011605-EI

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1.0 EXECUTIVE SUMMARY

1.0 Executive Summary

1.1 Objectives

On November 26, 2001, as a spin off of Docket 010001-EI, Docket 011605-EI was created to fully address the issue of risk management and the hedging theory. Consequently, the Florida Public Service Commission's (FPSC) Division of Economic Regulation requested that the Bureau of Regulatory Review (BRR) examine and evaluate risk management policies and procedures associated with the procurement of fossil fuel and wholesale energy for the four largest investor-owned electric utilities: Florida Power and Light (FPL), Florida Power Corporation (FPC), Gulf Power (Gulf), and Tampa Electric Company (TEC).

BRR's primary objectives were as follows:

- To protect the interests of ratepayers and evaluate the processes by which each company obtains fuel and manages its fuel procurement, to determine how effectively these practices are used, and to ensure that adequate and effective policies and procedures are in place
- To provide a basis for enhancing the Commission staff's understanding and knowledge of each company's risk management policies and procedures associated with the procurement of fuel and wholesale energy
- To provide an overview and comparison of hedging current and best practices within the electric utility industry
- Identify those areas where the greatest opportunities exist to improve both managerial and operational practices and where cost-effective benefits may be realized

1.2 Scope

Using the content from these objectives, this study looked at the four largest IOU's overall practices, controls, and policies when purchasing fossil fuel and wholesale energy. The review looked at the years from 1998 through 2001. Additionally, staff considered what other state commissions have recommended to curtail fuel prices and what the electric utility industry has considered when hedging techniques and financial options are sanctioned policies. This review is not intended to give an opinion on the use of financial hedging by a regulated utility. Instead, its focus is on controls that should be used if such a strategy were to be pursued.

1.3 Methodology

This review was based upon information gathered through document requests, interrogatories, interviews with fossil fuel department personnel, examination of company policies and procedures, and analysis of all company trading. These trading transactions include all hedging, contracts, contract swaps, options, and the spot market. Particular attention was given to current practices and to comparing them to industry recommendations.

In examining these practices and philosophies, staff focused on the following information sources:

- Transcripts of the FPSC undocketed Hedging and Portfolio Management Workshop held on May 14, 2001
- FPSC's Digest of Commission Regulatory Practices, Section XIII, Fuel and Purchased Power, Revised 4/98
- *Regulatory Perspective on Hedging and Speculating in the Electricity Futures Market*, FPSC Bureau of Research, July 1997
- *Review of Purchasing and Selling Practices for Natural Gas*, FPSC Bureau of Auditing, Audit Control No. 00-353-4-1, April 2001
- *A Practical Guide to Hedging: Operational and Accounting Controls, Financial Reporting, and Federal Income Tax*, NYMEX/Pricewaterhousecoopers, Chapter 4, pp 40-47, June 2001
- *Use of Hedging by Local Gas Distribution Companies: Basic Considerations and Regulatory Issues*, National Regulatory Research Institute, May 2001
- *Investment Management Theory and Application*, Sarkis J. Khoury, 1983
- Company responses to FPSC interrogatories and document requests
- Other documented Commission activities related to fuel cost recovery

1.4 Overall Opinion

There is considerable risk for utilities opting not to engage in financial hedging and there is considerable risk inherent in financial hedging. More risk is encountered if such an activity is not

adequately controlled[1]. Given that, the summary below describes each company's approach to hedging techniques in fuel procurement and related controls.

1.4.1 Florida Power & Light Company

FPL is a large electric utility that purchases and consumes mass amounts of oil and natural gas. The Energy Marketing and Trading Division's fossil fuel purchasing department has a staff that appears to have the skills and abilities necessary to buy, contract, and hedge fuel purchases. The company currently engages primarily in physical fuel purchases, physical hedging, and minor derivative hedging. FPL has implemented all the general internal controls described in Section 2.6 that are necessary safeguards for a hedging program. The scope of hedging operations is described in Chapter 3.

Potential areas of improvement were identified within FPL's fuel procurement process. The first area of improvement relates to the separation of operations between the regulated Energy Marketing & Trading division and its unregulated affiliate, Power Marketing. When the audit commenced, they did not have separate policy and procedure manuals, which are considered important to ensure a constant arms-length relationship is maintained. As discussed further in Section 3.2.1, Energy Marketing & Trading and Power Marketing have recently adopted separate policy and procedure manuals.

Secondly, the Exposure Management Committee, which oversees Energy Marketing & Trading operations, used to meet only every quarter. Fuel costs are a large portion of the company's expense, thus indicating that top management should give fuel procurement a good deal of attention. Staff notes that since the beginning of the audit, the Exposure Management Committee has begun to meet monthly. Staff believes that this is appropriate and also suggests that Energy Marketing & Trading provide the Exposure Management Committee with biweekly trend reports. More detail on this committee's function is available in Section 3.2.1.

As demonstrated by FPL, Physical hedging appears to be the most useful position in saving the ratepayer money. FPL has time-tested the process and has the management, and controls that are mandatory for a hedging program. The company asserts that the fuel savings each year, such as the $43.9 million in 2000, is an example of hedging and good procurement management.

1.4.2 Florida Power Corporation

Progress Energy has established the basic requirements that FPC needs for a working risk management program. However, there is one area of improvement that should be addressed before CP&L and Progress Fuels (the companies procuring for FPC) begin futures trading.

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[1]According to Sarkis J. Khoury, author of *Investment Management Theory and Application*, "No matter how well conceived a hedging strategy is, it is not always superior to a no-hedge position. . . . hedging depend[s] on expectations. . . the ability to predict the behavior of the basis should dictate the hedge ratio (*where the hedge ratio is*). . . determined by the yield volatility of the asset to be hedged relative to that of the futures contract."

Fuel related and wholesale energy policies, procedures, and guidelines need to be updated. If adopted by the FPC, these changes should improve its overall risk management program. More detail on these improvement areas is discussed in Section 4.2.4.

1.4.3 Tampa Electric Company

According to TEC's management plan, TEC has not engaged in fuel hedging practices due to its historical fuel mix being primarily coal, a relatively stable priced fuel. TEC recognizes that as the amount of natural gas increases in its overall fuel mix, the price volatility of the resulting mix may increase. Therefore, as TEC gains experience operating natural gas-fired generating units and developing natural gas marketing expertise, the company will evaluate potential hedging strategies.

Because TEC does not have controls in place to maintain a trading and risk management program, the company will need to establish a portfolio concept capable of supporting procurement, trading, and strategy for all fossil fuels and wholesale energy. TEC has some of the basics of a risk management program, but lacks the following:

- Updated procedures for all fuel departments and wholesale energy procedures
- Designated front, middle, and back offices
- Certain industry-experienced personnel

More data and analysis on TEC's fuel and wholesale energy operations are in Sections 5.2 and 5.3.

1.4.4 Gulf Power Company

Gulf also lacks some of the controls necessary to operate a risk management program. Gulf has multiple companies and departments contributing to the trading portfolio. Southern Company should consider central consolidation under the Risk Management Department. Secondly, the risk management policy needs more detail regarding office designation, credit monetary limits, and other department procedures that support the entire procurement operation. Currently, Southern has not engaged in any hedging transactions for Gulf, but is financially trading on behalf of Savannah Electric, Alabama Power, and Mississippi Power.

Policies and procedures that support the company risk management concept need much more detail and revision. For example, the contract procedures for fuel procurement are only six pages long and lack any policy on procuring gas and oil. They address coal only. The company is currently revising them. More detail is provided in Sections 6.2 and 6.3.

2.0 BACKGROUND AND PERSPECTIVE

2.0 Background and Perspective

2.1 Gas Industry Development

The nationwide natural gas prices during 2000/2001 resulted in a burden on many utility customers and prompted regulators to look for ways to protect consumers from fuel price spikes. One option is to do nothing, assume these spikes are rare, isolated occurrences. However, public response demanded price protection. There appear to be two alternatives state utility commissions have used to mitigate utility fuel cost recovery: mandating some form of hedging or locking in prices through price moratoriums. Both alternatives can shift part of the price risk from rate payers to the companies.

Both of these options would require a company to create a risk management plan and a department to execute the plan. A company that has heavily depended upon spot purchases and contracts as its purchasing norm may have to redefine its mission and acquire personnel who have commodity trading, forecasting, and financial skills. Further a utility company that fails to mitigate fuel prices through some form of hedging or alternate purchasing plan runs the risk that a regulator could deny full cost recovery.

According to *Webster's Third New International Dictionary,* "a commodity is something of value especially when regarded as an article of commerce." Fossil fuels (natural gas, coal, crude oil) and wholesale energy are classified as commodities. Commodities are nonfinancial by nature but are sold through futures contracts and most are commonly traded on recognized exchanges. Futures trading has long existed for commodities such as orange juice, metals, livestock, and currency. However, according to TEC, futures trading for coal is very infrequent and is in jeopardy of being suspended by the exchange. The most prominent futures exchange for gas is the New York Mercantile Exchange (NYMEX), although there are currently sixteen exchanges across the United States that trade commodities.

Natural gas price volatility began with the Natural Gas Policy Act of 1978 and the passage of the Wellhead Price Decontrol Act of 1989 (1989 Act). The 1989 Act transformed natural gas from a regulated supply into a speculative commodity that began trading in 1992. Today, all utility commissions must cope with a market that can be changed by rumors and by speculators who are betting on rising and falling prices.

Exhibit 1 depicts the price trend for utility natural gas in the United States from 1974 through 2000. More important are the future prices of gas. The Energy Information Administration predicts that natural gas prices will rise at a faster pace than oil. The Energy Information Administration expects wellhead natural gas to increase 2.8 percent per year reaching $3.05 per MMBTU by 2020. Rising prices are reflected by projected rising demand. However, supply is expected to meet demand, which will assure price stability.

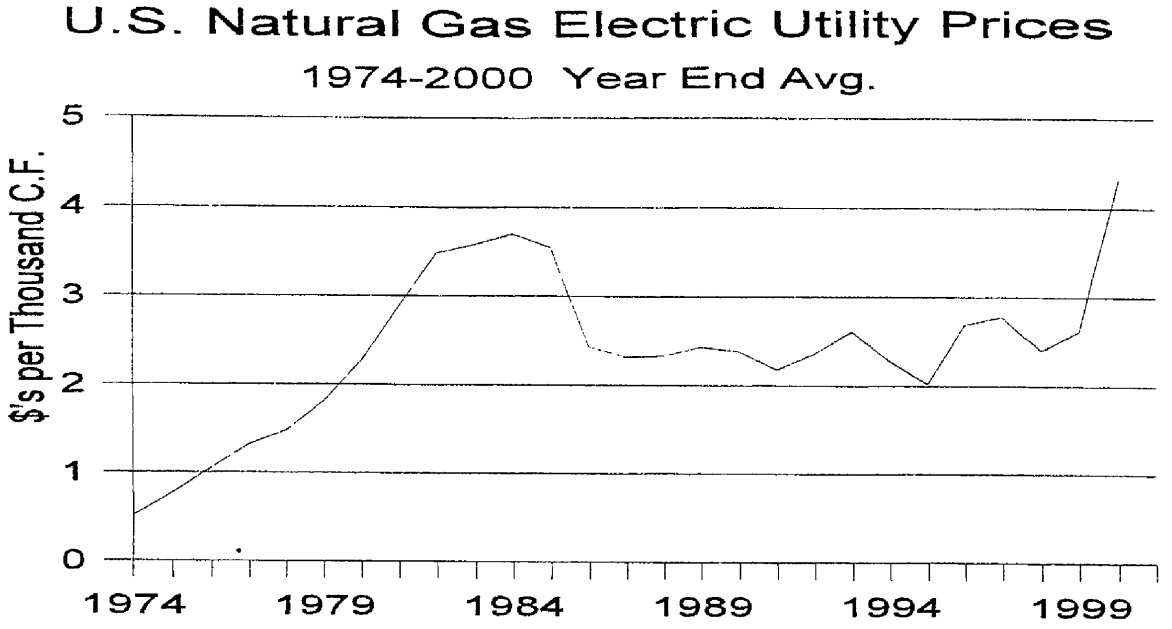


EXHIBIT 1 *Source: Energy Information Administration, Table 4*

Supply will be a cause for concern for utilities. The trend of electric utilities either converting plants to natural gas or building gas-fired plants greatly impacted demand. Increased demand creates concerns about gas production. The Energy Information Administration predicts that short-term (through 2004) and mid-term (2010) supply appears adequate, but long-term (2020) domestic production is not expected to keep up with demand.

The Energy Information Administration asserts that natural gas demands have risen 57 percent due to increased demand in electricity generation since 1999. By 2020, demand by utilities is expected to rise to 11.3 trillion cubic feet when based upon usage for the year 1999. That would be a rise of 336 percent. The Energy Information Administration cautions consumers that the ever-increasing demand raises the following questions:

- Is there enough to gas to meet demand?
- Can it be produced fast enough?
- Can we build pipelines fast enough?
- How high will prices go?

Questions such as these can and have affected market prices. A shortage assures higher prices, and increased availability can reduce prices. This is further solidified by looking at natural gas futures on the NYMEX Henry Hub Index for one-thousand cubic feet. In December 2001, the price was set at $2.55. In December 2002 it is $3.44, and for December 2003, it is $3.80.

A key event affecting the wholesale energy markets took place in 1996 when the Federal Energy Regulatory Commission (FERC) laid the foundation for competitive wholesale power

markets by opening access to transmission lines. The wholesale energy bulk trading market started with the establishment of the Independent System Operators. In 1999, FERC mandated grid management through Regional Transmission Organizations. This rule affected all public held electric companies.

At present, bulk power is traded at NYMEX and other markets in various hubs throughout the United States. The hubs are regional since interconnections are the limitations. For example, no transmission connection exists between Florida and California. Clusters among neighboring utilities are the norms. Peninsular Florida belongs to the Florida Regional Reliability Council region. However, bulk power in peninsular Florida is not currently, nor has ever been, traded on the NYMEX or any other market.

Wholesale power is traded and sold in megawatt hours. Like any other commodity, both futures and options are available. According to NYMEX data accumulated in Energy Information Administration, a large amount of electricity is traded in wholesale purchases and resale contracts. IOUs are responsible for over half of all those sales. In the last quarter of 2001, the NYMEX average megawatt hour sold for $35. However, in that same year, which was subject to heat waves and other factors such as the time of day and weather, a megawatt hour has sold for more than $1000.

2.2 Fuel Cost Recovery

From 1974 and forward, oil volatility has keenly affected utilities and the ratepayers they serve. It led to the mechanism used to recuperate the cost of fuel that cannot be anticipated in base rates costs: fuel and purchase recovery clause. Florida's history on this clause goes back to the 1950's, but it was effectively established in 1974 by Florida Public Service Commission Order No. 6357. It has been modified by eight Commission orders since that date.

