sessions. No allocation of them occurred in any of the four BGS periods covered by our audit. PSE&G cited the relatively minor size of the costs as the reason for deciding to bear their full amount; *i.e.*, not to allocate them.

9. Review, Booking, and Reporting of Administrative Costs

In addition to testing the Common Administrative Costs as described in the preceding sections of this report, we tested the execution of the accounting process at each EDC. We also tested directly-incurred Administrative Costs. We tested one month of activity for each of the four BGS periods at each EDC. We examined the sufficiency and accuracy of invoices. We performed testing to verify the application of controls addressing review, approval, and accurate and consistent cost recording. We also sought to determine the effectiveness of EDC adjustment processes applied when discovering any errors or omissions.

Our testing at each of the four EDCs found a match between all invoices examined and amounts recorded on the books. Our testing found that each EDC applied a consistent, structured invoice review and approval process, carried out at appropriate levels of management and in accord with their accounting policies, procedures, and process narratives.

PSE&G, JCP&L, and RECO recorded all their BGS Administrative Cost expenses upon receipt of invoices from service providers. ACE, by contrast, sometimes used an accrual process for Auction Manager costs, recognizing those costs as the underlying services were provided. ACE reconciled accrued versus actual costs as each BGS period progressed. ACE, however, did not use the accrual method consistently. We did not find either approach problematic in our efforts to test costs and their accounting. However, significant lags between the provision and the invoicing of services by the Auction Manager (discussed above in subsection 8 of the Findings section of this chapter) does encumber the process of validating the cost reconciliation process required for BGS Administrative Costs.

Our testing at PSE&G found that general ledger account detail reflected appropriate line-item values for expenses. However, that detail did not identify service providers or provide service descriptions. The lack of such information encumbers the process of analyzing services by type of vendor. Management performed routine internal quarterly reviews, and made timely adjustments when warranted. Supporting documents existed for costs such as rent, facilities to view auction and bidder sessions, and other ancillary charges.

Our testing at JCP&L found that management captured general ledger information on a cumulative basis, but without supporting detail. We were able to locate backup identifying vendors, dates, and values for the entries we tested. We did observe the existence of a review process and the making of adjustments. However, as described earlier, management booked only a small amount for patent-related legal costs in the 2013 BGS period, and no cost at all in the 2014 and 2015 periods - - indicating a lack of proper classification. Management made a single adjusting entry in the latter part of the 2016 BGS period; it covered eleven monthly law-firm invoices. Management indicates it has now properly deferred ██████ in costs for the 2012 BGS period and ██████ in costs for the 2013 through 2015 BGS periods to be reflected in a post-2016 BGS period.

ACE provided a summary schedule grouping information on a component basis by month for all four BGS periods. We examined detailed general ledger activity to verify the contents of that summary schedule. During this review we observed that ACE did not allocate Auction Manager and Board Consultant services to the BGS-CIEP, instead assigning 100 percent of the cost to BGS-RSCP customers in later BGS periods. We describe our findings on this error in Chapter VI. ACE

booked no patent-related legal costs to the account tracking BGS Administrative Costs for the BGS periods our audit addressed, nor was it booked in the summary schedule. Management explained that it had excluded patent-related legal costs from the BGS Reconciliation Charge Mechanism, including them instead in accounts that drive delivery rates. We did not find this approach consistent with what we understand the BGS Administrative Cost recovery process to require.

In the 2014 BGS period, ACE expanded employee expenses accounted for as BGS Administrative Costs to include services labeled as Power Procurement Residual and SOS/BGS Tracking System. Power Procurement Services involved power purchasing, contract administration, daily mark-to-market monitoring, along with Renewable Portfolio Standards reporting, credit evaluations, and billing. The SOS/BGS Tracking System costs were for amortization of assets used for BGS activities. Our review and testing disclosed June 2013 ACE adjusting entries of \$2,341,036 to reflect costs for power procurement expenses incurred from August 2003 through May 2013 and \$124,786 for SOS/BGS tracking System expenses covering the period of March 2011 through May 2013. These entries produced a total adjustment of \$2,465,822 to the 2014 BGS Administrative Costs. None of these costs had been included for BGS reconciliation previously. ACE also made a \$3,092,275 adjustment to DSSAC/CI EP standby fees, for revenues that should have been deferred. Offsetting the \$2,465,822 expense adjustment, this entry produced a net impact of \$626,453.

We reviewed and tested data supporting ACE’s inclusion of the costs of services from affiliates for monthly BGS supply services. We reviewed employee time sheets and rates and we examined the associated accounting entries.

RECO provided detail general ledger information by vendor name and date for the BGS audit periods. RECO booked to a deferred account [REDACTED] of patent-related legal costs for the four BGS periods of the audit period, but failed to reclassify the adjustment in a manner serving to include it in BGS Administrative Costs reconciliation. Management stated that it intended to make an adjustment in the future.

10. Standardizing Administrative Costs

We divided the question of state-wide standardization of expenses classified as BGS Administrative Costs into two cost types:

- Those commonly-incurred by the EDCs, subject to allocation among them
- Those directly-incurred uniquely by each EDC.

As we have described, services from four sources account for nearly all commonly incurred costs:

- The EDCs’ Auction Manager
- The law firm addressing patent-related issues for the EDCs
- The consulting firm advising the Staff and the BPU
- Office and other facility space.

a. Commonly-Incurred Costs

The EDCs already treated Auction Manager costs, which account for a majority of the commonly-incurred BGS Administrative Costs, in a standardized fashion. The Auction Manager’s application of consistent billing practices throughout the audit period and its division of charges among the EDCs facilitated standardized treatment. Patent-related legal services and services from the Staff/BPU consultant accounted for most of the rest of the commonly-incurred Administrative Costs, contributing roughly equal amounts. We found that the EDCs treated those costs in a standard fashion as well, but, as we observed earlier in this chapter, we found under-inclusion of the legal costs in some cases. Nominally, the EDCS also treated two small, commonly-incurred costs (lease costs for the Newark space used by the Auction Manager and facilities used for auction viewing and for bidder information sessions) in a standardized fashion as well. We found them, however, subject to the allocation issues described earlier.

In practice, therefore, standardization already largely exists for the commonly-incurred BGS Administrative Costs of all four New Jersey EDCs.

b. Directly-Incurred Costs

BGS Administrative Costs directly incurred by the EDCs varied significantly in nature and amounts across the audit period, as the next chart summarizes. The large 2014 jump in ACE costs arose from: (a) the inclusion of employee costs added at that time, and (b) an adjustment to address 10 years of costs from the 2003-2013 period.

Directly-Incurred Administrative Costs

BGS Period	2013	2014	2015	2016
<i>PSE&G</i> ¹	\$51,779	\$1,500	\$1,500	\$10,829
<i>JCP&L</i> ¹	\$21,041	\$40,400	\$72,343	\$39,797
<i>RECO</i> ^{1,2}	\$36,400	\$0	\$0	\$0
<i>ACE Total</i>	\$491,092	\$3,195,277	\$754,483	\$882,277
Non-Personnel Charges ¹	\$2,432	\$2,684,909	\$142,568	\$173,433
Affiliate Employee Services	\$488,660	\$510,368	\$611,915	\$708,844

The largest source of differences in directly-incurred costs classified as BGS Administrative Costs is that only ACE includes employee/affiliated time and expenses. As noted in Finding #9 above, in 2014 ACE made a \$2,465,822 adjustment to Non-Personnel Charges to reflect the additional cost of Power Procurement Residual and SOS/BGS Tracking System charges not previously reflected for the August 2003 to May 2013 periods. Another difference reflected in these amounts is that PSE&G, JCP&L, and RECO included in these amounts costs for the 2013 Solar Renewable Energy Certificate work of the BPU Consultant (described in Findings subsection 8.c. above.). ACE did not do so.

The following list shows how significantly the practices of the EDCs differ:

- PSE&G

- Printing costs for the annual BGS environmental information disclosure label issued in compliance with M.J.A.C.:8-3.1
- PJM fee for access to the GATS system required to develop and submit an annual RPS compliance report.
- JCP&L
 - Public notices for a BGS public input meeting in the service area
 - Court Reporter fees for the public-input meeting
 - Small printing charges related to the public-input meeting
- ACE
 - Outside IT Contractor – Customer Solutions
 - Small charges for mail services and ancillary items
 - General-fees and licenses
 - SOS/BGS tracking system
 - Power procurement
 - Energy management system support charges by an affiliate
 - IT customer care systems charges by an affiliate
 - Load settlements charges by an affiliate
 - Market settlements charges by an affiliate
 - Power procurement services charges by an affiliate
 - Supply customer energy charges by an affiliate.
- RECO claims no direct administrative cost.

The costs charged by ACE generally reflect functions that each of the other EDCs likely incur as well. They neither record nor charge to BGS Administrative Costs the time of their internal personnel who perform such functions. That ACE provides them through an affiliate does bear on the need for ensuring proper affiliate charging, but does not give them a causal relationship to the BGS that is lacking among the other three EDCs. That they perform them internally obviates the need for cost recording to ensure that the right operating utility, from among a group of such companies operating within a holding company structure, is charged. However, the failure of the other EDCs to account for and to charge for these internally-provided services means that ACE customers who do not chose market suppliers bear (considering cost causation) a disproportionate (on a comparative basis with the other EDCs) share of costs.

The lack of accounting (through time reporting or other, similar measures) for such internal costs by the other EDCs makes quantification of them impracticable. Nevertheless, the ACE costs for such services (shown on the following table) provides a rough proxy for measuring the magnitude of the costs that the other EDCs incur in performing similar BGS-related functions.

ACE Employee/Affiliated-Based BGS Administrative Costs

BGS Period	2013	2014	2015	2016
Energy Mgt. System Support	\$61,372	\$59,948	\$65,311	\$90,361
IT Customer Care Sys.	\$0	\$4,458	\$4,044	\$17,044
Load Settlements	\$63,336	\$75,733	\$79,987	\$90,564
Market Settlements	\$217,194	\$255,335	\$258,085	\$272,647
Power Procurement Services	\$144,670	\$112,098	\$202,725	\$237,764
Supply Customer Energy	\$2,088	\$2,796	\$1,763	\$464
Total Affil. Empl. Services	\$488,660	\$510,368	\$611,915	\$708,844

c. Differences in Accounting Bases for Administrative Costs

The work we performed in reviewing BGS cost accounting (described above in this chapter) determined that each EDC used systems and structures capable of standardizing reporting and recovery of both commonly- and individually-incurred BGS Administrative Costs. They have the capability to do so without major development or sustaining costs and resources. The largest likely source of change to such standardization would arise from the need to capture internal costs for functions such as those ACE reports from affiliates. The functions involved are largely repetitive and the New Jersey BGS processes have had long-term stability. Thus, direct time reporting, while a primary alternative, does not appear necessary. Pre-set allocations of time required would prove straightforward and effective.

d. Double Cost Recovery Risk

We understand that the issue of potential double recovery arose in a 2012 BGS proceeding at Docket No. ER12060485. The issue involved a cost true-up by ACE, which included internal labor cost in its BGS Reconciliation Charge Mechanism when trueing up costs. The BPU found that base-rate cases provided a more appropriate opportunity for addressing potential double recovery.