The fuel cost recovery is designed and allowed by the FPSC as a means for the IOUs to recover for cost-effective fuel, purchased power, and other related expenditures on a dollar-for-dollar basis. Upon Commission approval, it passes on costs to customers when there is a fuel price increase. It also passes on any savings realized to the customers when there are price reductions. Recovery of costs applies to coal, nuclear, oil, gas, and purchased power expenses.

2.3 Current Trends in Utility Purchasing of Fossil Fuel

The largest criticisms of fossil fuel cost-recovery involve purchasing practices and ratepayer price protection. One way for an electric utility to purchase fuel is to buy it on the spot market. The spot market is the current daily price. Simply put, the company buys the fuel at the current price, applies to the Commission for a fuel-price adjustment, and passes it onto the rate-paying customers. This practice provides very little incentive for the utility to look for ways to save the consumer from added fuel adjustment charges.

In lieu of spot market purchases, there are transactions that may mitigate the risk associated with spot oil and gas markets. The first is financial or derivative hedging. Derivatives include futures contracts and options such as puts, calls, and contract swaps. Another way to hedge is physical hedging through contract purchase with actual physical possession. These can also include contracts, puts, calls, and contract swaps.

2.4 Industry and Commission Actions Regarding Hedging

The use of fossil fuel hedging options and derivatives by electric utilities is a relatively new practice. Most state commission activity has centered on local distribution gas companies with two time-tested exceptions.

In November 1999, the Minnesota Public Utilities Commission granted an electric utility a one-year pilot program to purchase future contracts, puts, calls, and linked transactions in the purchase of wholesale energy. Also in 1999, the Minnesota Commission granted permission for the company to hedge natural gas. In 2001, the Georgia Public Service Commission ordered Savannah Electric and Power to engage in hedging transactions.

2.4.1 Northern States Power Company-Minnesota

The original Minnesota Commission order included three safeguards and limitations: purchases are limited to the electricity commodity, no speculating, and all activity is subject to prudence reviews. The commission imposed no specific internal risk management controls on the company. All effects would flow back through the fuel clause. In the first year, the net impact was a $6.9 million loss and an extra burden to ratepayers. The commission extended the program another 15 months. Total gas and wholesale power losses for the second year were $5.1 million. The commission extended the program for a third year, but the results are not available at this time. This is an example of how substantial losses may occur over the short term when forecasted pricing goes the other way, particularly in derivative trading.

2.4.2 Savannah Electric and Power-Georgia

The other company that was recently ordered to hedge was the Savannah Electric and Power (which is part of the Southern Company). The Georgia Public Service Commission was concerned because Savannah Electric had experienced high gas price volatility and believed the rate payers were entitled to price protection. The commission held hearings and ordered on May 24, 2001, that Savannah Electric must hedge part of the oil and gas purchases with financial instruments. The order imposed the following time and percentage limitations on the company:

- Hedging program begins June 1, 2001
- Maximum time is 42 months into the future
- Annual above market cap equal to 10 percent of gas/oil budget
- Prospective above market cap equal to 5 percent of the 42 month forward oil/gas budget
- All losses and gains will flow back to the fuel clause
- The company must procure all physical gas/oil at market

The commission imposed no specific risk management rules. However, commission staff will monitor the program and evaluate its success. Additionally, Savannah will retain 25 percent of the gains, and the company must keep records of all transactions. In the ensuing seven months, the company recorded hedging losses as actual fuel prices varied from what was predicted.

2.4.3 NARUC/NRRI Survey

The National Association of Regulatory Utility Commissions (NARUC) conducted a state commission survey on the hedging mechanism. The twenty-eight state responses were compiled by the National Regulatory Research Institute (NRRI). One of the questions asked was: Has your state utility commission addressed hedging as a risk management technique? Twenty-six answered affirmatively. The survey further verifies that at least six states have ordered or permitted hedging as a tool to mitigate prices on natural gas. The survey further shows that 14 states allow some tool for hedging cost recovery subject to provisos such as prudence review, reasonableness, or prior commission approval.

2.4.4 Regulatory Actions on Local Gas Distribution Companies

The West Virginia Public Service Commission also issued a specific order on hedging. In early 1995, a local distribution gas company filed a rate case along with a separate cost-recovery proceeding. Staff at the West Virginia Commission looked at futures gas prices on the NYMEX and proposed a settlement. The proposal was a three-year lock-in on rates.

After considerable discussion, the West Virginia Commission and the company agreed to a total rate moratorium for years 1996 through 1998. The agreement was a locked-in price of $2.00 per thousand cubic feet. Action by the West Virginia Commission essentially hedged for the customer by specifying a three-year tariff.

The gas company was free to rely on spot markets, but it recognized that there was too much assumed risk to its stockholders. Therefore, the company did not hesitate in making a management decision to lock-in a rate for 36 months. Since the burden of gas prices had switched from ratepayers to stockholders, hedging became a company strategy.

Further, the company agreed to the same conditions for the years 1999 through 2001. Commission staff calculated that action by the West Virginia Commission saved customers $30 million for the first three years and forecasted savings of $81 million for 1999 through 2001.

Arkansas also has taken recent action on natural gas price control during 2001. The Arkansas Commission realized that natural gas prices were being determined by traders and financial instruments. After hearings and workshops, it ordered all gas companies under its jurisdiction to adopt the principles for gas procurement:

- Develop a diversified gas supply portfolio which should include hedging, contracts, and financial instruments
- Submit portfolio for Commission review

- Costs associated can be recovered through the Cost Recovery Clause
- Maintain records
- Educate customers and levelize billing

The Arkansas Commission will closely monitor each company plan for proper price strategy and execution of the plan.

Lastly, the state utility commissions in Indiana, Nevada, and New Mexico either have publicly admonished or penalized local gas companies for failure to protect their customers from unreasonable gas prices. These commissions informed the companies that spot-market buying is insufficient, and that it is their duty to mitigate large price increases. Failure to do so will result in a denial for partial cost recovery.

2.5 National Regulatory Research Institute (NRRI) Report

In a May 2001 report by NRRI, entitled *Use of Hedging by Local Gas Distribution Companies: Basic Considerations and Regulatory Issues*, hedging natural gas was given close scrutiny. The NRRI offers the following caveats when hedging price control is endorsed by a commission:

- Risk management has costs; establish a need for the program
- Keep the hedging program simple
- Specify and articulate all objectives
- Identify the hedging costs
- Make sure the company has the qualified personnel to sufficiently run a program
- Utilities may want to avoid shifting risk, "play it safe," and avoid financial hedging altogether
- Rapid falls in price may rule out hedging

The NRRI identified the winter of 2000-2001 market shortfalls as illustrative of how volatile natural gas prices can be. They caution commissions that hedging in its purest form is only an insurance policy and, over time, should not be expected to reduce the average price. Hedging only stabilizes prices if they continue to rise.

2.6 Internal Controls for Physical and Financial Hedging

A company that plans to hedge commodities must have internal controls in place before the program is instituted. A guide for operation, internal controls, and accounting entitled *A Practical Guide to Hedging* is referenced by NYMEX on its internet website. Below is a summation of the general elements of the guide as well as other pertinent risk management controls:

- Inform the board of directors and seek board approval for a hedge program

- Establish a risk management executive committee composed of company top executives; establish dotted line reporting to the front office.

- Create an organization of personnel and facilities capable of commodity trading, portfolio management, procurement, financial planning, and an understanding of financial and inherent risk; within the organization it must have:
  - Continuing education for all front office personnel
  - Established clear communications
  - Organize the supporting departments which may include legal, data information, and contract administration

- Create and segregate duties in the front, middle, and back offices
  - Front office would be trading and procurement
  - Middle office would be risk management
  - Back office would be accounting and finance

- Draft a risk management plan
  - Goals and objectives
  - List strengths, weaknesses, opportunities, and threats

- Write policies and procedures that comply with all regulating authority, other laws and practices, and reflect the risk plan objectives; establish the following as a minimum:
  - Purpose of hedging and trading
  - Responsibilities of each supporting department and establish independence between each department
  - Stop loss and position limits
  - Types of options tools to be used
  - Value at Risk (VaR) and other analytical tools
  - Credit risk management with exposure standards and limits
  - Accounting
  - Authorization; state who has authority to do what
  - Employee duties and limitations
  - Timely reports to monitor positions, trades, and markets

- Institute annual internal auditing as part of the check process

3.0 FPL's FUEL PURCHASING PRACTICES

3.0 FPL's Fuel Purchasing Practices

3.1 FPL Company Profile

As Florida's largest electric utility, FPL serves about half the state's population. The operating utility is by far the largest subsidiary of the parent corporation, FPL Group. As shown in **Exhibit 2**, the organization has three major companies with FPL being the sole regulated entity. One branch of FPL is a division called Energy Marketing and Trading. It is the division that acquires all fuel for FPL. In 2001, this division had 63 employees. Its internal operations will be discussed and analyzed throughout this chapter. The sister division to Energy Marketing and Trading is the unregulated company, Energy Power Marketing. Energy Power Marketing exists to facilitate all out-of-state buying and selling transactions.

For year end 2001, operating revenues for FPL totaled slightly more than $7.4 billion and it employed a total workforce of 9,757 full-time employees. FPL's service territory covers an area of 27,650 square miles and customer accounts totaled an average of 3.935 million. At the end of 2001, FPL's generating capacity stood at 16,619 megawatts and was generated by 57 percent fossil-fuel burning, of which 7 percent was coal. Of the remainder, 17 percent was purchased and interchanged and 26 percent was nuclear-powered. FPL is the largest IOU oil buyer in the United States.

FPL's 34 base-load generating units include 28 steam turbines and six combined-cycle units. To operate those generators in 2001, total fuel consumption was 41,376,251 of barrels oil and 222, 327,090 MMBTUs of gas. The cost of the oil was $1.08 billion, and natural gas costs were $1.02 billion. Considering the price paid for gas and the amount used in 2001, FPL paid an average of $4.58 per MMBTU. In total, the fossil fuel (excluding coal) bill to fire FPL's generators was $2.10 billion. It is approximately $.35 cents per kilowatt hour cheaper to burn natural gas when priced against heavy oil.

For the current status of fuel cost-recovery, FPL has Commission approval for a $76,378,071 mid-course correction underrecovery for the period of January through December 2000. FPL asserted the correction was due to cold weather, higher demand on natural gas, and the sharp rise in natural gas prices. In addition, FPL is including an underrecovery of $259,002,688 for January through December 2002. That amount represents the remaining portion of 2000's estimated and actual true-up underrecovery of $518,005,376 that is being recovered over 24 months.

Order No. PSC-01-0963-PCO-EI approved FPL's mid-course correction. In that order, the Commission Chairman dissented stating that "IOU's have an obligation to take reasonable measures to ameliorate the negative effects that can be caused by highly volatile fuel markets." The Chairman also expressed the idea that FPL had the remainder of the year to explore other options to mitigate fuel costs. Hedging is one alternative to mitigate price volatility.

FPL GROUP
2001 ORGANIZATIONAL STRUCTURE

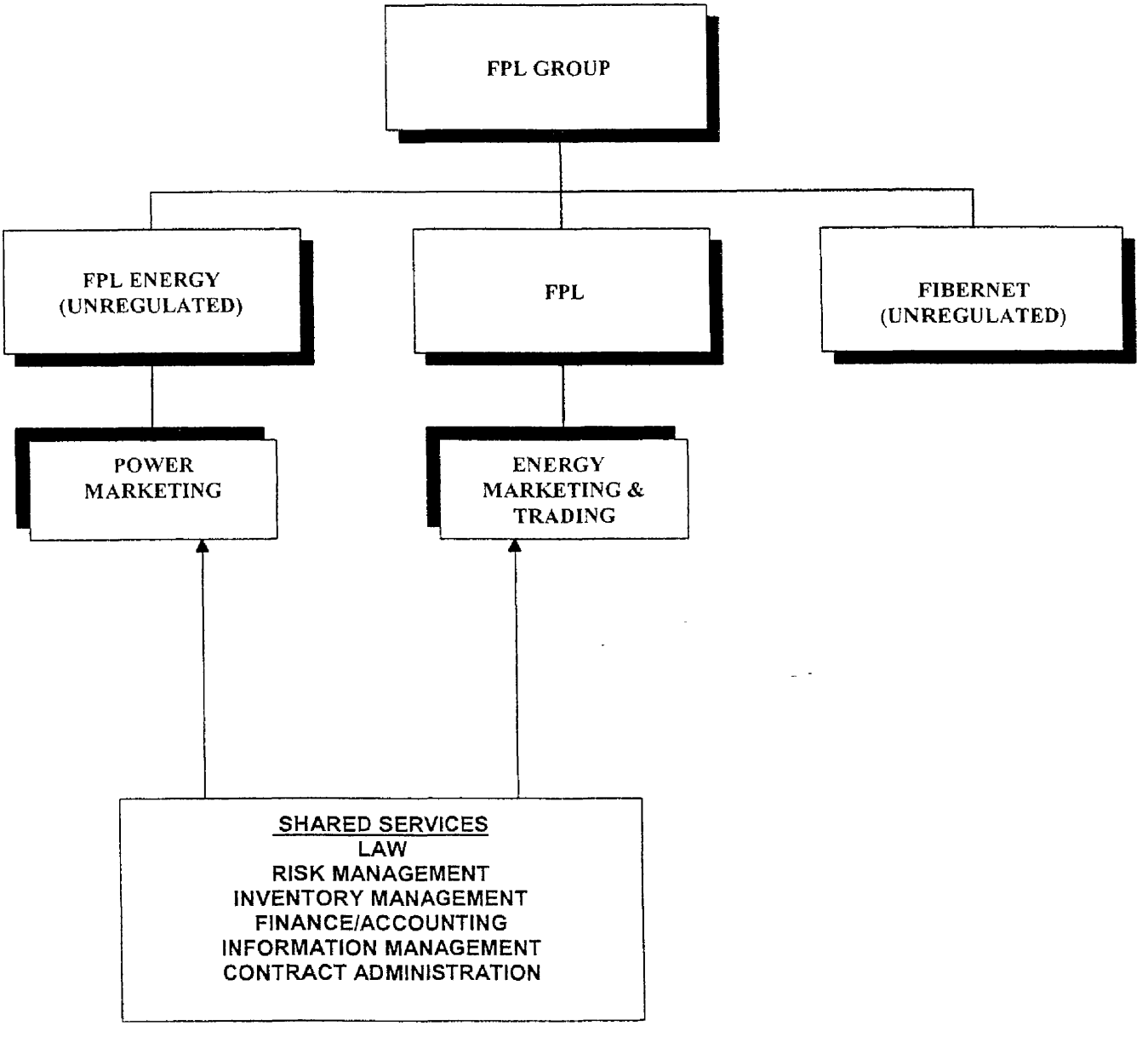


EXHIBIT 2

Source: DR-1

3.1.1 Fuel and Wholesale Power Purchasing Organization

As reflected in **Exhibit 3**, Energy Marketing and Trading is a separate division of FPL and Energy Marketing and Trading's sole mission is the acquisition of all fossil fuel and the operation of wholesale power trading for FPL. Energy Marketing and Trading is considered to be FPL's trading front office. Energy Marketing & Trading procures all fossil fuel required to run FPL's generation units as needed to meet customer load. If marketing conditions warrant, Energy Marketing & Trading may engage in selling any fuel in excess of these requirements to FPL Energy Services (an unregulated affiliate) or to third parties. As Exhibit 3 reflects, the Energy Marketing and Trading division is divided into the following six functions:

- Wholesale power trading
- Gas trading
- Oil trading
- Power Marketing
- Fuel planning and price forecasting
- Financial trading

Working in conjunction with, but independent of Energy Marketing and Trading, is the Risk Management Group (mid office), Finance/Accounting Group (back office), and the Exposure Management Committee. These three organizations will be discussed further in Section 3.2.1. **Exhibits 4 and 5** show the organization for both the Risk Management and the Finance and Accounting groups. Additionally, Energy Marketing and Trading shares employees with the legal, information management, inventory management, and contract administration departments.

ENERGY MARKETING AND TRADING DIVISION
2001

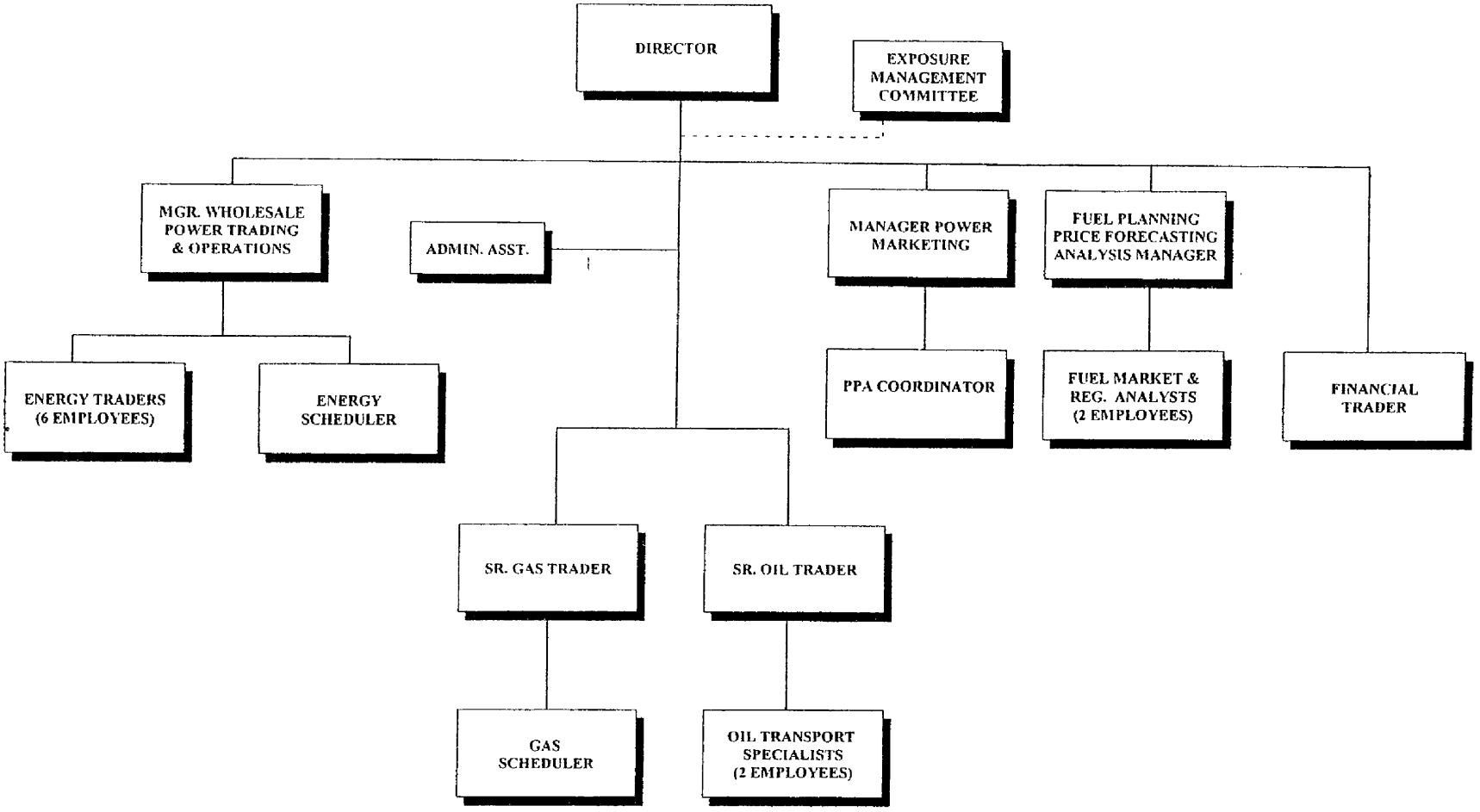


EXHIBIT 3

Source: DR1-1

RISK MANAGEMENT GROUP

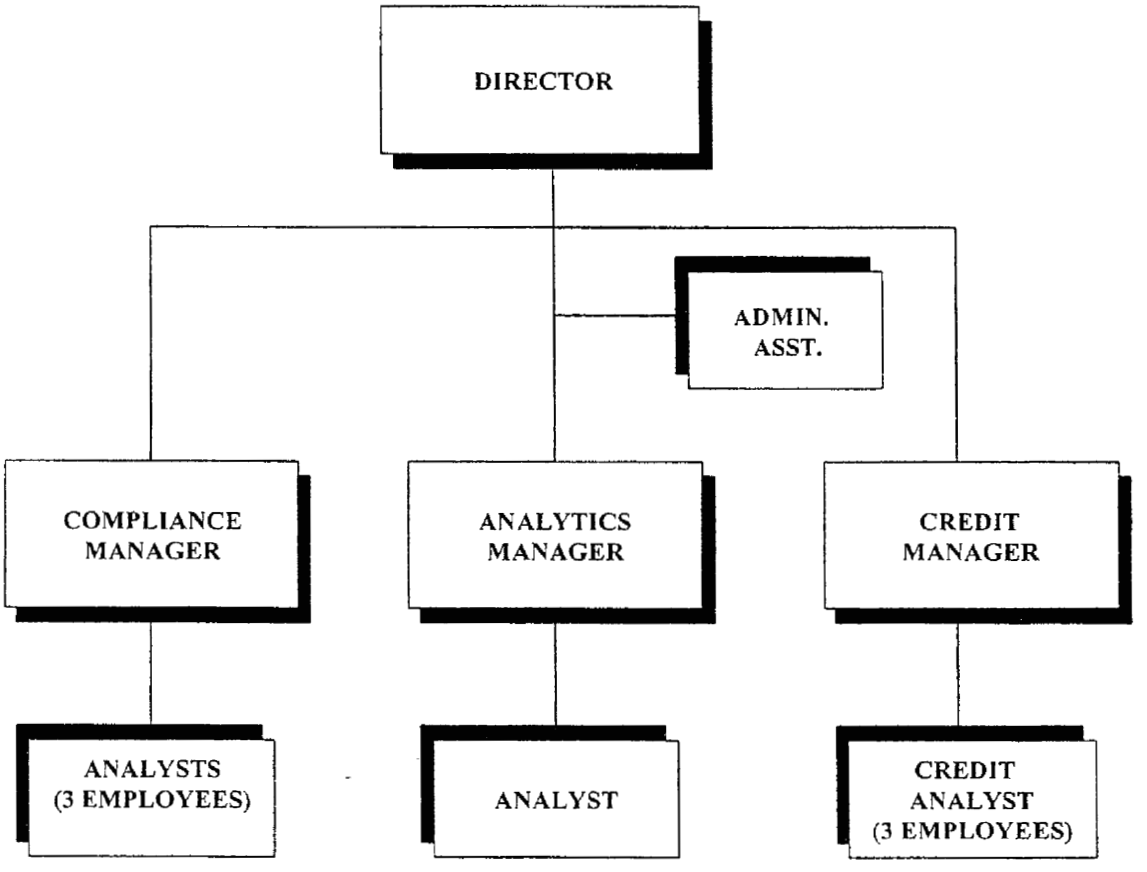


EXHIBIT 4

Source: DR-1

FINANCE AND ACCOUNTING GROUP

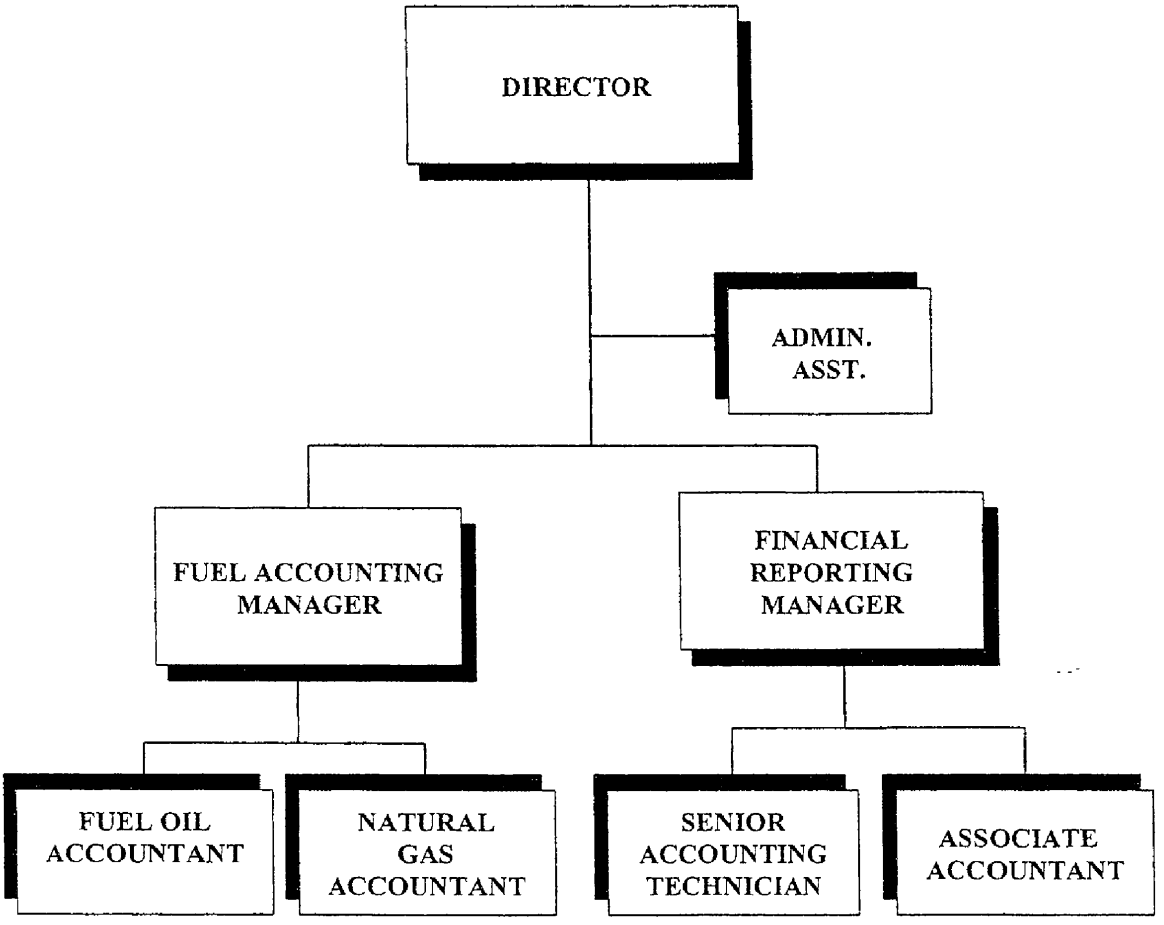


EXHIBIT 5 *Source. DR-1*

3.2 FPL's Fossil Fuel Purchasing Policies and Controls

The goals and objectives of the entire Energy Marketing and Trading Division are to procure fuel below market index pricing and procure purchased power at a savings. The resulting savings are to be passed on to FPL's customers. In 2000, Energy Marketing and Trading asserts that it saved FPL customers $43.9 million in gas purchases when compared to market indexes. Additionally, this savings was augmented by FPL's power plant capability to mix and switch natural gas and oil.

FPL's fuel consumption has one advantage and one disadvantage. The disadvantage is that FPL power plants are not coal-fired units (FPL does partially own both in- and out-of-state coal-fired plants). Although coal has historically stable pricing, pollution is always a concern to environmentalists. In contrast, FPL has 28 generation units that can burn either natural gas or oil. The ability to switch and mix in real time gives an option in the type of fuel to use. Obviously it depends on market prices, maintenance schedules, and availability when deciding with which fuel source to fire the units. Precise planning is crucial for optimum economic dispatch on all fossil units.

In a fuel strategy used prior to 2000, FPL considered the reservoir storing of natural gas. The decision at that time was that it was not economically feasible since no Florida storage facilities were in operation. However, at the end of 2000, storage was reconsidered. Since gas had escalated so much in price, FPL decided that it was now economically wise to store natural gas. Beginning in 2001, FPL obtained capacity to inject a maximum of 300,875 MMBTU at any time. The strategy was successful as FPL was able to reduce spot-market buying of high-priced gas during peak times and draw on the underground reserve.

3.2.1 Company Trading and Risk Management Controls

At the present time, Energy Marketing and Trading's policy and procedures on fuel trading and procurement are written in two separate manuals. The first is entitled *FPL Group Risk Management and Trading Manual.* The second is combined for FPL/Energy Marketing and Trading/Energy Power Marketing and is entitled *Risk Management and Trading Procedures Manual.* Both manuals seem comprehensive.

At the time that this audit began, the second manual was shared with the unregulated affiliate, Power Marketing. As a result, there was no clear demarcation between the policies and procedures for Energy Marketing & Trading and Power Marketing, with an appearance of intermingling employee duties, particularly for the "deal makers" (traders). During the audit, FPL asserted that it was in the process of creating two separate manuals for each company. FPL has advised that the separate manuals were completed during the first quarter of 2002.

[redacted]

The Exposure Management Committee meets at least every quarter (and more recently on a monthly basis) to monitor Energy Marketing and Trading's performance.

Staff suggests that meeting every quarter may not be adequate. Our dynamic economy, especially in the area of commodity trading and futures, can rapidly change with immediate trends of economic up and downturns. Although Energy Marketing and Trading management appears to have adequate staff for daily operations and decisions, the current situation of economic movement and fuel price sensitivity are indications that the committee should meet more often. Fuel costs are a large portion of the company's budget thus indicating that top management should give fuel a good deal of attention.