Only ACE made substantial use of the BGS process for recovering individually-incurred BGS Administrative Costs. There thus exists only an immaterial risk of double recovery of individually-incurred costs at the state’s other three EDCs. Moreover, the vast majority of the audit period’s ACE costs for internally-provided functions came from affiliates, who charged them using cost codes specifically tied to BGS-related cost accounts. The use of such a charging mechanism limited the costs charged only to BGS-related accounts. This limitation precluded a direct opportunity for charges to accounts relevant to both BGS and base ratemaking. It would take an indirect flaw or gap in affiliate transaction controls and accounting to permit such directly charged cost items to hit the books of ACE twice. We have begun the ACE Affiliate Transactions and Operational and Financial Performance and Management Audit. That audit will provide a more comprehensive examination of controls over and accounting for affiliate transactions, such as those reflecting BGS functions charged by affiliates to ACE. We will include in that examination a specific review of BGS functions charged by affiliates to ACE.

Commonly-incurred BGS Administrative Costs remained similar in magnitude and treatment both before and during the audit period. Moreover, all resulted from directly invoiced services and

facilities provided by third parties. We did not observe a material risk of double recovery there. We also agree that, to the extent verification is appropriate, simple and direct inquiry in base rate proceedings will suffice.

e. Standardization Practices in Other Jurisdictions

Standardization varies widely in the other jurisdictions for which we secured useful information. Practice at the one extreme assigns little or no costs to BGS-type processes. New Jersey practice falls in the mainstream by assigning costs identifiable as directly related to BGS processes to accounts that make their recovery the responsibility of BGS customers. New Jersey's use of tranche fees is a notable practice, facilitating the charging and recovery of commonly incurred costs. The middle group of jurisdictions includes some who require inclusion of costs for three types of resources: (a) planning and executing BGS-type supply acquisition and management agreements, (b) accounting for BGS-related costs and revenues, (c) regulatory and legal expenses for proceedings that address process design, and cost and rate recovery approval. At the other end of the spectrum a few jurisdictions add costs designed to provide third-party suppliers sufficient "head room" to compete with the prices for BGS-type service.

C. Conclusions

- 1. In general, Common and Direct Administrative Cost are not defined in a common, documented fashion; however, "components or subcategories" were consistently reported and were easily identifiable and suitable for appropriate classification and analytical review. (Recommendation #1)**

We did not find a clear, documented definition of the elements of Common and Direct Administrative Cost at a useful level of detail. However, information gleaned from Auction Manager agreements and invoices, combined with a review of transactions and their accounting illustrated a common understanding of them and an appropriate classification of their types. Developing a formal definition of Common and Direct Administrative cost within the EDC's CSA filings on an annual basis to comport with those costs to be included in the Tranche Fee and Reconciliation Charge Mechanism would constitute an appropriate improvement.

- 2. The administrative cost recovery process and methods, i.e., Tranche Fee and Reconciliation Charge were well defined and suitable for review and testing.**

We found both the Tranche Fee and Recovery Charge Mechanism process and methods to be well defined and sufficient to provide for adequate review and testing of the recovery of Administrative Cost claimed.

- 3. BPU requirements regarding accounting for and recovery of BGS administrative cost were appropriately reflected in each EDC's CSA filings.**

We found the BPU directives and guidance appropriately incorporated into the CSA Compliance filings and sufficient to provide for adequate review and testing of the recording of Administrative Cost to be claimed.

- 4. The EDC's had and applied appropriate accounting policy and procedures in administering the BGS process.**

We found the EDC’s accounting and reporting organizational structure and staff suitable for BGS accounting and administration purposes. We found reasonable oversight and direction of accounting department staff as it concerned the BGS process. We did, however, as discussed later find some areas of concern where accounting adjustments made should have been made significantly more timely.

5. The EDC’s accounting records and reporting methods were appropriate, but some transactions and adjusting entries continue to warrant attention and correction.
(Recommendations #2 through #7)

The EDC’s Accounting Records and Reporting Methods on both a consolidated and an individual basis were appropriate in all major respects. EDC’s internal and external reporting and review methods and process were sufficient for analysis, review, and testing purposes. We summarize the specific errors we found during our testing below. Our testing found methods, policies, and procedures, including adjusting entries consistently applied. All primary sources (invoices and time records) we requested were provided; they reasonably supported the expenses booked.

The EDCs have the power to audit Auction Manager charges within a two-year period after the final payment under the agreement. No EDC’s availed themselves of this audit provision during the audit scope period. (Recommendation #2).

Most expenses were properly classified; however, we identified the following errors:

- JCP&L has understated patent-related legal costs by ██████████ for the 2013-2015 BGS Audit Periods. It also understated them by an additional ██████████ for 2012. Management stated to us an intention to reflect in a future period understated amounts of ██████████ for the 2012 and ██████████ for the 2013-2016 BGS periods, respectively or a total claim of ██████████. (Recommendation #3)
- ACE did not include patent-related legal costs in its BGS Administrative Cost reconciliation process. Management included ██████████ of such costs in accounts that drove delivery rates over the 2013-2016 periods ██████████ (Recommendation #4)
- RECO classified patent litigation cost for the BGS audit periods, but failed to reclassify them to the appropriate account for inclusion when calculating Reconciliation Charge Mechanism. Management stated that it planned to undertake the necessary reclassification. (Recommendation #5)
- PSE&G incurred the full cost of office space for the BGS process, subject to subsequent allocation among the EDC’s on a proportional basis. However, over the audit period, PSE&G ended up bearing a greater than expected percentage, with the other EDCs bearing less than expected percentages. The impact was minimal as summarized in the table provided in Findings subsection 8.d. above. (Recommendation #6)
- PSE&G assumed the full cost for the facilities used to view the auction and for bidder information sessions, failing to secure allocations to the other EDCs of their shares of the costs. The impact was minimal; as summarized in the table in Finding #8 above, Auction Viewing Room and Bidder Session costs totaled \$25,504 and \$34,644 for the four BGS periods, respectively. (Recommendation #7)

- ACE made a \$2,465,822 adjusting entry in June 2013 to capture employee expenses from affiliates incurred over a roughly ten-year prior period ending in 2013. ACE offset this cost with a revenue entry of \$3,092,275, producing a net impact of \$626,452. Costs for these services continued monthly thereafter. An adjustment of this magnitude, especially on covering so long a period should have been explained more fully at the time. We did find adequate support for these adjusting entries in our test work.

6. Directly-incurred costs have varied widely due to ACE’s unique charging of internal costs incurred to perform or support BGS processes, with the effect of assigning to its BGS customers a comparatively much higher amount of BGS Administrative Costs.
(Recommendation #9)

Prior to mid-2013, the EDCs assigned different types of costs to the amounts they recovered from BGS customers outside the tranche fees paid by winning suppliers. We would expect, however, that the suppliers implicitly reflected tranche fees in their auction bidding. Nevertheless, none of the four utilities included substantial directly-incurred costs historically. ACE’s 2013 change resulted from the initiation by ACE of costs directly charged in the performance or in support of several BGS processes. All EDCs generally perform internally the types of costs involved. Two factors distinguished ACE: (a) it received them through an affiliate, and (b) only ACE recorded the time-related and other costs associated with the functions and support involved.

Utility holding companies commonly provide common services to their operating utilities through service companies and similar operating structures. Whether provided in this fashion or through personnel internal to the operating utility (in this case ACE), the amounts involved represent direct costs of providing utility service. On the one hand, ACE BGS customers therefore pay, when compared to the other three New Jersey EDCs, a premium. On the other hand, the non-BGS customers of the other three EDCS pay a premium.

Providing the services from an affiliate requires charging, while service from internal utilities does not. None of the other three EDCs had found reason to account for the time and other costs associated with the functions and support for which ACE distinctly accounted and charged. That difference, however, has no bearing on cost causation - - a driving principle in utility rate structuring. Nor can we observe any other distinction at ACE that warranted treating its BGS customers differently.

There were also other differences in costs that the EDCs captured as internally-incurred BGS Administrative Costs. However, except for ACE, their magnitudes were comparatively very small, making the impacts of differences on customers minimal. Over the audit period, PSE&G and JCP&L directly-incurred BGS Administrative Costs averaged 1.4 and 7.0 percent respectively of their totals.

7. We found no accounting system or structural differences that would raise a material bar to standardizing the definitions of BGS Administrative Costs among the EDCs.

Each EDC employed systems and approaches that, while varying somewhat, can all sufficiently track and record time, and provide financial reports for the costs involved in performing and supporting BGS functions. The largest difference involved the lack of time reporting by those other than ACE, which appeared to do it principally because affiliates provided the services involved.

Stability in the New Jersey BGS process makes use of pre-assigned allocations of time and associated costs an acceptable alternative to hourly time reporting, easing any burden on the other EDCs in conforming to the ACE practice.

8. We did not find substantial risk of material levels of double recovery of BGS-related costs through the operation of base rates and the BGS Reconciliation Charge Mechanism.

Commonly-incurred BGS Administrative Costs have remained stable, transparent, and subject to clear recovery methods for many years. We found little risk of double recovery of these costs and we consider confirmation of non-duplication a simple, straightforward matter when all costs are before the BPU and stakeholders in rate cases.

Except in the case of ACE, directly-incurred costs were at too low a level to produce a risk of material levels of double recovery. Conclusion #2 above explains that added costs (on a comparative bases) to ACE BGS customers raises a more significant question. Presumably, substantial controls exist to ensure that the affiliate charges that make ACE different result from regular, documented, and clear procedures and systems. However, a review of systems, methods, and controls over affiliate costs forms part of the scope of our recently-initiated audit of ACE affiliate matters for the BPU. We will design testing there to include BGS charges from affiliates.

D. Recommendations

1. Through the next EDC CSA filings, establish a formal, documented definition of Commonly- and Directly-Incurred BGS Administrative Costs. (Conclusion #1)

The EDCs should develop a single, clear and comprehensive definition of commonly-incurred Administrative Costs, explicitly treating each component, and detailing treatment of actual costs in Reconciliation Charge Mechanisms. We do not believe that there is a lack of a common understanding among the EDCs, but documentation will help ensure consistency and provide a sound basis for determining how any future cost sources that may arise in connection with the BGS should be treated.

This common definition should specifically deal with resources, such as the Auction Manager and the BPU Consultant, expected to continue as regular sources of costs. For Auction Manager costs, the definition should include a breakdown by major category. The invoice structure of the Auction Manager provides a sound starting point for detailing those categories. The definition should also specify the types of facility, equipment, and systems costs includable. The definition should provide for a detailed, common range of these cost categories as well, in order to support accounting by those categories in a way that makes cost reconciliation and periodic outside review of costs practicable and transparent. The definition should also provide the parameters for determining how costs arising from activities occasioned by but not a part of direct design or execution of BGS processes should be included. Patent-related legal costs, which the EDCs expect to remain an element of BGS Administrative Costs subject to reconciliation, offer an example of such costs. Adding this component to the definition will assist in addressing future possible sources of such “occasioned by” costs.