In staff's opinion, the Exposure Management Committee provides executive management guidance using collective minds who are aware and attuned to the economic trends and market risk. This guidance should be tapped more often to mitigate risk. Therefore, timely committee input is crucial to Energy Marketing and Trading's operation and readiness to initiate rapid change. Staff notes that in the [redacted] It is proposed that Exposure Management Committee meet every month at a minimum. It is also suggested that Energy Marketing and Trading provide the committee with trend reports at a minimum on a biweekly basis. FPL has confirmed that it is now the policy of the Exposure Management Committee to meet on a monthly basis and that it has been doing so since January 2002.

[redacted] The risk group ensures that all fuel transactions have been properly recorded. It also verifies trading data and confirms those transactions. In other responsibilities, it ensures all models are accurate and tracks all company credit risk with counterparties. Finally, it issues daily hedging reports and other periodic material related to trading activities.

3.2.2 Fuel Portfolio Policy

Energy Marketing and Trading's fuel planning policy can be described as a team effort developed and implemented using long-term strategy sessions, monthly planning meetings, and

daily and hourly operational updates. The division has a POWRSYM computer model that requires input such as generation parameters, load, fuel price forecasts, and projected power sales and purchases. The system output augments a starting point for long-term planning. The output determines how much fuel will be needed, and the decision will be made as to how it should be procured.

FPL amasses all acquisitions of its fuels and physical and financial options into what is referred to as a fuel and asset portfolio. The portfolio is the total fuel holdings that FPL anticipates using from all sources, both physical and financial. Inherent to any portfolio is risk, and FPL's focuses on price risk. Some of the risk exists in natural gas trading since FPL started contract hedging gas in September of 1999 using exchange-traded futures and options. Currently, it financially or physically hedges very little oil. Most of the oil is purchased through contract and spot markets.

As stated by management and in operating procedures, Energy Marketing and Trading will not physically purchase or sell more fuel than needed to meet customer demand. It may purchase a volume of natural gas at a fixed price for a long position so it may be used to meet short-term customer demand, but the company asserts that it never takes a position in the market without an offsetting position. Management asserts this would be classified as speculating.

Further, FPL procedures describe [redacted]

[redacted]

[redacted]

EXHIBIT 6 *Source: Docket 010001, Staff Interrogatories #1.*

[redacted]

[redacted]

[redacted]

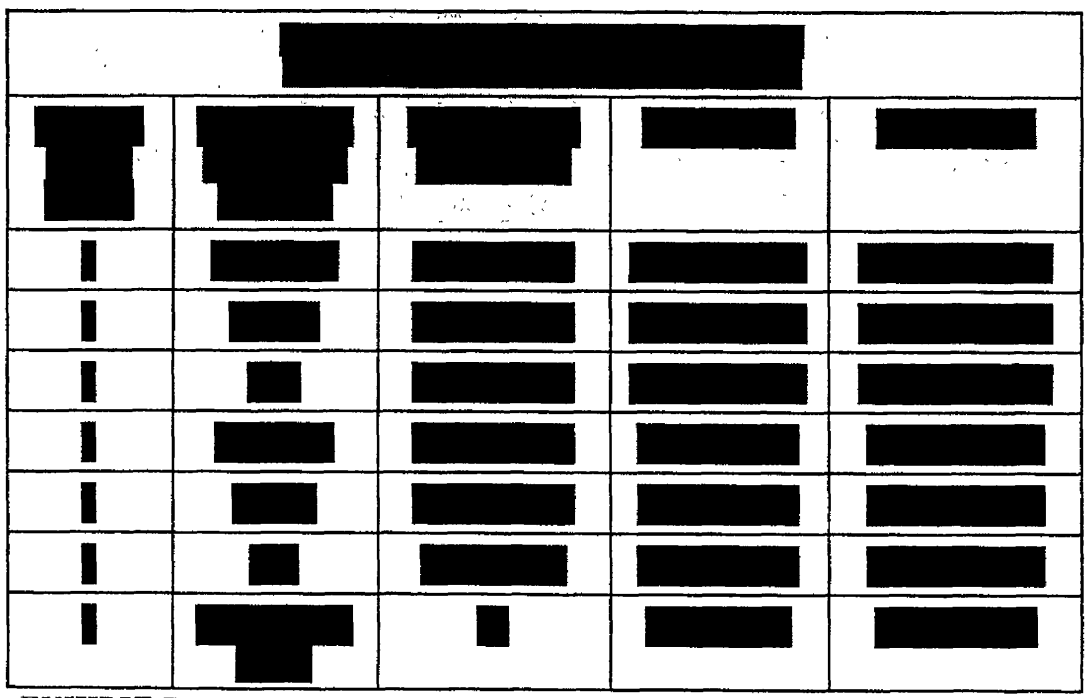
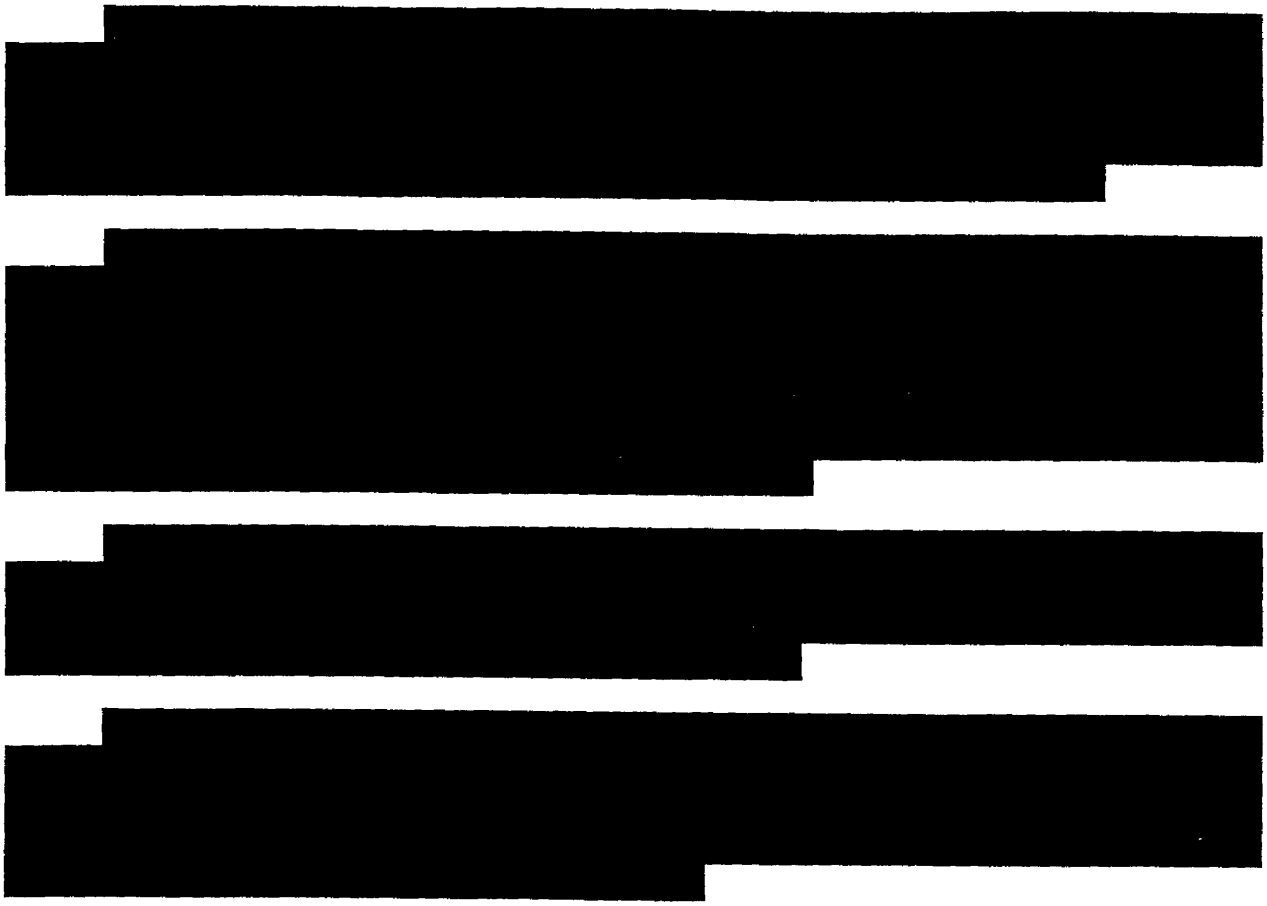


EXHIBIT 7 *Source: Docket 010001, Staff's first set of Interrogatories*



3.2.3 Contracts Policy

FPL writes short, medium, and long-term contracts for both oil and gas. These contracts are also known as bilateral agreements. For gas contracts, short-term is defined from one month to two years, medium as two to five years, and long-term as greater than five years. Oil agreements are time defined differently: short is greater than one month but less than six months, medium is six months to a year, and long is one year or longer. The company heavily depends on these contracts for price stability and minimizing volatility.

Further, FPL writes contracts in two ways: fixed-price and market-indexed. A fixed-price contract is an agreement between two parties to buy at a predetermined and agreed upon price. The disadvantage of fixed prices is that the price of oil or gas may drop below the contractual price. A market-indexed contract is a contract between two counter parties in which the selling price is tied to a certain index of a selected market. Market-indexed contracts are more flexible because they take advantage of market trends particularly if the price drops. **Exhibit 8** reflects a four-year purchasing plan and the variances by fuel and year. In 2000, FPL purchased 90 percent of its residual oil and 65 percent natural gas on indexed contracts. For 2001, results show a shift away from spot market to indexed-pricing for gas procurement.

FPL'S Fossil Fuel Purchases												
	Residual Oil Percent				Distillate Oil Percent				Natural Gas Percent			
Purchased as	1998	1999	2000	2001	1998	1999	2000	2001	1998	1999	2000	2001
Fixed Long Term												
Indexed Long Term									31%	37%	48%	55%
Fixed Medium Term												
Indexed Medium Term	32%	30%	35%	21%					4%			10%
Fixed Short Term	20%	14%	0%	0%					0%			26%
Indexed Short Term	0%	4%	55%	71%					1%	57%	17%	9%
Spot Market	48%	52%	10%	8%	100%	100%	100%	100%	64%	6%	35%	0%

EXHIBIT 8

Source: Interrogatory Response 33 from Docket 010001-EI & DR 1-18.

Note. Coal was omitted because of limited usage and FPL is only partial owner of the plants.

It appears that in 2000, FPL may have experienced contractual gas procurement pricing problems. That year, 65 percent of purchased gas was indexed and 35 percent was spot market as shown in Exhibit 8. As the price escalated in the winter of 2000 and 2001, so did FPL's fuel costs. FPL was obligated to pay spot and near-spot price for the entire time period.

Over the last four years, it is apparent that Energy Marketing and Trading has changed its purchasing philosophy in both residual oil and gas. In 1998 and 1999, it relied heavily on the spot market, but the shift went primarily to indexed short and long-term contracts at the end of 1999. FPL has also recently reviewed its oil supplier process and has revised it to solicit other suppliers to offer oil while meeting supply terms. According to the company, the goal is to encourage liquidity and give FPL more asset management options.

FPL has multiple contractual clauses to protect itself from the price spikes. For example, FPL may strike a contract for long-term, but it is only executable month-to-month. Second, FPL has resale options such as selling it back to the original provider for a trade in future months. Third, other imbedded options include language intended to reduce risk such as legalities, quantity, price, and enforcement.

3.2.4 Physical & Option Hedging Policy

Energy Marketing and Trading began physical and option hedging of natural gas in 1998. The company defines hedging as a contract between two counter parties, thus making them bilateral contracts. Energy Marketing and Trading's mainstay is hedging in the physical buying of gas and oil by using contracts, as described in Section 3.2.3 above, and buying on the spot market. It then manipulates the physical supply to accommodate needs and uses limited financial trading to augment the physical hedging.

Energy Marketing and Trading uses option contracts to purchase natural gas as insurance against adverse price movements. This will reduce price volatility for any upward or downward movement and provide a form of hedging on price adversity. In 1999, Energy Marketing and Trading increased transactions, and to offset prices in 2000, the company physically and option-hedged 108,730,000 MMBTU of natural gas through long and short futures. Using options of puts and calls in 2000, the company traded 47,690,000 MMBTU and swapped 157,358,300 MMBTU.

Energy Marketing and Trading staff also write puts and calls. The strategy that Energy Marketing and Trading applies has several aspects. First, it takes advantage of either upward or declining prices because it may acquire natural gas at below-market price. Second, the company would get a premium from the counter party whether the fuel is delivered or not. Third, even though the option may never be executed, the premium can be applied to other purchases, which reduces overall fuel costs.

Energy Marketing and Trading asserts it will continue various forms of hedging when purchasing natural gas and fine-tune the program to become still more cost effective. In the past, it has not hedged residual oil; however, it is now looking for ways to lower oil prices.

3.2.5 Spot Market

Spot market is defined as the price of a commodity at today's prices and up to 30 days in advance. Purchasing on the spot market is extremely advantageous when commodity prices drop. The reverse becomes the managerial nightmare. Uncontrolled price jumps in 2000 and 2001 are the most recent example of the consequences when high demand and speculators have control. Indexing data from the Energy Information Administration in January of 2000, a thousand cubic feet of natural gas provided to utilities was $2.74. In December 2000, it was $8.23. The all time high was $9.47 in January of 2001, which equates to a 346 percent increase within a one-year period.

In essence, spot market purchasing may be sufficient when prices are in decline or relatively stable; however, spot market purchasing has been the mainstay approach for most fuel-fired utilities to purchase fossil fuel. During the past decade, natural gas prices have lost stability and the trend, as noted in Exhibit 1, is escalating prices. It is, therefore, obvious that spot market purchases are only useful when prices are stable or are dropping. When utilities use fossil fuels to generate, they must have an alternative plan to mitigate price increases.

FPL is not as dependent on the spot market as it has been in the past. Its residual oil spot purchase was at 52 percent in 1999 and has dropped to 8 percent in 2001. The same holds true for natural gas. FPL purchased 64 percent spot gas in 1998 and dropped to zero percent in 2001.

An event impacting FPL and other IOUs is the completion of the Gulfstream 36-inch natural gas pipeline. The pipeline has been constructed from Mobile Bay, Alabama, to Port Manatee, Florida. It has the capability to transport 1.1 billion cubic feet of gas per day. The new line will impact the cost of gas transportation because it will be in direct competition with the Florida Gas Transmission pipeline. The new pipeline should reduce firm transportation cost of natural gas to FPL customers.