A common definition of directly-incurred costs that each EDC includes in Reconciliation Charge Mechanisms is also required. In the case of non-employee costs, the very general descriptions under which each EDC operates enable them to account for similar cost types differently. We could discern no compelling reason for differences. A common definition, again prepared for vetting through the next EDC CSA filings, will serve to provide more clarity and precision in what non-employee costs to include. We believe that there is at least a largely-common understanding among the EDCs of these costs, making the benefits of this recommendation more a matter of maintaining control over those costs as their sources may change in the future than of producing material change in cost types or amounts being classified as BGS Administrative Costs now. In any event, these non-employee costs are small, making the change a matter of low priority. Employee costs incurred directly and individually by the EDCs have significantly greater cost consequences.

2. Establish a practice of conducting periodic reviews of the Auction Manager’s charges for BGS services. (Conclusion #5)

A single firm has served the EDCs as the Auction Manager since BGS inception. The EDC’s should periodically audit the invoices as permitted by the agreement. The Auction Manager’s charges are in the range of \$1.5 million per year.

3. Correct JCP&L’s under-inclusion of patent-related legal expenses. (Conclusion #5)

JCP&L failed to include most of its patent-related legal costs for the 2013, 2014, and 2015 BGS reconciliation periods. Management began to correct this situation by deferring ██████ for the 2013-2015 BGS periods and ██████ for the 2012 BGS period. It plans to address the combined amount ██████ in a future BGS reconciliation filing. That filing should include a detailed report and reconciliation of its share of the costs involved, how management accounted for them, and how it will improve controls to avoid similar omissions in the future. In comments to a draft of this report, JCP&L stated that it has made the required correction.

4. Correct ACE’s under-inclusion of patent-related legal expenses. (Conclusion #5)

ACE did not include any patent-related legal costs in the 2013 through 2016 BGS reconciliation efforts. ACE included them in accounts whose costs it recovers through delivery rates. ACE included ██████ of patent-related legal costs in those other accounts over the 2013-2016 periods. The company needs to provide a detailed report and reconciliation of its share of the expenses, how it accounted for them, and how to provide for reconciliation and recovery through the BGS process.

5. Correct RECO’s under-inclusion of patent-related legal expenses. (Conclusion #5)

RECO failed to properly reclassify patent-related legal costs for inclusion in the BGS reconciliation process. RECO’s 2016 ██████ percent share of approximately ██████ in annual expenses would produce about ██████ over the four BGS periods. RECO did reflect ██████ on its books but did not properly reclassified the underlying yearly amounts for inclusion in the BGS reconciliation process. RECO indicated that it was seeking to correct the misclassification. It should continue its corrective efforts to completion. In comments on the draft or this report, RECO stated that, upon switching to a different accounting system, it “picked up”

“certain patent costs.” RECO further stated that it properly coded the costs, corrected the error, and charged the costs.

6. Correct the methods and calculations for allocating lease costs for Newark offices used by the Auction Manager. (Conclusion #5)

Under allocations to the other three EDCs left PSE&G responsible for too great a share of the lease costs for office space used by the Auction Manager. This cost element accounted for about 4.5 percent of commonly-incurred costs during the audit period. Therefore, the consequences of not allocating it correctly have only nominal cost impact, but correction should prove a straightforward matter.

7. PSE&G should allocate the costs of auction viewing and bidder information session facilities. (Conclusion #5)

PSE&G has borne the full costs, failing to allocate shares to the other EDCs because of the nominal costs. Implementing this recommendation will have minimal dollar impact, given that the category accounted for less than one percent of commonly-incurred BGS Administrative Costs during the audit period. However, implementing it should prove a straightforward matter. In comments on the draft of this report, PSE&G reports that it no longer bears the costs of bidder information sessions, stating that NERA runs them and allocates their costs to the EDCs through its Auction Manager invoices.

8. ACE should adopt the practice of explaining more fully out-of-period adjustments in the future. (Conclusion #5)

ACE’s adjustment includes costs assigned to the 2014 BGS reconciliation process, but incurred across the preceding 10 years.

9. Enhance standardization of the categories of uniquely-incurred costs of the EDCs for performing and supporting BGS functions. (Conclusion #6)

At a minimum, the EDCs should develop a common, clear categorization of costs subject to inclusion through Reconciliation Mechanisms, and support that categorization with detailed itemizations of the cost types to be included. These costs have been nominal, but they should be commonly defined and applied. Examples of the differences we observed include: (a) JCP&L’s inclusion of approximately \$40,000 of legal notices, printing, and court reporter costs associated with a public-input meeting in its service area, and (b) ACE’s inclusion of Information Technology support services of over \$20,000 in its more recent RCM filing. No material differences in the costs borne by BGS customers versus others will result from this change, but the nominal costs of making it warrant consistency.

The more significant issue concerns costs that ACE includes in its Reconciliation Mechanism for services provided by affiliates. ACE has incurred substantial charges for such services each year. When combined with its other directly incurred charges, the non-common charges become by far the largest category of ACE BGS Administrative Costs, well outpacing the Auction Manager costs that comprise the second-largest category for ACE. The ACE affiliate costs involve functions and support reasonably necessary for all three of the other New Jersey EDCs. All utilities who use

structured regulatory and bidding processes to secure BGS-type supplies from the market likely need similar support.

In the absence of accounting by the three New Jersey EDCs for the time and other costs involved, and in the absence of any other means offered by them for estimating them, we chose to use the ACE individually-incurred cost values (direct charges and affiliated employee services) to establish a proxy for what one could expect, were the other EDCs to identify such costs. For those three, the additional \$1 million we chose to use as a proxy for annual costs would represent a large and material portion of total costs paid by customers (using the assumption that tranche fees recovering commonly-incurred costs form an implicit part of winning bid prices). ACE's ratio of commonly- to directly-incurred 2016 period BGS Administrative Costs differed dramatically from the other two larger New Jersey EDCs:

- ACE: 20/80
- PSE&G: 99/1
- JCP&L: 95/5.

Adding \$1 million of direct cost would increase PSE&G's total BGS Administrative Costs of \$1.2 million by 81 percent and JCP&L's corresponding \$0.8 million by 127 percent. Differences at RECO led us to choose not to offer any similar benchmark for roughly estimating its costs of corresponding types.

The BPU should also consider the adoption of what we consider the best practice we have observed in other jurisdictions of including in the BGS Reconciliation Mechanism costs for accounting and regulatory and legal functions and support. These costs arise directly from the BGS process and in the absence of a charging mechanism are borne in substantial part by non-BGS customers. BGS costs already include some costs for legal services related to patent issues. Adding them can be accommodated simply, using standard pre-set amounts, reflecting the stability of BGS cost and revenue accounting and the annual regulatory process for reviewing and approving each year's BGS process and results.

Liberty Analysis of Cost Reflected in Reconciliation Charges
(Table is Partially Confidential)

PSE&G 2013-2016 BGS PERIODS

BGS Period	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
<u>PSE&G</u>	54.64%	54.34%	54.95%	54.10%
Tranche Fee - Categories				
<u>Common - Administrative</u>	<u>RCM</u>	<u>RCM</u>	<u>RCM</u>	<u>RCM</u>
Auction Manager (Incl. Cr. Rent)	\$ 902,600	\$ 691,885	\$ 881,504	\$ 771,639
Board Consultant	73,320	146,800	148,447	146,151
Rent Office Space	75,365	80,634	62,857	63,971
██████████	██████████	██████████	██████████	██████████
BGS Bidder Sessions	8,747	7,761	8,673	9,463
BGS Auction Viewing Room	8,872	9,316		7,316
██████████	██████████	██████████	██████████	██████████
<u>Direct</u>				
PJM	1,500	1,500	1,500	1,500
Environmental Label	11,962	-	-	9,329
Board Consultant Solar Project	38,316			
Unidentified				
Total Direct Charges	\$ 51,779	\$ 1,500	\$ 1,500	\$ 10,829
██████████	██████████	██████████	██████████	██████████
██████████	██████████	██████████	██████████	██████████
Difference	\$ 13,717	\$ 2	\$ (1)	\$ 3

JCP&L 2013-2016 BGS PERIODS
(Table is Partially Confidential)

BGS Period	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
<u>JCP&L</u>	30.08%	30.56%	31.01%	31.86%
Tranche Fee - Categories				
<u>Common - Administrative</u>	<u>RCM</u>	<u>RCM</u>	<u>RCM</u>	<u>RCM</u>
Auction Manager (Incl. Rent)	\$ 463,682	\$ 448,051	\$ 526,204	\$ 499,162
Board Consultant	40,363	82,558	-	169,843
Rent Office Space	-	-	-	-
██████████	██████████	██████████	██████████	██████████
BGS Bidder Sessions				
BGS Auction Viewing Room				
██████████	██████████	██████████	██████████	██████████
<u>Direct</u>				
Printing	395	720	345	424
Legal Notices		39,680	71,998	38,895
Court Reporter				479
Board Consultant Solar Project	20,646			
Unidentified	-	-	-	-
Total Direct Charges	\$ 21,041	\$ 40,400	\$ 72,343	\$ 39,797
██████████	██████████	██████████	██████████	██████████
██████████	██████████	██████████	██████████	██████████
Difference	\$ -	\$ -	\$ -	\$ -

ACE 2013-2016 BGS PERIODS
(Table is Partially Confidential)

BGS Period	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
<u>ACE</u>	12.86%	12.03%	11.69%	11.69%
Tranche Fee - Categories				
<u>Common - Administrative</u>	<u>RCM</u>	<u>RCM</u>	<u>RCM</u>	<u>RCM</u>
Auction Manager (Incl. Rent)	\$ 202,171	\$ 143,617	\$ 237,827	\$ 188,678
Board Consultant	26,481	32,449	31,580	31,581
Rent Office Space	-	-	-	-
██████████	████	████	████	████
BGS Bidder Sessions	-	-	-	-
BGS Auction Viewing Room	-	-	-	-
██████████	████	████	████	████
<u>Direct</u>				
IT-Contractor Cust Sol IBM	\$ 369	\$ 12,198	\$ 7,673	\$ 21,296
Mail Services & Other	563	567	380	89
General-Fees & Licenses	1,500	1,500	1,500	-
SOS/BGS Tracking System	-	178,506	48,319	61,865
Power Procurement Residuals	-	2,492,138	84,696	90,183
<u>Affiliated Employee Services</u>				
Energy Mgt. Sys. Support	61,372	59,948	65,311	90,361
IT Customer Care Sys.	-	4,458	4,044	17,044
Load Settlements	63,336	75,733	79,987	90,564
Market Settlements	217,194	255,335	258,085	272,647
Power Procurement Services	144,670	112,098	202,725	237,764
Supply Customer Energy	2,088	2,796	1,763	464
Subtotal Affil. Employee Services	488,660	510,368	611,915	708,844
Board Consultant Solar Project				
Unidentified				
Total Direct Charges	\$ 491,092	\$ 3,195,277	\$ 754,483	\$ 882,277
██████████	████	████	████	████
██████████	████	████	████	████
Difference	\$ (1)	\$ 137	\$ (33)	\$ (13)

RECO 2013-2016 BGS PERIODS
(Table is Partially Confidential)

BGS Period	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
<u>RECO</u>	2.42%	3.07%	2.35%	2.35%
Tranche Fee - Categories				
<u>Common - Administrative</u>	<u>RCM</u>	<u>RCM</u>	<u>RCM</u>	<u>RCM</u>
Auction Manager (Incl. Rent)	\$ 42,271	\$ 42,041	\$ 40,416	\$ 36,910
Board Consultant	3,247	8,294	6,349	-
Rent Office Space	█	█	█	█
BGS Bidder Sessions				
BGS Auction Viewing Room	█	█	█	█
<u>Direct</u>				
Printing				
Legal Notices				
Court Reporter				
Board Consultant Solar Project				
Board Consultant - RFP Sp. Proj.	36,400			
Total Direct Charges	\$ 36,400	\$ -	\$ -	\$ -
█	█	█	█	█
█	█	█	█	█
Difference	\$ (1)	\$ 1	\$ (1)	\$ -

IV. Allocation of BGS Administrative Costs

A. Background

Using the data gathering and analytical processes described in the preceding two chapters, we examined each EDC's effectiveness in allocating their common and unique BGS Administrative Costs across the audit period. We applied the following criteria in performing this examination:

- Allocation methods should be clear and consistently applied
- If multiple allocation methods are used, when and to what cost types they apply should be clear and justifiable
- Methods for populating cost categories should be consistently and appropriately applied
- Methods for recovery of costs should be consistently applied.

B. Findings

1. Administrative Costs Subject to Allocation Among the EDCs

BGS Administrative Costs requiring allocation consist of the common costs incurred for the benefit of all four EDCs for designing, approving, and executing each year's BGS process and for conducting a defined set of activities (e.g., mark-to-market services for contracts awarded following the annual auction process). As described previously, these costs arise under services and facilities agreements with outsiders, who include the EDCs' Auction Manager, the law firm providing patent-related legal services, the consultant overseeing BGS processes and advising Staff and the BPU, office space (for the Auction Manager), other facilities (for auction viewing), and bidder information systems used by the EDCs and for bidder sessions.

2. Allocation Method Clarity and Consistency

We found clear definition and consistent application of common Administrative Costs throughout the audit period. The Tranche Fee paid by winning bidders provided the means for recovering these common costs. A consistent allocation basis for setting these fees for each EDC applied throughout the audit period.

Tranches comprise the units on which bidders based their bids. Each tranche reflected a "winnable" block of service, defined as a percentage share of an individual EDC's BGS load - - a share that the winning bidder for the tranche became obliged to serve on a full-requirements basis. Each tranche came to the winning bidder with the obligation to pay a fixed fee. The fee did not operate as an adder to winning bidders' contract prices. Therefore, any recovery of the costs of that fee must have been reflected in the winning bid price.

The method for calculating tranche fees proved clear and consistently and correctly applied throughout the audit period. The calculation produced a separate tranche fee for each of the two overall BGS types:

- Residential Small Commercial Pricing (RSCP)
- Commercial and Industrial Energy Pricing (CIEP).

Design and execution of the BGS bidding and award process proceeded in parallel for both RSCP and CIEP. The Auction Manager ran separate auctions for each, although they occurred simultaneously. PSE&G calculated tranche fees on behalf of all four New Jersey EDCs. PSE&G began the calculation by estimating the total of common Administrative Costs (*i.e.*, costs applicable to RSCP plus those applicable to CIEP plus those common to both). PSE&G then allocated the total common Administrative Costs based on the statewide (*i.e.*, for all four EDCs) total load shares of each type included in a particular year's auction. With each of the two type's percentages set (and totaling 100 percent), PSE&G applied that percentage to the total common Administrative Costs. With the total costs allocable to RSCP and to CIEP thus set, PSE&G then divided the allocated total costs of each by the number of tranches being awarded through the bidding process. PSE&G finally rounded these resulting dollars-per tranche-numbers to the nearest \$100.

The Auction Manager announced the amounts of the tranche fees related just prior to the annual February auction. Collection of the fees from those winning supply contracts in the auction occurred by means of a reduction in the amounts due to the suppliers for energy flow in the first-month (June) of energy flow under the contracts. The EDCs charged their BGS customers with no such deduction. Thus, they recouped their shares of the estimated common BGS Administrative Costs paid to the service and facilities providers whose costs comprise these Administrative Costs.

In summary, both initial cost responsibility for and recovery of common Administrative Costs occurred on the bases of each EDC's shares of total load awarded for the applicable GBS year. No other allocation methods applied to common Administrative Costs during the audit period. The allocation methods applied remained consistent among all four New Jersey EDCs throughout the audit period.

3. Data and Methods for Populating Allocable Cost Categories

Our examination disclosed no material differences in outside services and facilities or their providers during the audit period. Their invoices provided sufficient information to permit PSE&G to perform common Administrative Cost calculations for all the EDCs. Invoices and supporting information from the vendors were sufficient to enable our testing of conformity between amounts charged and those eventually allocated to each EDC. Our review and testing found, with certain exceptions described in Chapter III, no errors in the PSE&G calculations and no inconsistencies between amounts calculated by PSE&G and those recorded by the EDCs. The exceptions concerned excess rent and facilities charges borne by PSE&G, but in amounts that we did not consider substantial.

C. Conclusions

1. The process for setting and collecting tranche fees provided, throughout the audit period, a clearly defined, consistently applied, and appropriate single method for allocating common BGS Administrative Costs.

Suppliers who won contracts through the BGS auction process paid tranche fees that recovered the full estimated costs of outside providers whose efforts produce each year's processes for BGS design and execution, including all pre-auction, auction, and post-auction activities. The allocation

resulted from an appropriately-defined calculation, shared between RSCP and CIEP classes on a rational basis. PSE&G performed the calculation consistently and correctly (excepting nominal rental and facilities costs) on behalf of all the EDCs. Our testing of invoices and calculations showed the process to be a well-controlled one, with two exceptions (explained in Chapter III) resulting in PSE&G bearing too great a share of rental and facilities costs, albeit in amounts we did not find substantial. The cost allocation process applied reciprocally designed elements that returned to the EDCs from BGS customer payments each EDC's share of estimated common BGS Administrative Costs.

2. The EDC's did not use, nor did we find a justification for, multiple methods to allocate common Administrative Costs.

We found a single, consistently-executed method for allocating common BGS Administrative Costs. We found no reason to conclude that multiple methods would enhance the cost allocation process.

3. Our testing validated the sufficiency and the accuracy of information used to allocate common BGS Administrative Costs.

Our testing found the information provided by vendors sufficient to support accurate allocation. We also found consistency between that information and account entries made and cost allocations performed, subject to minor rental and facilities exceptions, which we addressed in Recommendation #6 and #7 in the previous chapter of this report.

4. Each EDC consistently used a uniform and appropriate recovery method for common BGS Administrative Costs during the audit period.

Our review and testing of the EDCs' Reconciliation Charge Mechanisms verified the consistent and accurate use of the tranche fee calculations charges, and reconciliation methods.

D. Recommendations

Liberty has no recommendations regarding the allocation of common BGS Administrative Costs.

V. Mechanisms for Recovering Administrative Costs

A. Background

The cost focus of the preceding chapters was on collection, accumulation, and recording of costs recoverable as BGS Administrative Costs. This chapter describes our examination of policies and procedures, accounting controls, and supporting documentation used to develop the actual rates charged to customers. We examined the required filings, the supporting data presented, and we examined its conformity to the accounting information collected, accumulated, and recorded, as described in the preceding chapters. Our examination sought to validate the correct use of cost information in the calculation of rates.

Tranche fees based on estimated common costs initially collected those costs from winning bidders, making customers indirectly responsible for them as a supplier cost of doing business. Where actual common costs differed from those estimates, however, BGS customers paid or received the difference, because each EDC's Reconciliation Charge Mechanisms reconciled those estimates to actual costs. These reconciliation mechanisms also provided for direct recovery from customers of each EDC's actual directly-incurred BGS Administrative Costs. The tranche fees did not include these directly-incurred costs in the first place.

We examined each EDC's processes, procedures, and activities for securing BGS Administrative Cost recovery and for ensuring that no double recovery of such costs occurred. We evaluated policies, practices, activities, and controls designed to ensure recovery in accord with proper design and with full accuracy. We applied the following evaluation criteria in assessing the recovery methods of each EDC:

- Procedures, processes, cost components, and customer allocations should be sufficient to ensure cost recovery that is accurate and appropriately allocates costs among customer groups affected
- Recovery methods should be clear and consistently applied
- Procedures, practices, and results should conform to Board Orders and other applicable guidance
- Material differences in approach among EDCs should be documented reasonably justified by individual EDC circumstances.

We also considered changes in recovery mechanisms that would provide consistency across some or all the four New Jersey LDCs. We did so considering the need for balance between the fairness, efficiency, transparency, and other benefits of consistency against the burdens that changes would require of the EDCs.

B. Findings

1. Reconciliation Processes

Tranche fees paid by winning bidders compensated the EDCs for estimated common BGS Administrative Costs. This overall approach has remained stable since the 2002 inception of the

BGS auction process. The elements of common cost used, the allocation between the two BGS customer classes, and the basis for the allocations did not change during the audit period.

2. *Common Elements of Recovery Methods*

Our examination of each EDC’s methods for initially collecting and then reconciling BGS Administrative Costs disclosed a broad set of consistent methods and approaches. Chapter III discussed the initial recovery of common Administrative Costs through tranche fees. Here we focused on two other important aspects of recovery through revenues.

The first aspect on which we focused here concerns the process for reconciling: (a) the actual costs for the services and facilities that drive those tranche fees, with (b) revenues actually collected via tranche fees. That reconciliation is required because the tranche fee calculations used cost estimates for the common Administrative Costs (Auction Manager, patent-related legal services, Staff/BPU consultant, and office rental and other facility costs). The tranche fee calculations used estimates because actual costs only become known as the year progresses well after the time of tranche fee collection.

The second aspect on which we focused concerns the four differing processes each EDC uses for collecting and reconciling its individually-incurred (*i.e.*, not common) BGS Administrative Costs. Those processes also used estimated costs and expected revenues (but for individually-incurred, not commonly-incurred costs). Those costs also eventually required reconciliation to match actual individual EDC costs with actual individual EDC revenues.

Reconciliation for common and for individually-incurred costs and revenues occurred through each EDC’s Reconciliation Charge Mechanism. Our examination of the common process for determining and collecting tranche fees and of each of the four Reconciliation Charge Mechanisms included policies, procedures, methods, and data sources. We examined the notifications to successful bidders about tranche fee obligations and amounts for each of the four BGS periods included in our audit period.

We also reviewed and asked questions about each EDCs individual CSA Compliance Filing. Upon final BPU Order approving each BGS Auction, the EDCs had to make these filings, which reconciled estimated versus actual costs, and led to BGS customer rate changes to reflect differences. The contents of these filings generally consisted of the following items: Committed Supply and Contingency Plans, Accounting and Cost Recovery, Description of Tariff Sheets, Tariff Sheets, Spreadsheets for the Development of BGS Cost, and related calculations of BGS rates.