3.3 FPL's Wholesale Energy Purchasing and Sales Policies and Controls

Energy Marketing and Trading has a separate department that trades wholesale energy. The department states that wholesale energy needs are executed largely on a short-term basis. Short-term is defined as a month or less. The department uses the following five parameters in determining whether it will sell or purchase energy:

- Market conditions
- Generation outage schedules
- Load forecasts
- Fuel price forecasts
- Reserve margins

Once all factors are determined, the planners apply the same strategy used in fuel procurement.

The typical strategy meeting involves arriving at a decision to either physically buy or sell. An example of a decision is arriving at a conclusion that selling call options is indicated. The company would then write call options for a set megawatt amount and have them recallable in case that load is needed. The strategy behind option selling is capturing the premium on the call and providing economic benefit to FPL's customers. At the same time, the company has hedged. The call may increase in price during the time frame of the call but, if it does not, the customer still has gained from the premium. However, if the call does increase in price, FPL will capture gains by selling excess energy on a real-time basis.

Energy Marketing and Trading has found that greatest economic benefit to its customers is dealing in the short-term and real-time market. For example, if the wholesale market looks favorable for the next day, company generation is high, and hourly megawatt prices are high, Energy Marketing and Trading may choose to sell up to 70 percent of its excess on the next day market. Each daily or hourly decision is determined by existing conditions and all transactions are executed to optimize monetary benefit.

When FPL trades in wholesale energy, it deals directly with the counter parties in physical movement. FPL states it does not trade on the NYMEX for several reasons. First, it is a core function to optimize generation resources as strategy has found real-time to be the best optimization. Secondly, NYMEX is normally a financial futures market. This will limit real-time opportunities as previously discussed.

3.3.1 Contract Buying, Selling, and Hedging

FPL's basis for hedging is contracting to purchase future wholesale energy when prices look favorable compared to the cost of generation. The company does not financially purchase or hedge on the NYMEX, but it uses the same concept in real-time. **Exhibit 9** presents a three-year summation of all buying, selling, and two-year option activity FPL has engaged in. Overall, it appears FPL has increased sales and purchases of wholesale electricity. The largest noted change is the number of call options executed for year 2000.

Energy Marketing and Trading has determined that real-time and short-term transactions are the most advantageous way to operate within the wholesale energy market. FPL asserts 2000 revenues from sales was $144 million compared to $121 million in 1999.

It appears that FPL has become increasingly proactive in wholesale energy transactions. Staff believes the company should continue taking advantage of real-time and short-term transactions especially if megawatt hours continue to rise in price.

3.3.2 Staff Analysis

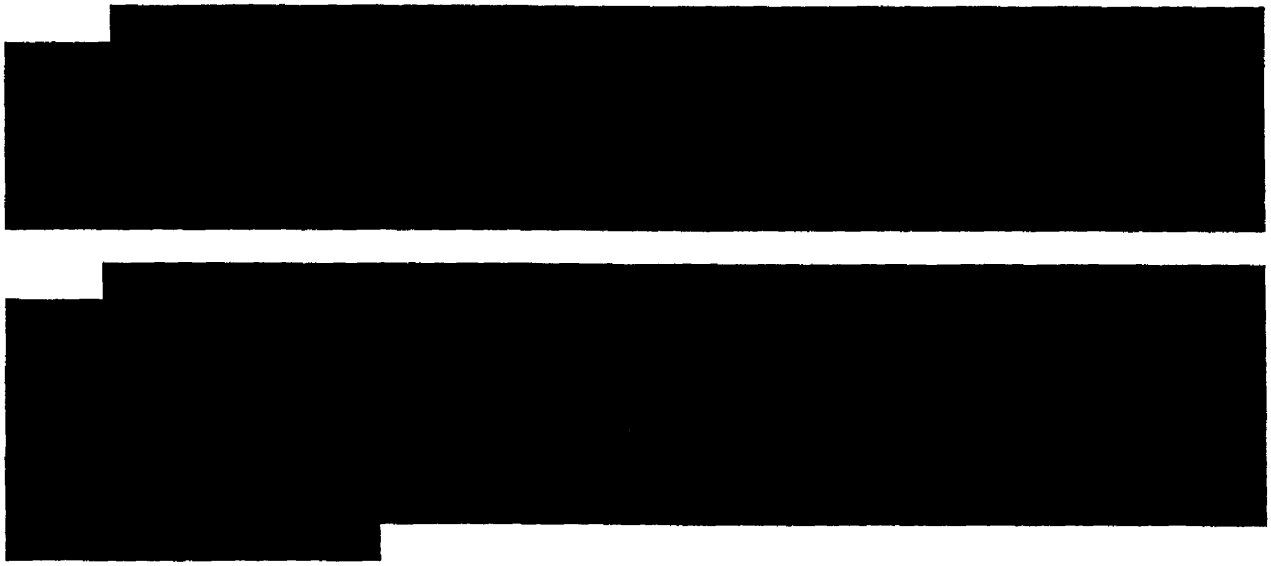
As illustrated in Section 3.2.1, FPL has instituted general risk management internal controls recommended in *A Practical Guide to Hedging* by Pricewaterhousecoopers. These general control elements are described in Section 2.6.

FPL's Wholesale Megawatt Hour Purchases, Sales, and Options (000)			
	1999	2000	2001
Purchased*	17,024	19,376	19,603
Sales	2,680	2,863	2,007
Call Options	63,600	493,260	N/A

EXHIBIT 9 *Source: Staff's First Set of Interrogatories in Docket No. 01001EI & DR-2-2.*

**Includes all Qualifying facilities.*

Energy Marketing and Trading has become more proactive in achieving price stability by using hedging tools, most particularly in natural gas purchases. It is Energy Marketing and Trading's responsibility to its customers to procure fuel at the lowest prices available and utilize plants with the optimum fuel mix. Staff concurs that it is a complex, sometimes unpredictable, and a monumental task to physically deliver fuel to the power plants. Procurement requires an effective strategic plan, valid economic predictions, inter-company coordination, and a proactive stance in all spheres of influence. All plans must come together and the end result must be delivered fuel to the plant at the most economical prices.



3.4 FPL's Risk Management Plan

As a culmination of risk planning for fuel purchases and hedging, FPL was asked to submit a risk management plan that would summarize its strategy for year 2002 and beyond. Included is

an excerpt of FPL's risk management strategy from section four of the plan. The company responses are verbatim and identified in *italics*.

IV. RISK MANAGEMENT STRATEGY

A. Risk Identification

1. Identify each type of risk that the utility encounters when procuring:

a. Coal

FPL encounters three (3) risks when procuring Coal: 1. supply (either related to the commodity or transportation), 2. price, or 3. quality.

b. Residual Oil

The potential risks FPL encounters when procuring residual fuel oil include supplier credit, fuel supply and transportation availability, product quality, demurrage from arriving to early, weather, environmental risk from potential spills, and emissions risk from burning the fuel.

c. Distillate Oil

The potential risks FPL encounters when procuring distillate fuel oil include supplier credit, fuel supply and transportation availability, product quality, demurrage from arriving too early, weather, environmental risk from potential spills, and emissions risk from burning the fuel.

d. Natural Gas

The potential risks FPL encounters when procuring natural gas include supplier credit, fuel supply and transportation availability risk, product quality, and weather.

e. Purchased Power

The potential risks FPL encounters when purchasing power include supplier credit, transmission availability risk, supplier failure to deliver and weather or generation variances that change the economics of the purchased power.
Separately identify the utility's goal(s) in managing the recognized risks associated with each fuel or power purchases.

FPL's goals are always to minimize or mitigate the risks associated with each fuel and power purchases.

Describe how the utility decides what an acceptable level of risk is when associated with fuel procurement and purchased power transactions.

The utility determines acceptable levels of risk for fuel procurement and purchased power transactions by performing various analyses that include forecasted/expected levels of activity, forecasted price levels and price changes, price volatilities, and Value-at-Risk (VaR) calculations. The analyses are then presented to the Exposure Management Committee for review and approval. Approval is given to remain within specified VaR limits.

B. Describe your fossil fuel procurement and wholesale purchased power plans separately for 2002. Please include:

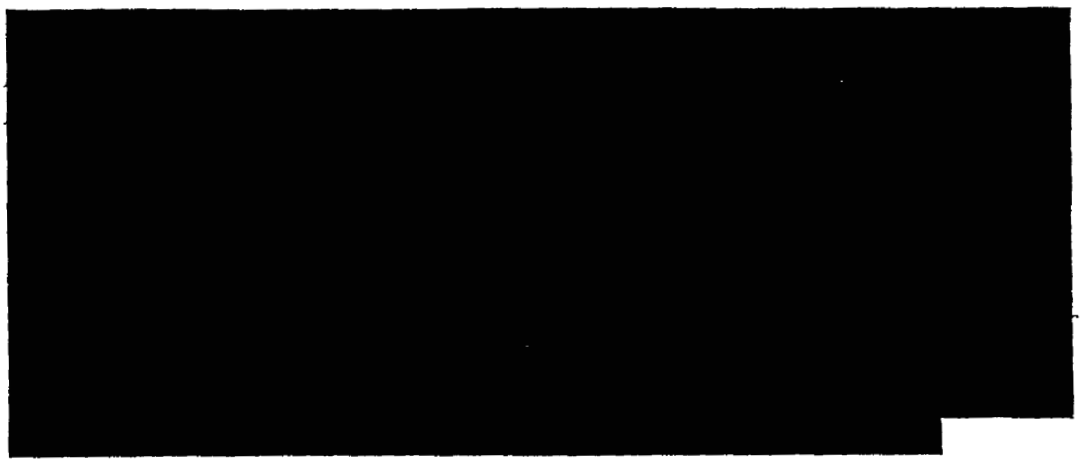
General
1. Types of fuel used and power purchased or sold
2. Quantities and mix and by percent
3. How purchased and by percent
4. Justify all purchasing strategies in items 1-3.

Specific
1. What derivatives will be used and how
2. What will be hedged and how
3. Savings (net of expenses) anticipated and why

SWOT
1. Describe the strengths of the plan
2. Describe the weaknesses of the plan
3. Describe the opportunities within the plan
4. Describe the threats and possible countermeasures

The objectives of FPL's fossil fuel procurement and wholesale purchase power plans for 2002 are cost and volatility minimization for FPL's customers through asset optimization of the FPL generation and fuel handling facilities. FPL projects that in 2002 it will generate 20,996,554 MWH from heavy oil (25.69% of the mix), 239,476 MWH from light oil (0.29% of the mix), 6,558,665 MWH from coal (8.03% of the mix), 29,639,042 MWH from gas (36.27% of the mix), and 24,283,718 MWH from nuclear (29.72% of the mix) as filed by FPL on November 5, 2001. In addition, FPL plans to purchase 20,398,312 MWH of power and plans to sell 2,333,502 MWH of power. The projected generation mix, as well as, the level of power purchases and sales are based on an economic dispatch from FPL's POWRSYM model, and FPL's

projection of fuel costs, load requirements, generation availability and the market price of power.



The primary strengths of the plan are a diversified fuel mix, balanced procurement portfolio, optimization of FPL's fuel switching assets, and dynamic management of market opportunities. The weaknesses are only if anticipated market opportunities do not arise allowing FPL to obtain the savings projected above. The greatest opportunities arise from FPL's ability to fuel switch and optimize a balanced portfolio, through FPL's integrated trading operations where fuel and power, physical and financial, traders, as well as, market experts plan, develop strategies, and implement a balanced and optimal program, on a daily basis, for FPL's customers.

C. Audits

1. Internal Auditor – describe the level of audit oversight that the utility's internal auditor provides to the utility's risk management efforts.

   The following answer assumes that the utility's risk management efforts you are referring to is the middle office within the trading floor, commonly referred to in our company as risk management.

   Risk Management efforts within the trading floor receive the same level of audit oversight as all other areas in the company. That is, a risk assessment process is performed with all potential areas of audits considered (including the middle office of the trading floor). Based on a series of factors, for example, materiality, prior findings, management requests, control environment, level of change, etc., the risk for the area is determined, and based on the level of risk, our audit plan is developed. The audit plan includes areas of audits deemed as having the highest level of risk for the

company. The risk management function has been reviewed and will continue to be reviewed through this process.

2. Outside Auditors

a. Indicate which outside auditors, if any, provide oversight to the utility's risk management efforts.

Outside auditors do not provide specific audit oversight of the utility's risk management efforts.

b. Describe the level of audit oversight that these outside auditors provide to the utility's risk management efforts.

Deloitte & Touche has indicated that in planning and performing their audit of the financial statements of FPL Group, Inc. and Florida Power & Light Company, they consider its overall internal control in order to determine their auditing procedures for the purpose of expressing an opinion on the financial statements and not to provide assurance on the Company's internal control. They have indicated that their consideration of the Company's internal control would not necessarily disclose all matters in the Company's internal control that might be material weaknesses under standards established by the American Institute of Certified Public Accountants. They do not provide any specific audit oversight of the utility's risk management efforts.

3.5 Risk Plan Analysis

FPL's primary objectives for its 2002 fossil fuel procurement includes a well-balanced asset optimization plan that considers cost and volatility. It will use computer models for projections in fuel costs, load requirements, generation availability, and market price of power. [redacted] All fuel procurement and hedging will have benefit of oversight by the Exposure Management Committee.

The company lists the strengths of the plan as fuel mix, fuel switching, a balanced procurement portfolio, and dynamic management of market opportunities. The fundamental weakness is when the market opportunities do not occur.

[redacted]

The company identifies the following generic risks inherent with fossil fuel and purchased power procurement:

- Supply
- Price
- Quality of product
- Supplier credit
- Weather
- Environmental

FPL asserts that its plan has methods and operations that can mitigate the acceptable risk by forecasting and using various analytical tools such as VaR. The overall objective of the plan will minimize fuel cost and volatility by hedging [redacted]

4.0 FPC's FUEL PURCHASING PRACTICES

4.0 FPC's FUEL PURCHASING PRACTICES

4.1 FPC Company Profile

As Florida's second largest electric utility, FPC serves the west-central region of Florida. As shown in **Exhibit 10**, the company was purchased by Carolina Power & Light (CP&L) in December of 2000. At that time, all related companies merged into a holding company called Progress Energy. Two of Progress Energy's subsidiaries, CP&L and FPC, are the regulated electric companies.

In other pertinent statistics, for year end 2001, operating revenues for FPC totaled 3.2 billion dollars and employed a total workforce of 4,210 employees. FPC's service territory covers an area of 20,000 square miles and customer accounts totaled an average of 1.4 million. FPC's summer generating capacity stood at 7,943 megawatts for year 2001 and was generated by 90 percent fossil-fuel. The fuel mix was 61 percent gas and oil, and 29 percent coal. The remaining 10 percent is nuclear.

FPC's 14 base-load, fossil-fuel generating units include 12 steam turbines and two combined-cycle units. To operate those generators in 2001, total fuel consumption was 11,155,283 barrels of oil, 49,833,191 MCF of gas, and 5,449,229 tons of coal. In total, the fossil fuel bill to fire FPC's generators was $790.6 million.