These EDC CSA Compliance filings, while exhibiting some differences, included the following key characteristics and content:

- *Costs*: Separate accounting details for BGS-RSCP and BGS-CIEP Administrative Cost items
- *Revenues*: Separate accounting details for BGS-RSCP and BGS-CIEP revenues related to Administrative Costs

- *Common/Individually-Incurred Breakdown*: Cost and revenue data for both common (tranche fee) and individually incurred Administrative Costs and revenues
- *Reconciliation*: BGS-RSCP and BGS-CIEP amounts subject to deferred accounting, *i.e.*, difference between revenues and cost
- *Class Based Deferrals/Credits*: BGS deferral/credit determined individually for BGS-RSCP and BGS-CIEP rates.
- *Rate Adjustments*: employed to balance out and differences between revenues and actual costs
- BGS Administrative Costs in excess of recorded revenue, for which differences became charged to customer monthly accounts and reconciled periodically
- BGS Administrative Costs less than recorded revenue, for which differences became credited to customer monthly accounts and reconciled periodically
- BPU approval of frequency of charges/credits, which differed among the EDCs
- Reconciliation Charge rates: calculated separately, with interest rates and frequency of adjustment as approved by the BPU for each EDC.

3. *EDC-Specific Recovery Features*

The frequency of reconciliation charge changes (supported by EDC filings) varied as follows:

- PSE&G: monthly balancing, monthly Reconciliation Charge Filings, no rate cap.
- JCP&L: monthly balancing, quarterly Reconciliation Charge Filings, no rate cap.
- ACE: monthly balancing, biannual annual Reconciliation Charge Filings (Effective June 1 and October 1), rate is capped at +/- 2 cents per kWh.
- RECO: monthly balancing and quarterly Reconciliation Charge Filings, rate is capped at +/- 2 cents per kWh.

Interest rates applied by the EDCs also differed:

- PSE&G used two-year constant maturity Treasuries, Federal Reserve Statistical Release, plus 60 basis points, subject to chance each August 1st
- JCP&L used its actual internal short-term money pool costs
- ACE used its actual internal cost of short-term debt; if not available, rates on equivalent temporary cash investments
- RECO used two-year constant maturity Treasuries, Federal Reserve Statistical Release, plus 60 basis points, but not in excess of overall rate-of return.

4. *EDC's Rate Reconciliation Charge filings – Analysis, Review, and Testing*

We examined all EDC reconciliation charge filings for each of the four BGS periods we audited. The scope and detail of the filings and supporting accounting information remained generally consistent with the preceding descriptions. We also developed from this review a set of detailed information for use in identifying items to test.

We performed an on-site review and testing process for a reconciliation filing by EDC for each of the four applicable BGS periods. We looked for supporting invoices and for the sufficiency of

accounting processes performed to support the filings. Our testing sought to determine whether we could verify filing contents based on;

- Actual costs incurred
- Appropriate cost-item approval processes
- Recording of cost items in financial books of record
- Impacts of cost items on deferred accounts required to track and reconcile balances underlying Reconciliation Charge Filings.

The EDCs' BGS Reconciliation Charge Mechanisms provide for, but are not limited to true-ups of differences between estimated and actual common and directly-incurred BGS Administrative Costs. The mechanisms also seek to reconcile differences between BGS payments to suppliers and BGS revenues from customers. We focused on the BGS Administrative Costs as they flow through the true up process, to verify appropriate and consistent reflection of differences appropriately and consistently on a total basis and as divided between the two BGS customer groups of each EDC.

EDC reconciliation filing frequency varies, as established by BPU approved cycles for each. We found small differences in: (a) how the EDCs present line-by-line information in their filings, and (b) the levels of supporting information provided with the respective filings. We provide below a summary of the major components and supporting information provided by each EDC.

5. PSE&G – Monthly Filings

PSE&G's monthly filings included separate cost data sheets to support distinct rate determinations for its BGS-RSCP and BGS-CIEP customer groups. The filings also included tariffs and a cover sheet. A formula-based process began with the Beginning Balance (over/under), and it detailed current-month activities and amounts for:

- BGS energy revenues
- BGS energy and Administrative Costs
- A credit for BGS tranche fees
- BGS Reconciliation Charge collections or refunds to customers
- All combining to produce the net accumulated balance to be collected or refunded
- Description of the application of the established provisions for interest
- Description of items related to timing differences associated with energy-supply costs and customer billing cycle considerations.

Our testing of the PSE&G filings focused primarily on BGS Administrative Costs and offsetting BGS tranche fees producing the balances that drive the company's monthly Reconciliation Charge. PSE&G's inclusion of a separate line item for tranche fee credits facilitated the process of verifying consistency with the BGS auction value established for both BGS customer groups. We also found PSE&G's BGS Administrative Costs line item helpful in verifying conformity with monthly book entries. PSE&G's filings included monthly amounts for rental expenses, a debit or expense item. However, it treated two other cost types separately - - tranche fees, a credit or revenue item, and all other Administrative Costs combined, a debit or expense item. PSE&G handled them once per year, as part of its filing for the month of June. Unlike rent, which produced continuing charges each month, tranche fees and administrative costs for the BGS year became known by June. The

fact that PSE&G (like all the other EDCs except for ACE) did not charge for BGS related functions and support performed internally allowed its directly-incurred Administrative Costs for the BGS year to be settled by June.

Our efforts to match costs with revenues within a BGS period encountered timing difficulties. PSE&G at times did not receive invoices for services provided in a certain monthly period until much later. Chapter III discusses the significant lag that often incurred between dates of service provision and billing by the Auction Manager. Those lags ranged from 63 to 105 days in the 2015 and 2016 BGS periods. Even where invoices covered services provided in a prior BGS period PSE&G included the costs in the monthly period during which it received those invoices, along with the amount associated for monthly rental expenses. Moreover, as discussed just above, monthly PSE&G filings did not detail the individual components (instead lumping them together to produce a single cost line items for revenues or expenses). Thus, invoice timing differentials make it burdensome to validate costs for a defined BGS period through the normal method of matching supporting details (like invoices) to monthly filings.

The work we described in Chapter III found no inconsistency between monthly values reported and those reflected on the books. We also verified the underlying cost components. Finally, we verified ultimate accuracy in cases of the large timing difference between some invoices and how they were booked and included in the monthly BGS Reconciliation Filings. While accounting values may tie to those reported in the BGS filings, one must exercise caution when comparing costs of certain items to the corresponding estimated value used initially. Clarity and ease of review to verify matching would be significantly enhanced, were PSE&G to provide an annual summary report to the BPU identifying and detailing BGS commonly-incurred and directly-incurred Direct Administrative Cost included in the BGS reconciliation on a cost component basis. Those components include items such as Auction Manager, Patent Lawyer, Board Consultant, Rent, etc. for the twelve months ended June. As we describe below. The other EDCs should make this change as well.

6. JCP&L – Quarterly Filings

The quarterly JCP&L filings included one schedule to support rate determinations for each of its BGS-RSCP and BGS-CIEP customer groups. The filings also included tariffs and a cover sheet. JCP&L applied a formula-based process for comparing BGS Revenue and Administrative Costs to produce over- or under-recovery amounts for the reconciliation period involved. The calculations made provision for applicable interest. Our on-site testing included an examination of the supporting files used to prepare the filings JCP&L made on a quarterly basis. These filings reported over/under recovery amounts based on period-end book values, which set the value to be refunded or collected. JCP&L booked Administrative Costs on receipt of invoices, and booked tranche fee revenues in the month of June, assigning them to an appropriate deferral account. Management subsequently reclassified them each June to deferral accounts established for the two BGS customer groups.

As for PSE&G, not billing employee time used to conduct and support BGS activities (see Chapter III.B.3) made it possible to determine essentially the full BGS year's internally-incurred Administrative Costs in time for June accounting treatment. JCP&L thus included its net over/under BGS Administrative Costs balance in its Reconciliation Charge Mechanism filing for

the period ending in June. That filing provided the BGS-RSCP and BGS-CIEP cumulative Total Over/(Under) Recovery balances for the period.

Our testing discovered supporting information sufficient to test specific elements of JCP&L Administrative Costs as booked each month, including the tranche fee credit. We verified the accuracy of JCP&L's determination of the balance (total and for each of the two BGS customer groups) to be collected or refunded through the Reconciliation Charge Mechanism. JCP&L recorded BGS Administrative Costs as a debit or expense upon receipt of invoices, and compared cumulative entries for the twelve-month period to the BGS tranche fee credit booked in June. Liberty verified that the sum of these accounting values matched the values reported in the BGS RCM filings. As with PSE&G, the absence of an annual summary report detailing the BGS year's common and directly-incurred Administrative Cost by component made the process of comparing actual with estimated costs more cumbersome than necessary.

7. ACE – Bi-Annual Filings

The ACE reconciliation filings, effective June 1 and October 1, included a single schedule to support rate adjustment determinations for its two BGS customer groups. The ACE filings included additional supporting schedules addressing customer billing cycles and forecasted sales volumes used to calculate those adjustments. The ACE filings also included tariffs and a cover sheet.

ACE's June 1 and October 1 (effective date) filings also employed a straightforward, formula-based process. The process used the beginning over- or under-collected balance, and current cost items for BGS energy revenues, BGS energy supply costs, BGS Administrative Costs (net of tranche fee credits), and Reconciliation Charge collections or refunds to customers over the respective historic months associated with the filing. The June 1 filing thus included information on a monthly basis for August through March, while the October 1 filing provided monthly information for April through July. The filings thus reflected the net accumulated balance to be collected or refunded, applied applicable interest, and included items related to timing differences of energy supply cost and customer billing cycle considerations.

The ACE filings broke down each of the formula components by month, and then accumulated them in accord with the two annual periods (beginning each June 1 and October 1) during which rate adjustments applied. Selecting June 1 and October 1 dates provided for an uneven number of months, designed to reflect the seasonality of services provided to the ACE BGS customers. Thus, supporting data for filing for the period starting June 1 included data for the four months of data April through July. The filing for the period beginning October 1 included data for the eight months of August through March.

Our on-site testing included examination of the files supporting the biannual filings. The filings provided over- or under-recovery dollar amounts consisting of the period-end accumulated book values. These values formed the basis of the amounts to be refunded to or recovered from the two BGS customer groups. ACE booked BGS Administrative Costs monthly as it received invoices or made accrual entries. ACE began by classifying the entries to an appropriate deferral account designed to support over/under collection refunds/collections by BGS-RSCP and BGS-CIEP customers. ACE recorded its tranche fees in June, classifying them in a manner that supported

appropriate determination of over/under collection, again for each of the two customer groups. ACE calculated net over/under BGS Administrative Cost balances for each group for the eight-month period ending in March and the four-month period ending in July to coincide with the periods established for its Reconciliation Charge Mechanism filing.