According to FPC's 2002 Ten-Year Site Plan, the company will become more dependent on natural gas for future generation needs. As scheduled, FPC will add generating units two through six at the Hines Energy complex. The new units will be fired by natural gas and are scheduled to be completed by 2009.

Regarding the current status of fuel cost-recovery, FPC received Commission approval for $29.4 million of underrecovery for the period of January through December 2000 and a $33.3 million estimated overrecovery for 2001, resulting in a fuel adjustment true-up amount of $23.6 million to be collected in 2002.

4.1.1 Fuel and Wholesale Power Purchasing Organization

As reflected in Exhibit 10, fossil fuel and wholesale energy are procured through the activities of two companies with three separate sections. The Gas and Oil Trading section within CP&L procures all natural gas and oil. Another CP&L section, Power Trading transacts all wholesale power trading for Progress Energy. These two sections are under one management reporting into the Department Head of the Regulated Commercial Operations organization (previously know as Energy Trading) within CP&L. Finally, the Progress Ventures Company and the subsidiary within it, Progress Fuels, procure all coal and barge services. **Exhibits 11, 12, and** 13 reflect the internal structure of each section.

PROGRESS ENERGY
2002 ORGANIZATIONAL STRUCTURE

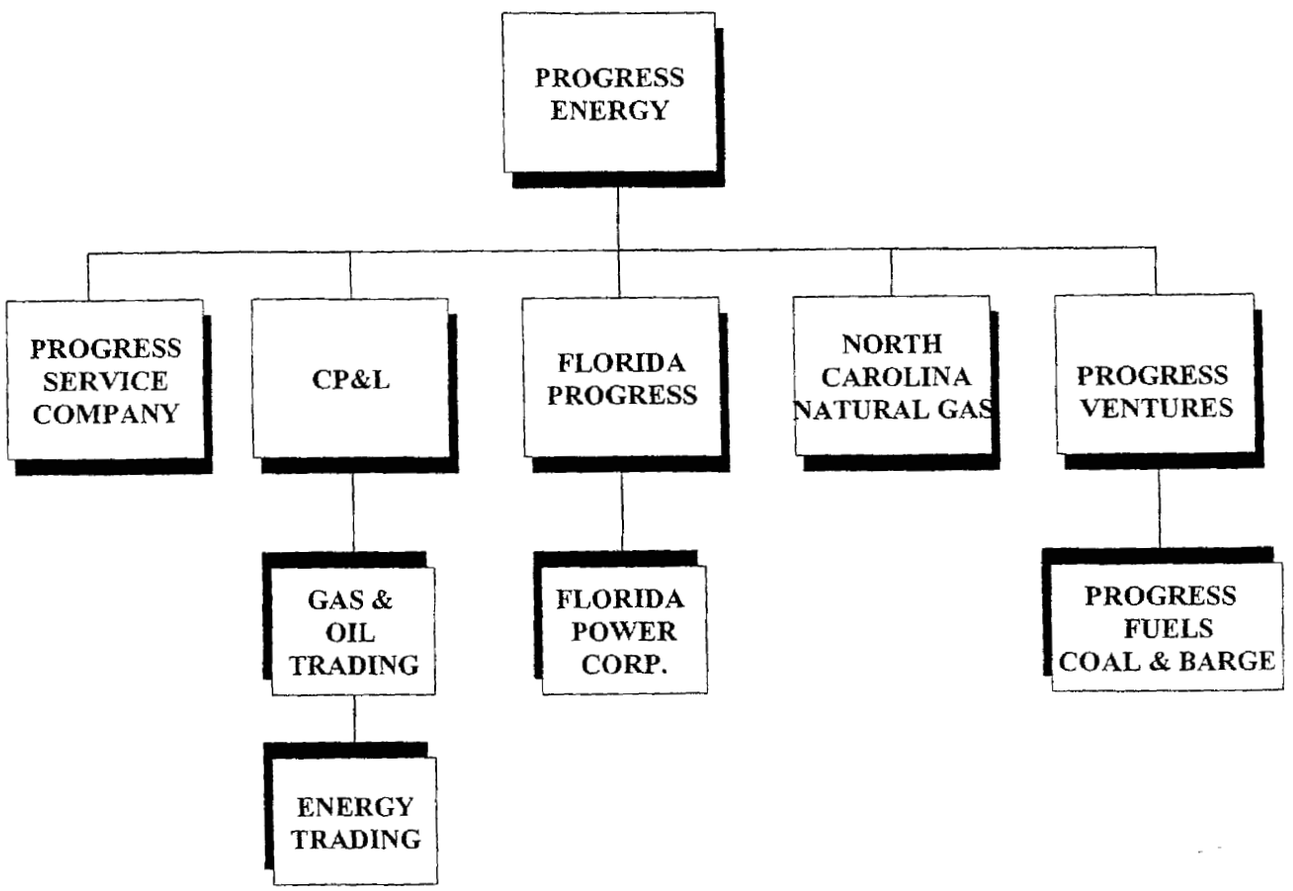


EXHIBIT 10

Source: Dr 1-1

CP&L
GAS & OIL TRADING

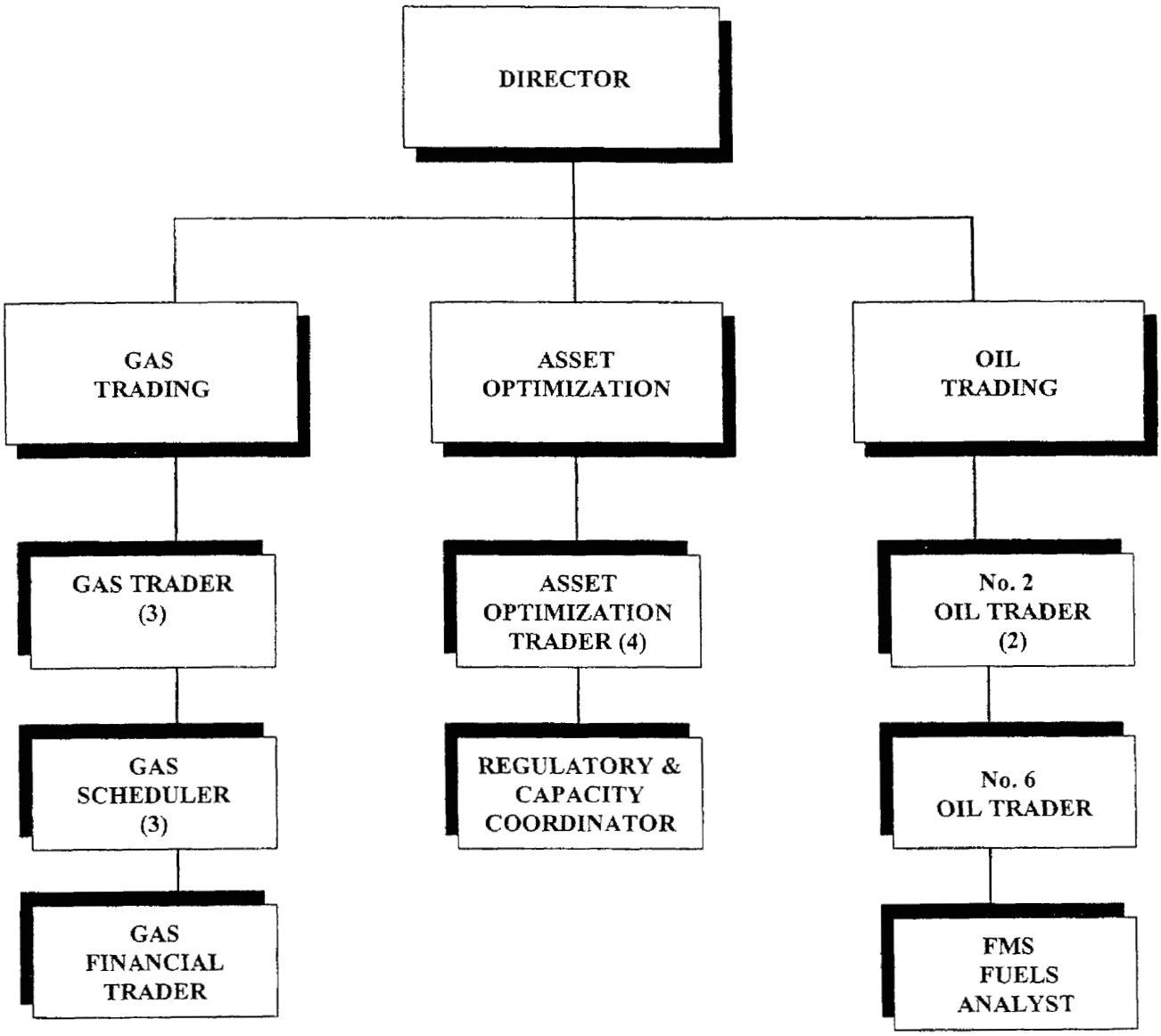


EXHIBIT 11

Source: Dr 1-1

Progress Ventures/Progress Fuels

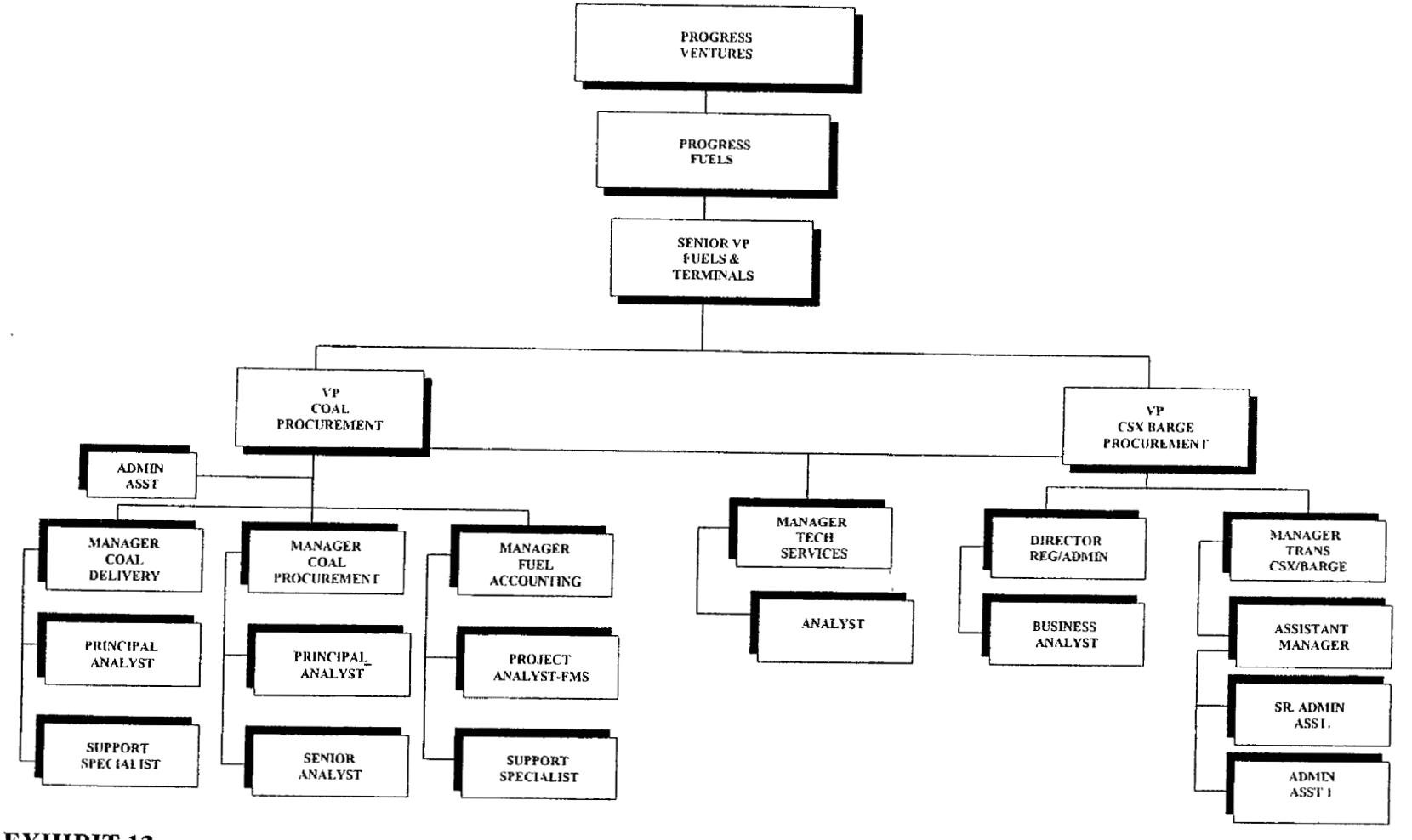


EXHIBIT 12

Source: Dr 1-1

CP&L
POWER TRADING

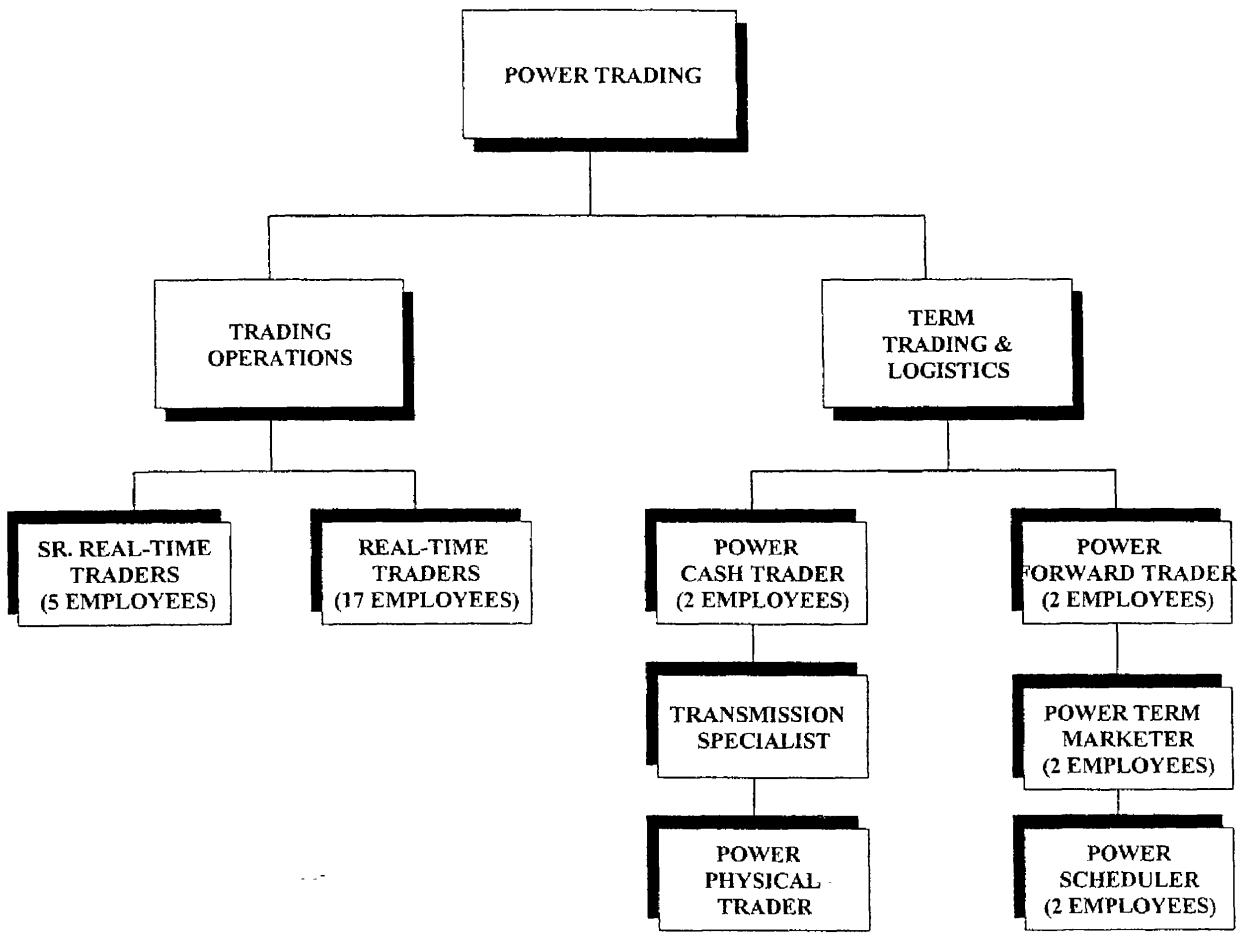


EXHIBIT 13

Source: DR 1-1

4.2 FPC's Fossil Fuel Purchasing Policies and Controls

In order to curtail costs, FPC's main objective in 2000 and 2001 was to develop and implement a centralized fuel management process. Therefore, all natural gas, oil, and wholesale power operations were combined, centralized, and moved from FPC headquarters to Raleigh, North Carolina.