We confirmed that accounting-entry values tied to values reported in the reconciliation mechanism filings. However, timing differences between months of service provision and months in which they were recorded made it impracticable to compare estimates of individual Administrative Costs items with what turned out to be their actual costs. In common with the other EDCs, lack of periodic (*e.g.*, annual) EDC summary reports to the BPU showing details of the build-up of actual Administrative Costs and comparing them to estimated costs used to develop the Tranche Fee for a matching same period, encumbers the analysis. A report structured like our schedule in Chapter III “Common Costs Included in Tranche Fees”, showing estimated versus actual tranche fee costs, and the appendix schedules “Analysis of Cost Reflected in Reconciliation Charges” on an individual EDC basis would provide a meaningful and useful tool for cost analysis.

8. RECO – Quarterly Filings

RECO’s quarterly filings included a schedule supporting separate reconciliation rate determinations for the two BGS customer groups. The filings also included monthly schedules providing single line items for BGS Costs and Revenues (with details on specific cost components), along with the required tariffs and a cover sheet. The RECO filings directly compared BGS revenues and costs to derive over- or under-recovery totals for each period, and included a provision for applicable interest. The supporting monthly cost detail did not separately identify BGS Administrative Costs or Tranche Fee credits.

Our on-site testing included examination of the supporting files used to prepare RECO’s quarterly filings. The filings’ presented cumulative over/under recovery values for the period. These values formed the basis for measuring the amounts to be refunded or collected. RECO booked BGS Administrative Costs monthly as it received invoices, assigning them to an appropriate deferral account for recovery or collection by each of the two BGS customer groups. RECO recorded tranche fees in the month of June, making entries in an appropriate deferral account for recovery or collection of balances, again by customer group.

We confirmed that accounting-entry values tied to values reported in the BGS RCM filings. However, timing differences explained above (time of rendering versus invoicing for services) made it impracticable to compare estimates of individual Administrative Costs items with what turned out to be their actual costs.

Here too, a periodic EDC summary report to the BPU showing details of the build-up of actual Administrative Costs and providing a comparison to the estimated costs used to develop tranche fees revenue for the same period would support comparative analysis.

C. Conclusions

1. The EDCs use different cycles for reconciling BGS Administrative Costs with revenues, and commonly do not provide details enabling straightforward validation of amounts reported with supporting information. (Recommendation #1)

The EDC's reconciliation charge filings varied in information elements and categorizations reported, due in-part to the differences in the cycles they used to file and to adjust rates designed to reconcile costs with revenues. Only PSE&G identified BGS Administrative Costs and tranche fee credits as separately identifiable elements in reconciliation filings. JCP&L's filing for June included the net cumulative value of BGS Administrative Costs debits and tranche fee credits in a single line item (BGS Energy Expense and Revenues), without separately identifying them. The monthly details in the ACE filings identified BGS Administrative Costs and tranche fee credits as a combined line-item. The RECO filings included BGS Administrative Costs and tranche fee credits into BGS Cost/Revenue line items, without separately identifying them.

Reconciliation of BGS Administrative Costs values occurred on the same cycles and as part of the same process that reconciled overall BGS energy supply expenses and revenues. These energy supply expenses and revenues dwarfed Administrative Costs. Therefore, treatment of Administrative Costs should follow, rather than lead energy expenses and revenues in determining how to deal with cost and revenue reconciliation for BGS customers of both classes. Certainly, we observed no factors or circumstances making any of the cycles used by the EDCs during the audit period particularly difficult to design or execute.

Nevertheless, good reason exists for producing periodic reporting of estimated versus actual Administrative Costs on a more detailed, category-driven basis than the EDCs now provide. The common use of a single line item unsupported by accompanying detail makes it difficult for analyses such as those warranted by an audit of the scope we undertook. A single line item approach produces an inability to discern Administrative Costs by type and amount for comparison against the corresponding amounts used to build estimates on which the EDCs based tranche fees charged to those awarded BGS supply contracts. Moreover, to the extent that different types of costs may in the future add to or subtract from expenses includable as BGS Administrative Costs, their nature and justification would not be rendered transparent by the single-line approach. Testing the validity of an expense item takes visibility on the item's nature and amount.

2. Each EDC followed and used clear and consistent processes, cost components, and allocations of Administrative Costs during the audit period.

The EDCs used fundamentally the same processes and methods in employing estimates of Administrative Costs and in periodically reconciling costs to reflect actual costs and revenues. All the EDCs correctly segregated and performed calculations for each of their two BGS customer groups. However, it took an unduly complicated review of books cost and invoices to identify and test detailed cost items reflected in their BGS cost recovery mechanisms.

3. We found no failures to comply with BPU requirements with respect to reconciliation.

Our review of the CSA Compliance Filings, Rate Reconciliation Charge filings and supporting accounting information documented the EDC's compliance with the procedures in Board Orders and Directives.

- 4. The EDC's made Reconciliation Charge Mechanism filings, which we found accurate and consistent with their applicable compliance filing requirements, but did not accompany them with reports that offer a basis for ready review of their components. (Recommendation #1)**

The Rate Reconciliation Charge Filings of the EDCs exhibited significant variations in their reporting of Administrative Costs and tranche fee credits. The PSE&G filings identified BGS Administrative Costs and tranche fee credits separately, but did segregate them by source, or category. JCP&L did not even separately identify Administrative Costs and tranche fee credits, instead combining them with the vastly larger BGS Energy Expense and Revenues, which underwent reconciliation on the same cycles. ACE combined BGS Administrative Costs and tranche fee credits into a single line item. RECO combined BGS Administrative Costs and tranche fee credits into the BGS Cost/Revenue line items without distinction.

D. Recommendations

- 1. Provide for EDC filings with the BPU of periodic reports identifying BGS Administrative Costs at a reasonably-detailed categorical level, to support direct review of the accuracy and appropriateness of the components subjected to reconciliation. (Conclusions #1 and #4)**

The lack of periodic reporting of estimated versus actual Administrative Costs on a reasonably detailed category basis unduly complicates review and testing of actual versus estimated costs and revenues. Combining many cost types and elements into a single line item without detail hinders the process of identifying specific costs sources and testing them.

VI. Allocation of Administrative Costs to Customers

A. Background

The BGS process requires the EDCs to allocate BGS Administrative Costs on a reasonable basis between the two type of New Jersey BGS groups - - Residential Small Commercial Pricing (“BGS-RSCP”) and Commercial and Industrial Energy Pricing (“BGS-CIEP”) customers. We applied the following criteria in evaluating these allocations:

- Allocation methods should conform to BPU Orders and other applicable guidance
- Allocation methods should be well-defined and follow sound allocation principles
- Procedures, policy, and methods should be clear and consistently applied among customers
- Differences among EDCs should be documented, explained, and have a sound foundation.

Our review included sample testing to assure reasonableness and accuracy of allocation methods, and to verify that charges to customers produce revenues closely approximating costs they cause.

B. Findings

1. *Conformity with BPU Orders and Guidance*

We reviewed each of the EDC’s current BGS year Company Specific Addendum Compliance Filing. These CSA Compliance Filings specifically address accounting and cost recovery on a total cost basis and as divided between the two New Jersey BGS customer groups. We found no failures to conform to BPU requirements and guidance.

2. *Allocation Methods and Principles Definition*

As we discussed in Subsection 5 of Chapter III’s Findings section, winning suppliers bear responsibility for tranche fees, satisfied through offsets to their invoices for energy supply in the first month of delivery under the contracts awarded to them. That chapter also reported that clear and appropriate methods determined the amounts of those fees. These methods, processes, and assignments are long-standing, were clearly understood by all involved at the EDCs, and were consistently and correctly executed during the audit period.

3. *Testing of Allocation Method Application*

We selected for testing a sample month for each EDC for each BGS year included in the audit period. Our testing examined relevant policies and procedures and cost allocation methods as designed and as applied. Our testing also included the EDCs’ BGS Reconciliation Charge Mechanisms, as described in Chapter V. We reviewed BPU-approved tariff provisions addressing classification and booking of BGS Administrative Costs and tranche fee credits.

Our review verified that the EDC’s consistently and accurately made allocations to each of the two BGS customer groups, with a single exception. ACE did not correctly allocate Auction Manager and Staff/BPU Consultant services costs. ACE allocated these costs before February 2014 costs between the BGS-RSCP and the BGS-CIEP groups customers on an 80/20 basis. ACE then

incorrectly began to allocate 100 percent of these costs to the BGS-RSCP group. The next table summarizes the changes that correct (80/20) allocations after February 2014 would have produced during the audit period.

As explained in Chapter III, our work also disclosed an exception at ACE concerning allocation between BGS and non-BGS customers. ACE did not include patent-related legal expenses as BGS Administrative Costs over the 2013-2016 period, accounting for them as costs recoverable through delivery rates. The total costs for the period amounted [REDACTED] [REDACTED] [REDACTED] respectively, on a yearly basis).

ACE Audit Period Allocations

	<u>Total \$</u>		
	<u>4 YR BGS</u>	<u>BGS-RSCP</u>	<u>BGS-CIEP</u>
Recalculated Allocation Charges:			
		<u>80%</u>	<u>20%</u>
Auction Manager (Incl. Chrg. Rent)	\$ 772,293	\$ 617,834	\$ 154,459
Board Consultant	122,091	97,673	24,418
Total Charges	\$ 894,384	\$ 715,507	\$ 178,877
Actual Allocated Charges			
Auction Manager (Incl. Chrg. Rent)	\$ 772,293	\$ 719,636	\$ 52,657
Board Consultant	122,091	84,208	37,883
Total Charges	\$ 894,384	\$ 803,844	\$ 90,540
Adjustments to Allocated Charges			
Auction Manager (Incl. Chrg. Rent)	\$ -	\$ (101,802)	\$ 101,802
Board Consultant	-	13,465	(13,465)
Total Adjustments	\$ -	\$ (88,337)	\$ 88,337

In comments to a draft of this report, ACE stated that it will make the necessary adjustments between RSCP and CIEP customers using actual factors realized in the 2014 through 2016 BGS periods.

We also examined a RECO allocation issue arising in the 2013 BGS period, following BPU authorization the Company to undertake a special project to solicit bidders for a “Fixed for Floating” NYMEX futures transaction. The costs were to be allocated solely to the BGS-RSCP customers. We reviewed the invoice of the consultant who performed the work, for a cost of \$36,400. Our review confirmed appropriate accounting and the allocation of all costs, as required, to BGS-RSCP customers.

C. Conclusions

1. The EDC's generally applied well-defined and appropriate allocation principles during the audit period, with two exceptions involving ACE. *(Recommendation #1)*

EDC tranche fees recovered common BGS Administrative Costs and used the load requirements of the RSCP and CIEP customer groups as their basis. The processes used for setting and recovering tranche fees generally provided for consistent, effective allocation of common Administrative Costs.

An exception to this general finding (addressed in Chapter III) involved ACE's failure for the 2013 through 2016 BGS reconciliation periods to include patent-related legal costs. The second exception involved ACE's incorrect allocation of 100 percent of the costs of post-February 2014 Auction Manager and Staff/BPU consultant services to BGS-RSCP customers; BGS-CIEP customers should have borne 20 percent of those costs.

2. We verified that ACE, the only EDC to charge for the time internal (affiliate) resources spend on or supporting BGS functions, used appropriate methods and correctly allocated the costs of such time. *(Recommendation #2)*

Our review and testing confirmed the appropriateness of the methods applied for allocating the time of internal ACE resources performing or supporting BGS functions. Direct time reporting formed the primary basis for the charges. ACE properly classified the costs to the BGS-RSCP and BGS-CIEP groups as part of its BGS Reconciliation Charge Mechanism process.

D. Recommendations

1. Provide to the BPU supporting information sufficient to demonstrate that patent-related legal costs originally included in delivery rates were charged to BGS customers per the established allocation factors. *(Conclusion #1)*

ACE did not include patent-related legal costs in its the BGS Administrative Cost Recovery process. These costs included [REDACTED] of cost in accounts recovered through delivery rates over the 2013 to 2016 periods.

2. Adjust ACE charges to the BGS-RSCP and BGS-CIEP to reflect the appropriate allocation of Auction Manager and Staff/Board Consultant Charges for the 2013 to 2016 BGS periods. *(Conclusion #2)*

Prior to February 2014, ACE allocated Auction Manager and Staff/Board consultant costs to the BGS-RSCP and BGS-CIEP customers on an 80/20 basis. ACE then began to allocate 100 percent of these costs to the BGS-RSCP customers. The 80/20 split for 2014 would reduce charges to BGS-RSCP customers by \$88,337, with costs to BGS-CIEP customers increasing by this same amount. ACE will determine the amounts based on actual factors applicable for the 2014 through 2016 BGS periods - - an approach that we find appropriate.

VII. Review of Auction Manager Costs

A. Background

Charges from the Auction Manager dominate the commonly-incurred BGS Administrative Costs, which get recovered through tranche fees paid by winning bidders. This chapter reviews their principal components.

B. Findings

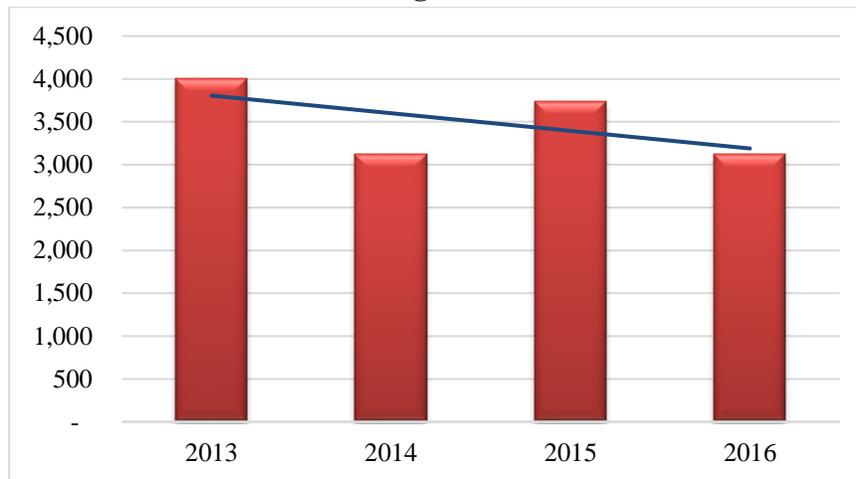
1. Hours Billed

The Auction Manager managed all aspects of the New Jersey BGS auction. The Auction Manager charged for professional services on an hourly basis, using monthly billing to the EDCs. The Auction Manager has managed a long-standing set of processes, which have been in place without major change since 2002. It takes the Auction Manager a very sizeable number of person-hours (3,000 to 4,000) to manage the BGS processes each year. We considered these hours numbers high by comparison to others.

The quantity of hours billed for the provision of the BGS auction services should be reasonable and reflect necessary work tasks. Our review determined that the principal driver of the hours was the breadth of the work scope performed by the Auction Manager and the sophistication and complexity of the processes in support of which it spent those hours. Accordingly, a simplification of processes would be expected to reduce those hours. In addition, the work of the Auction Manager has not been competitively solicited. Periodically doing so not only would test the reasonableness of hours, but exert pressure for the provider to keep them at best competitive levels. Another advantage of bidding here might arise from the patent legal issues. They seem not to accompany the DCA processes used by others. Even the New Jersey Auction Manager appeared not to experience them in other jurisdictions.

Given the notably high number of hours, untested by regular competition, we began a more detailed examination by looking at trends in Auction Manager hours billed over time. The chart below shows Auction Manager hours billed during the audit period. The trend line indicates, as one would expect, a decline over time, for a process whose elements have remained stable and that have not been forced to address significant anomalies from year to year.

Auction Manager’s Hours Billed



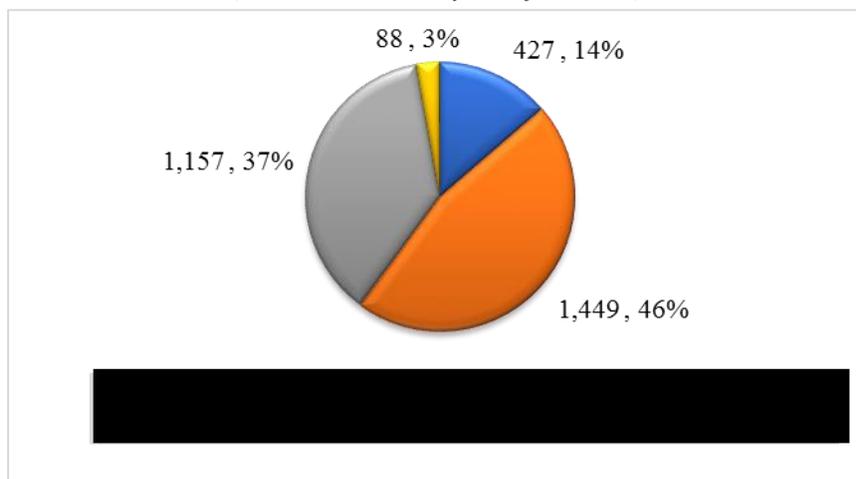
Compared to what Liberty has experienced in other jurisdictions, the Auction Manager fees were high, driven by the quantity of hours billed. We found them reasonably related to the work performed. The Auction Manager provided substantially more services - - and at a notable level of quality - - for New Jersey than we found in other jurisdictions. Charges for their services proved within the services provided in terms of quantity and quality.

2. Assignment of Consultants

We also examined the Auction Manager’s assignment of consultants to its roster of tasks. While determining the levels of personnel required significant judgment, we found overall a reasonable distribution of work; *i.e.*, substantial use of lower-rate personnel. The chart below displays the 2016 hours distribution, showing hours, percent of hours, and billing rates for each consultant category. The chart shows 83 percent of hours billed by the lower-rate Economic Research Staff and Economic Analyst categories.

Auction Manager’s 2016 Fee Sources

(Chart is Partially Confidential)

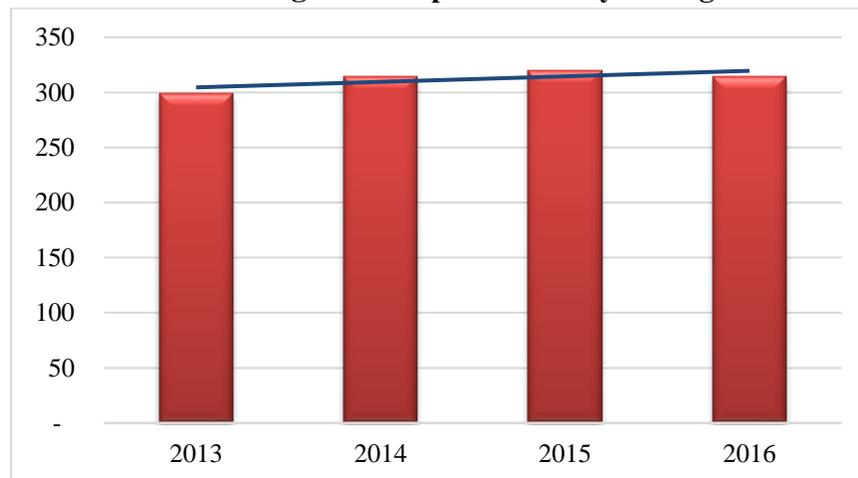


3. Hourly Billing Rates

We also examined the Auction Manager’s hourly billing rates. Comparative data is limited, but we found all but the officer rate in line with our expectations. While comparatively very high, the total number of officer hours billed was too low for any premium in the hourly rate to have a material cost impact overall. The vast majority of Auction Manager hours came from non-officers, whose rates we found in range. We observed no material issues with respect to billing rates.

The chart below displays the Auction Manager’s overall billing rate, aggregated to represent all functions from all levels of consultants, divided into the hours billed. This blended rate has grown by 5.0 percent between 2013 and 2016, which reflects a compound annual growth rate of just 1.6 percent. This low rate provides an indicator that the lack of competitive solicitation for the Auction Manager’s role has not likely had a significant impact on hourly rate growth, although we continue to consider some form of periodic competition appropriate.

Auction Manager’s Composite Hourly Billing Rate



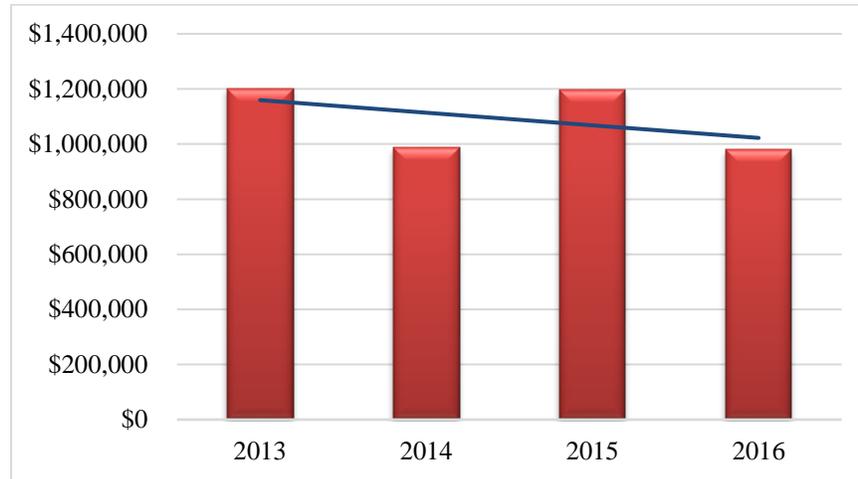
4. Billing Trends

The BGS process is a mature one, having been in place since 2002. The EDCs provided for its execution in a consistent manner over the audit period. Given stability across a period extending even well before the years our audit addressed, one would expect the Auction Manager’s costs to remain steady, with moderate reductions to reflect increased familiarity of those who carry out the required work activities. Absence of frequent or major needs for changes to systems, documents, processes, and activities underscores the validity of this expectation.

The Auction Manager’s charges did trend downward over the audit period. The following chart shows charges by year, with a trend line superimposed. Between 2013 and 2016, the Auction Manager’s fees dropped by 18.5 percent, producing an annual compound reduction rate of 6.6 percent. This drop, which we consider notable, corresponded directly with and was driven by a reduction in hours billed. An exception occurred in 2015 hours spent in the category of “FAQs, Bidder Info Data.” Bidder inquiries and needs largely drive this category, making a single year of “off-normal” activity level unsurprising. This time period witnessed the first introduction by PJM

of auctions for its capacity performance product - - making an increase in bidder inquiries and information needs understandable.