As shown in Exhibit 12, Progress Ventures owns a subsidiary called Progress Fuels (formerly Electric Fuels). The subsidiary purchases coal and provides coal transportation for FPC operations. In the same manner, procurement of oil, natural gas, and wholesale energy is performed on behalf of FPC by CP&L employees. All centralization took place in December 2000 and, according to FPC, the transition is still in progress in areas such as procedures and name changes.

Five policy manuals reflect FPC guidelines for fuel and energy purchases. The first manual, *Progress Ventures Risk Management Guidelines,* details trading and marketing for wholesale energy. The second is a manual on counterparty credit risk when trading oil, gas, and wholesale energy. The third and fourth manuals are referred to as the *Oil Process Analysis* and the *Gas Process Analysis* manuals. The last policy manual, entitled *Electric Fuels Corporation Coal Purchasing Procedures*, provides details for coal purchasing.

Recognizing the need for defined risk management policies in the company, the Risk Management Committee was created by the Progress Energy Board of Directors on March 21, 2001. The board directed the committee to be composed of company executives and sanctioned the use of financial derivatives. *The Risk Management Guidelines* shows the establishment of the Risk Management Committee and its subcommittees. Their responsibilities are as follows:

- Commodity market trends
- Trading and hedging strategies
- Risk and credit exposure
- Modeling
- Operational Control
- Pricing methods and approving liquidity limits
- Special Studies

The same procedures also delineate the front, middle, and back offices. Energy Trading is the front office, and its primary functions are trading, price deals, portfolio management, and inputting transaction deals. The middle office is the finance department which reports market risk, quantifies through statistics, and monitors policies and procedures. The finance department is independent of the front and back offices. According to FPC, the back office primarily records all transactions, administers contracts, and reconciles settlements. The back office is independent of the front and middle offices. The middle office is a separate section within the finance department. The middle office currently reports directly to the Chief Financial Office for Progress Ventures. This position reports directly to the President of Progress Ventures. (FPC's Enterprise Risk Management department is a section of a larger Financial Services organization within the Progress

Energy Service Company. The Vice President, or Chief Risk Officer is responsible for all risk management matters. This position has recently been filled.)

The Risk Management Committee holds normally monthly meetings, but it appears several meetings have been canceled. The committee appears to be the major force for policy changes on procurement and trading. For instance, the December 2001 minutes show that the committee authorized the use of options, capacity, futures, and swaps for the Progress Ventures Company.

Since this committee changes policy and makes new policy, it is important the committee assure that any directive issued by upper management is codified into new procedures and communicated to middle and lower management. It appears CP&L is preparing to enter into more option trading and hedging activities. The Regulated Commercial Operations organization has a Risk Management Subcommittee that meets biweekly. Representatives of fuels, power trading, origination, middle/upper management and enterprise risk management are present. The Senior Vice President of Progress Ventures chairs this meeting. The enterprise risk management personnel are in constant contact with the members of the Risk Management Committee to provide any significant events/updates of any material changes that would affect FPC.

The *Gas Process Analysis* manual outlines physical gas trading, transportation, and scheduling. The manual provides generalities on these procedures but it is not specific on how to approach each subject. For example in reference to trading, the manual indexes a notebook, deal sheets, and confirmation, but it does not specify how to use those items. In contrast, the *Oil Process Analysis* manual provides the information necessary to initiate a request for proposal (RFP) and has specific instructions on how to procure oil when using the RFP process. However, it lacks detail for trading or hedging oil and the processes involved.

If CP&L intends to increase trading, use of options, and hedging for fossil-fuel procurement, staff recommends that all fuel procurement manuals and the risk management guidelines be updated and include specific policy and guidelines on physical and financial trading. Trading requires a high level of departmental controls and an audit trail with specifics on the documentation of forms used, employee conduct, and limits on acquisitions.

4.2.1 Progress Fuels Coal Procurement

Progress Fuels is split into two divisions. One division procures coal and the other procures coal transportation. Coal procurement is directed by a written policy that considers market conditions in determining what terms to negotiate in contracts. Although these procedures are dated 1987, CP&L contends they are up-to-date.

Depending on the market, the company either solicits from known producers or will draft an RFP. Direct solicitation is based on cost, type of coal needed, mine ownership, and references. If a known producer fits these parameters, the company will deal with them directly. The second option is the RFP process. It is more formal and involves considerations of a bid list, coal quality, mine ownership, contract clauses, and access to transportation. CP&L purchases coal depending on market conditions and the consideration of cost. Therefore, each contract that is drafted may

consider spot purchase, indexed purchase, or a fixed purchase. Each RFP contract has additional considerations such as access to transportation, union contracts, and additional capacity to ship. All provisos are meant to protect company and customer interests.

CP&L also purchases spot coal, defining "spot" as a purchase arrangement less than a year in duration. Spot purchases are used when the company's requirements are predictable. "Predictable" is defined as events that will be known to occur such as price, distressed sales, and obtaining transportation within a short period of time.

In 2001, CP&L, on behalf of FPC, purchased [redacted] of its coal at spot market. The current mix and past history of coal acquisitions are shown in **Exhibit 14**. The coal procedures describe coal purchasing but lack procedures on coal transportation. CP&L asserts that coal transportation procedures are not needed since an agreement had been reached with the Commission in 1986. The docket allowed FPC seven dedicated company-owned train cars to deliver coal and excess would be delivered by water. Details are available in Docket No. 860001-EI-G.

4.2.2 FPC Natural Gas and Oil Procurement

Procurement for gas and oil is initiated by the Gas & Oil Trading Department at CP&L headquarters. The *Gas Process Analysis* manual provides an outline for gas procurement using the business core processes of physical trading, transportation, and scheduling. Physical trading starts with daily morning meetings to determine gas requirements. The team considers power market activity, weather, oil prices, and operational pipelines.

After analyzing those criteria, the team then considers gas supply, news from trade publications, electronic trading conditions at NYMEX, and the approved bidder list. All items must be analyzed to arrive at a decision whether to purchase or sell through the bidders. For natural gas procurement in 2001, FPC contracted [redacted] long term and [redacted] at short term as Exhibit 14 shows. FPC claims that it is the most cost effective and the strategy used in that year.

The procedure also indexes monthly trading and transportation capacity with much of the same criteria as used in daily transactions. The outlined processes appear to be adequate based upon a flow chart of the entire process, but lack detail regarding trading natural gas with other counter parties. For example, control forms are not indexed by number and type, trading restrictions are not listed, and there is no description of how the trades are documented in the notebook and documented in the accounting report. In sum, there are large gaps between each step.

As depicted in Exhibit 14, nearly all of the oil procured by FPC is bought under long and medium-term contracts. As per procedure, the procurement process covers both number two and six oil procurement by means of the RFP process. Step one of the process identifies the need for procurement due to expiring contracts and new requirements. Step two addresses estimating volume need. Step three describes establishment of a bidder list. Steps four and five cover drafting the RFP and sending it to all bidders. The remaining steps address processing and analyzing all bids. Various forms used, form letters, bid lists, and examples are provided in the procedure.

CP&L'S Fossil Fuel Purchases for FPC by Type of Contract

Purchased as	Coal Percent				Residual Oil as %			Distillate Oil as %			Natural Gas as %		
	1998	1999	2000	2001	1999	2000	2001	1999	2000	2001	1999	2000	2001
Fixed Long Term	[redacted]												
Indexed Long Term	[redacted]												
Fixed Medium Term	[redacted]												
Indexed Medium Term	[redacted]												
Fixed Short Term	[redacted]												
Indexed Short Term	[redacted]												
Spot Market	[redacted]												

EXHIBIT 14

**1998 Data for oil and gas are not available. All percentages have been rounded. Source: DR 1-9.*

The other part of the oil procedures is the Fuel Management System (FMS). It is also written as a step process that is used either daily or monthly. FMS facilitates a constant supply of oil based on inventories and scheduling. The flow chart assesses burn projections, weather, and current inventories. The computer model is updated, reviewed, and changed as necessary. The final product is sent to the supplier for constant flow and whether spot market oil has to be purchased for augmentation.

Although the *Oil Process Analysis* manual is detailed, it has no index, the pages are not marked as to what section the reader is in, and it lacks flow of content. The *Gas Process Analysis* manual has the same problem. Staff suggests FPC consider revising these two manuals.

4.2.3 Physical & Financial Hedging and Options

At this point, FPC does not engage in financially hedging transactions. All coal, oil, and gas are bought by contract and spot market. FPC asserts is has been conservative in the approach to physical and financial trading and options. The company specifically cites price risk and regulatory direction as the drivers to its conservative plan. Consequently, the Gas and Oil Trading section's primary responsibility is the negotiation of contractual terms related to price, type, and transportation for the acquisition and delivery of gas and oil.

It appears during the high natural gas price period of November 2000 through March 2001, FPC had 16 contracts with a mix of market indexed, fixed, NYMEX priced, and spot. Six of those contracts had required minimum volume usage. Of those six, two were fixed and the remaining four were NYMEX (indexed) priced. With those required indexed usages, FPC was vulnerable and impacted by price spikes.

FPC also asserts that between November 2000 and February 2001, it saved customers $11 million by using fixed-priced contract options as a form of hedging. For example, coal contracts are three to five years but have a re-opener option for price changes. For oil and gas, contracts include clauses such as fixed prices, switching from indexed to fixed, resale to others, and postponing deliveries until future dates.

4.2.4 Staff Analysis

In staff's opinion, FPC and Progress Fuels have established the general requirements as indicated in Section 2.6, which lists the general controls needed for a risk management program. However, there are three areas of improvement that should be addressed before CP&L begins advanced risk techniques and trading.

First, fossil fuel and wholesale energy acquisitions are located in two different companies and three different departments. This becomes further compounded by the geographic distance between CP&L and FPC. However, FPC does not view the geographic distance to be a hindrance in managing the FPC portfolio since the skill set required is different for each commodity. Currently, the wholesale power, gas and oil purchases are handled through the Regulated Commercial Operations Department (previously know as Energy Trading) in CP&L. FPC's coal procurement is handled through Progress Fuels (previously know as Electric Fuels). Progress Fuels

has a specific contract with the FPSC to procure coal for FPC. FPC views these commodities under a portfolio concept regardless of whether they are managed by different organizations within Progress Energy. Staff suggests that may be too segmented considering the dynamics of commodity trading. Financial and option trades are fast paced. Prices can change within minutes. Companies that commodity trade must have rapid communications and quick decision making input. Therefore, to operate an effective fuel portfolio, the company may consider further consolidation within FPC. Staff notes that CP&L and FPC are still in transition as a result of the merger.

FPC does view its fuel procurement and energy transactions under a portfolio concept. This is primarily accomplished in the Portfolio Management section of the FP&L Regulated Commercial Operations organization (previously known as Energy Trading) which also contains gas, oil and wholesale power purchases. The fuel procurement is handled separately due to the skill set required in each commodity. Among other things, Portfolio Management reports on the inventory and cost of each commodity for FPC. This includes input from various other sections. The information is used to determine economic unit dispatch requirements as well as to identify any operational issues that require immediate attention to assure reliability. CP&L is, however, reviewing the concept of moving all fuel procurement and wholesale power purchases under the Regulated Commercial Operations Department of CP&L.

Secondly, the Risk Management Committee needs to demonstrate itself as the lead policy maker and meet at least monthly with established communications to every department involved. Additionally, consideration should be given to rename the Finance Department or further define it as the risk management middle office.

Lastly, all fuel and wholesale energy policies, procedures, and guidelines need to be consolidated and updated to reflect current and future operations. Clear procedures are necessary in an effective risk management program.

4.3 FPC's Wholesale Energy Purchasing and Sales Policies and Controls

FPC's wholesale energy policies are contained in the risk management guidelines for Progress Ventures. However, since Energy Trading is controlled under CP&L, the guidelines need to be updated and amended. Also, the risk management guidelines should be clarified as to whether they relate to all fuel procurement operations, or just to wholesale energy.

The risk management guidelines provide wholesale energy with explicit limits on trading. There are risk limits on megawatt hours per day and month, VaR, stop loss, and liquidity limits. All limits are monitored by the middle office. Credit risk is defined and structured for company protection. All limits and exposure risk appear to be adequate.

Energy Trading began purchasing and selling all wholesale energy for FPC in 2001. Its strategy is economically based and the decision to purchase or sell is made by comparing the market

price and attributes associated with FPC's system cost and system needs. Power Trading states that it will judiciously use options and will not buy or sell more load than they have. As with fossil fuel, the company uses a conservative approach when option-trading wholesale power.

Energy Trading trades in the market by entering into bilateral contracts directly with counter parties in Florida and throughout the Southeast. It does not trade on the NYMEX. **Exhibit 15** reflects a three-year history of FPC and CP&L's wholesale energy activities for purchases, sales, and options. As noted, purchases have increased and sales have declined. Option purchases for the past three years have been minimal.