Auction Manager Fees



We have only limited data on costs borne in other jurisdictions for services corresponding to those of the Auction Manager. We do know that New Jersey costs exceed what we have seen where we have direct knowledge, but substantial differences in work scope also exist. The scope of the services performed by the New Jersey Auction Manager exceed those in those other jurisdictions. We found the activities driving that larger scope an overall strength of the BGS process. A change to a simpler auction method would materially reduce costs. However, even assuming that change, the New Jersey Auction Manager role would remain more extensive than what we have seen elsewhere. Apart from the question of analytically comparing the costs with the value of the chosen New Jersey auction method (see Chapter II, Recommendation #2), we found no reason to question the scope of the New Jersey Auction Manager’s costs. That scope clearly serves as the driver of higher New Jersey Auction Manager costs.

C. Conclusions

1. The Auction Manager spent a large quantity of person-hours on the New Jersey BGS Process, making its costs more expensive than those typical of other jurisdictions.

The magnitude of Auction Manager work activities proved a key driver of the high comparative costs of New Jersey’s BGS Administrative Costs, with the DCA process the primary contributor.

2. We found the decline in audit period costs for Auction Manager services positive, but the EDCs have not opened the services provided to competition. (Recommendation #1)

Trends in Auction Manager costs evidenced a flow of the benefits of process stability and Auction Manager resource maturity and stability back to the EDCs. We found no basis for concluding that the Auction Manager’s charges reflected substantial inefficiency. Nevertheless, like the BGS auctions themselves and the process for selecting the BPU Consultant demonstrate, imposing some level of competition among providers helps to produce best costs. We do not question the EDCs’ efforts to seek lower Auction Manager costs without compromising quality, but those efforts have

not included exposing the Auction Manager to competition despite what has become a very long tenure.

3. The Auction Manager’s billing rates were reasonable overall.

The bulk of the hours for the Auction Manager’s professional services are worked by non-officer resources, who have reasonable billing rates when compared to other vendors.

4. System costs were reasonable.

Given the complexity of the DCA process and comparisons with systems used in other jurisdictions, we found typical annual system fees in the range of \$200,000 reasonable.

5. The costs of the Consultant to Staff and the BPU, resulting as they did from regular competitive bidding, were demonstrably reasonable.

We are familiar with the scope of services requested and provided and we are familiar with the competitive process that secured them. We found the service scope reasonably related to the needs for Staff and BPU monitoring and reporting. The bidding process was supportive of securing competitive costs.

D. Recommendations

1. Periodically subject Auction Manager services procurement to meaningful competition.
(Conclusion #2)

The methods used to introduce more competition need not rise to a formal RFP process, recognizing the nature of the specialized, professional services involved. Nor need competition occur annually, with a three-year period appropriate at the outset. The provision of clear cost concessions against a comparable level of services, secured through negotiation (in return for an extension to the one-year contract term offered to the contractor), might also justify a longer competitive cycle.

VIII. Timing of Charges for Services

A. Background

We examined the methods and processes the Auction Manager and the Board Consultant used to bill for services. We tracked the timing and amounts of charges for services and payments made in relation to them, relative to key BGS-related time milestones. Our goal in undertaking these activities was to determine whether substantial billing lags occurred during the audit period.

We applied the following evaluation criteria in assessing the timing of services rendered versus charges:

- Clear procedures should routinely apply to ensure billing for services as promptly as possible.
- Charging of costs to customers should be as contemporaneous with the BGS services associated with the incurring of such costs as practicable.
- Inconsistencies among the New Jersey EDCs in how and when such costs get charged to customers should have a sound justification.
- The magnitude of any mismatches in cost incurrence and customer billing timing should be clear.
- Consideration should be given to the use of estimates for outside costs to the extent it would promote more consistent matching of charges for outside BGS services with the associated BGS services.

Chapter III describes the review we undertook of EDC accounting policies and procedures related to the recording of outside services invoices. That chapter also explained the results of our transaction testing and verification to validate transactions, their billing, and their accounting at each EDC. We found no substantive concerns about the costs of outside services, but did note the existence of delays in billing for Auction Manager services. In further examining this delay, we reviewed the Auction Manager invoice categorizations, monthly details, and the durations between month-ends and the dates of invoices for those months. Our work produced a calculation of billing lag days (time of last day of service in month to date of invoice rendering) for the entire audit period. Only one invoice per year comes to the EDCs for the work of the Board Consultant.

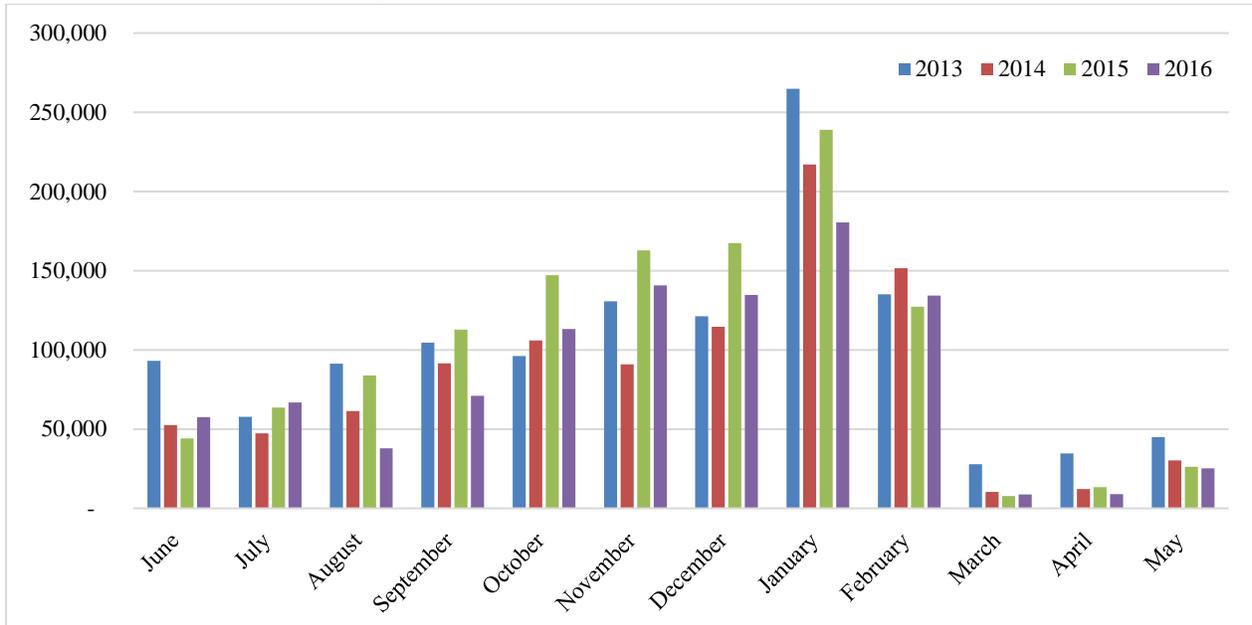
Recognizing the designation of invoice timing as an area of focus in the RFP to which our audit and this report responds, this chapter offers additional context for and discussion of the issue.

B. Findings

1. Auction Manager Invoicing

We focused on the timing of Auction Manager professional fees, which make up the single largest source of BGS auction expense. We looked for patterns, cyclicity, or seasonality of expenditures as they occurred (not as the Auction Manager billed them). The following chart displays these expenditures graphically across the audit period.

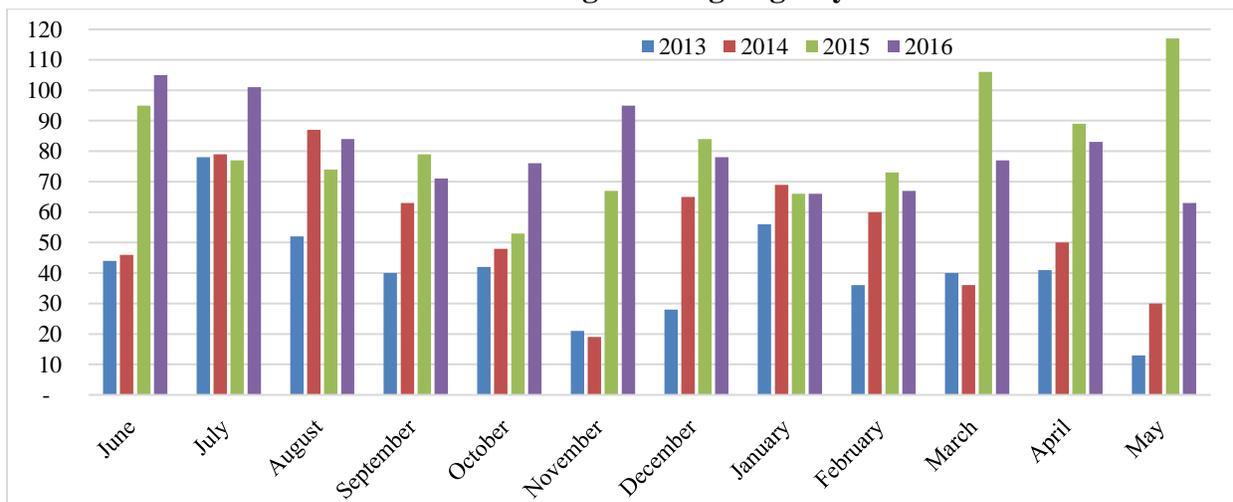
Auction Manager Service Dollars by Month of Work Performance



The table shows that monthly work followed a discernible pattern through the audit period. Costs increased between June and January, with the latter the peak month. Costs then dropped somewhat in February and then precipitously from March through May. The repetition of the pattern in each audit period year indicates a high level of work flow consistency.

Our review of invoice timing showed a significant lag in billing for services, relative to the dates when the Auction Manager actually performed the services eventually billed. Chapter III discussed our benchmark of 45 days between month end and billing of costs for that month. The following chart shows increasing lag as the audit period progressed.

Auction Manager Billing Lag Days



As Chapter III noted, the length of billing lags experienced in the audit period pushed some invoices into the next BGS year's resolution mechanism. In one sense, consistency from year to year in spending patterns moderates concern about service and billing mismatch. Nevertheless, validating the reconciliation of estimated to actual costs becomes more difficult, given continued and prolonged accounting timing differences.

2. Board Consultant Invoicing

The BPU issues one annual bill for each BGS yearly period for the services of its consultant. We found no timing delays in the provision of these invoices.

C. Conclusions

- 1. The workflows and the charges (as incurred) by the Auction Manager and the Board Consultant remained consistent across the audit period, with Auction Manager invoicing significantly lagging work performance. (Recommendation #1)**

The Auction Manager's monthly invoices well exceed our benchmark of 45 days. The lag increased substantially as the audit period progressed. Lags of this length make corroboration of services rendered more difficult and complicate measures to reconcile estimated to actual costs.

D. Recommendations

- 1. Move Auction Manager billing into conformity with a 45-day benchmark. (Conclusion #1)**

This change would not impose burdensome changes to the Auction Manager, and would enhance accounting and charging for BGS Administrative Costs.