FPC's Wholesale Megawatt Hours of Purchases, Sales, and Options (000)			
	1999	**2000**	**2001**
Purchases*	8,575	9,326	10,619
Sales	1,590	1,477	880
Call Options	98	18	97

EXHIBIT 15 *Source: Staff's 2nd set of interrogatories number 109 in Docket 010001.*

**Includes Purchases from Qualifying Facilities.*

4.4 FPC's Risk Management Plan

As a culmination of risk planning for fuel purchases and hedging, FPC was asked to submit a risk management plan that would summarize its strategy for year 2002. Included is an excerpt of section four which is part that outlines FPC's fuel strategy. The company responses are verbatim and identified in *italics*.

IV. Risk Management Strategy

A. Risk Identification

1. Identify each type of risk that the utility encounters when procuring:

a. Coal

1) Plant availability
2) Supply or transport problems due to labor disputes, weather or other unforseen delays
3) Coal quality errors

4) *Financial strength of suppliers*
5) *Changes in laws regulating mining, transportation, or burning of coal*
6) *Price volatility*

b. Residual Oil

1) *Differences between forecasted/scheduled requirements & actual requirements due to economic changes, overall power demand, weather changes, change in price relationships between competing fuels, plant availability (maintenance/unexpected shutdowns or startups), plant dispatch changes, power market changes, etc.*

2) *Differences between forecasted/scheduled deliveries and actual deliveries due to supply or transport problems , loading and unloading delays, etc.*

3) *Fuel quality problems such as blending errors, off spec deliveries, changes in SO2 values, changes in plant fuel handling capability, etc.*

4) *Changes in laws, regulations, plant permits, etc. that effect the amount, cost, testing requirements or quality of oil required.*

5) *Impact of regulatory, management, internal and external audit reviews.*

6) *General industry changes that impact overall availability/ cost/quality of fuel oil.*

7) *Price volatility & fuel oil market related factors.*

c. Distillate Oil

Same as Residual Oil

d. Natural Gas

1) *Imbalance penalties with interstate pipelines as a result of over/under burns based on differences between forecasted/scheduled gas and actual requirements due to, but not limited to, changes in weather, plant availability, and alert day tolerances.*

2) *Deliveries by interstate pipelines and suppliers based on force majeure events.*

3) *Defaults by suppliers (for example, bankruptcy)*

4) *Price risk based on volatility in the natural gas industry*

5) *Contractual disputes regarding payment and deliveries*

e. Purchased Power

1) *Default risk – inability of the supplier to obtain adequate resources to deliver the power per contract or agreement*

2) *Directional price risk – e.g., purchased power contracts in which the price of the purchased power is tied to an index*
3) *Physical risk – inability of electrical grid to reliably support power transfer*

4) *Credit risk – inability of contract counterparty to deliver per contract resulting in purchase of higher cost purchased power*

5) *Basis risk – e.g., supplier(s) can experience adverse weather as compared with Florida Power's service territory*

2. Separately identify the utility's goal(s) in managing the recognized risks associated with each fuel or power purchases.

Coal:
1. *Review actual conditions and adjust delivery schedules as needed.*
2. *Maintain contacts with plants and suppliers.*
3. *Monitor market prices and spot market options.*
4. *Monitor suppliers financial strength.*
5. *Build flexibility on volume terms etc. into agreement.*
6. *Develop alternative supply sources whenever possible.*

Oil:
1. *Monitor actual conditions and consumption levels vs. forecasted levels and update forecasts frequently as conditions change. Adjust delivery schedules as needed.*

2. *Monitor actual delivery status and maintain frequent contact with suppliers and receiving plants to anticipate problems and take corrective action.*

3. *Keep current on market prices & activity. Utilize contract price options, inventory, & spot market options as appropriate. Florida Power has used, and continues to use, negotiated fixed prices as a method of stabilizing prices. This is usually accomplished by fixing prices on all or part of individual ships or a series of shipments to be delivered over a period of time of one to three months.*

Natural Gas:

1. *Monitor plant burns vs. forecasted levels. Switch to fuel oil if it is determined that we will be out of tolerance on the interstate pipeline or adjust natural gas schedules to reallocate to different plants if possible.*

2. *Use fuel oil where applicable at certain plants to maintain load, if possible.*

3. *Continue to scrutinize a supplier's financial strength to avoid surprises by the utility.*

a) *Use physical fuel oil inventory where applicable to dispatch at lowest fuel oil price. Logistics with physical fuel oil and levels of inventory come into play when managing this alternative.*

b) *Continue to monitor natural gas trends to determine long-term market swings in a specific direction.*

c) *Evaluate fixing natural gas prices on a percentage of monthly natural gas requirements to offset volatility for the ratepayers.*

d) *Evaluate zero cost collars for physical natural gas requirements in lieu of, or in conjunction with, fixed natural gas prices.*

e) *Evaluate the costs of paying a premium for purchasing a call option for a certain percentage of the utilities monthly natural gas requirements.*

f) *Sell excess gas supplies/capacity, separately or bundled, at a profit that are not needed on a daily basis by the utility.*

Purchased Power:

1. *Assess each supplier's ability to deliver power based on historical reliability as a supplier (default risk) and credit ratings*

2. *Utilizes both fixed price contracts (next day purchases) and variable price contracts tied to a specific counterparty's generation unit's incremental cost.*

3. *Utilizes firm transmission paths where available for reliable purchased power.*

3. **Describe how the utility decides what an acceptable level of risk when associated with fuel procurement and purchased power transactions.**

Oil and Coal:
The amount of risk considered acceptable is based on past experiences with what has been successful and evaluating the risk profile of any problems or opportunities based on this experience.

Natural Gas:
Decisions of acceptable risk are determined based on the circumstances at the time when purchasing natural gas. The circumstances at the time may include scenarios that involve all or a part of the following: Forward pricing trends, force majeure events, fuel oil inventories, competitive fuel pricing, supply restraints, etc. For example, if the utility views a strong directional market trend for natural gas based on industry reports, events in the marketplace, demand, national storage levels, etc., the utility would consider implementing the risk management tools identified above.

Purchased Power:
Considerations for purchasing power on a long term and mid-term basis include, but are not limited to the following:

1. *Price curves – directional price risk associated with fuel and power*
2. *Generator outages*
3. *Load forecast*
4. *Physical risk associated with transfer capability of transmission system*
5. *Credit worthiness of potential supplier(s)*
6. *Default risk of potential supplier(s)*
7. *Basis risk – e.g., supplier(s) can experience adverse weather as compared with Florida Power's service territory*

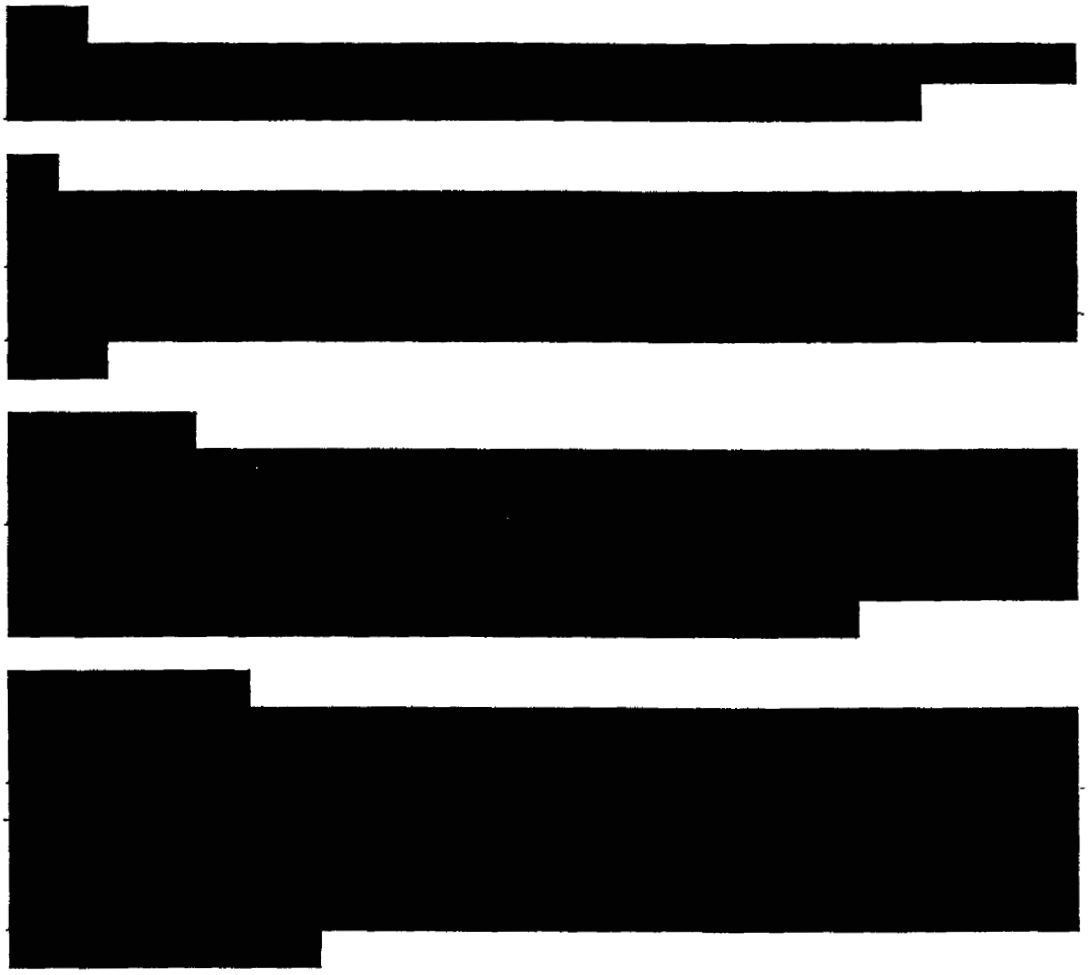
B. Describe your fossil fuel procurement and wholesale purchased power plans separately for 2002. Please include:

<u>General</u>

1. Types of fuel used and power purchased or sold

2. **Quantities and mix and by percent**
3. **How purchased and by percent**
4. **Justify all purchasing strategies in items 1-3.**

Response to #'s 1-3:



Response to #4:
Purchasing strategies for fuel and purchased power are based on having a portfolio mix that encompasses various types and lengths of contracts that will provide reliability, flexibility and the least cost for the utility and the ratepayers.

Specific
1. **What derivatives will be used and how**
2. **What will be hedged and how**
3. **Savings (net of expenses) anticipated and why**

Response:
Coal:
1. Use of derivative markets is not planned for 2002.
2. Use of hedging is not planned for 2002.
3. Not applicable
Oil:
1. Use of derivative markets is not planned for 2002.
2. The majority of fuel oil under contract is priced utilizing spot market *based indexes. Fixed price forward prices are periodically negotiated with contract suppliers as a hedge against future market price increases.*
3. *May or may not result in savings depending on actual market prices. Hedging eliminates volatility but does not always result in a savings to the ratepayers.*

Natural Gas:
1. *Use of derivative markets is not planned for 2002.*
2. *Based on circumstances the utility deems as a possible risk to the ratepayers, the utility will evaluate the risk management tools identified above.*
3. *Anticipated savings will be determined in the decision making to hedge natural gas based on possible risk scenarios previously identified.*

Purchased Power:
1. *Use of derivative markets is not planned for 2002.*
2. *Considerations of associated risks will be utilized in the decision making process for purchasing power. Physical products such as fixed price contracts and physical options will be considered for mitigating risks.*
3. *Savings may be incurred depending on actual system conditions including unscheduled generator outages on both Florida Power and other potential counterparties' systems, actual weather, and resulting market prices. Soft markets may limit value of purchased power contracts.*

SWOT

1. Describe the strengths of the plan
2. Describe the weaknesses of the plan
3. Describe the opportunities within the plan
4. Describe the threats and possible countermeasures

Coal and Oil:
1. *Provide a reliable supply at competitive price levels with significant flexibility to switch fuels and respond to changing requirements as economics and operations dictate.*
2. *Limited activity in the spot market may limit the field of available suppliers able/willing to meet FPC's needs.*

3. *Pricing & quality flexibility available in current supply arrangements provide opportunities for substantial cost savings.*
4. *Please refer to the risk identification section (4.1).*

Natural Gas:

1. *Strengths of the plan enable Florida Power to implement the risk management tools where deemed by the utility to:*
   a. *Reduce price volatility*
   b. *Ensure reliability of natural gas supply deliveries by evaluating supplier's financial strength.*
   c. *Reduce cost by avoiding imbalance penalties.*
   d. *Reduce fuel costs by dispatching plants on lower cost fuels.*

2. *Market volatility in pricing can be misleading in the decision making to hedge natural gas supply. Catastrophic and/or force majeure events are unforeseen events that cannot be factored into when making or managing pricing/hedging decisions. Supplier risks cannot always be mitigated quickly and effectively.*
3. *Allows the ability to reduce fuel costs by displacing higher cost generation.*
4. *Please refer to the risk identification section (4.1).*

Purchased Power:

1. *Ability to manage reliable economic power supply for ratepayers.*
2. *Any fixed price contracts limit the ability to take advantage of soft markets, however these fixed price contracts are usually short-term in duration.*
3. *Allows flexibility to take advantage of short-term markets for purchasing power and displacing higher cost generation.*
4. *Please refer to the risk identification section (4.1).*

C. Audits

1. Internal Auditor – describe the level of audit oversight that the utility's internal auditor provides to the utility's risk management efforts.

Audit Services provides independent assurance and consulting services that ensure regulatory compliance, effective corporate governance, operational excellence, and appropriate risk management for all major activities including fuel procurement. Activities are audited based on relative priority rather than a fixed cycle. Within that framework, Audit Services' oversight of fuel procurement risk management activities is addressed from several perspectives.

Compliance – Audit Services periodically conducts audits to ensure procedures and controls associated with processing fuel payments

(coal, oil, and gas) are functioning effectively. Audits include review for compliance with contract terms, evidence that controls are functioning effectively, and accuracy and consistency of financial accounting and transfer of coal from EFC to FPC and regulatory reporting.

Trading and procurement – Audit Services periodically evaluates the adequacy of the process and control environment associated with the purchase, sale, and recording of fuel and energy.

Operational – Based on relative priority, Audit Services periodically assesses the effectiveness of company operations which directly or indirectly impact fuel procurement risk management including such activities as plant dispatch (forecast and execution) and coal inventory processes.

2. Outside Auditors

a. Indicate which outside auditors, if any, provide oversight to the utility's risk management efforts.
b. Describe the level of audit oversight that these outside auditors provide to the utility's risk management efforts.

Deloitte & Touche does not provide any specific audit oversight of the utility's risk management function.

4.5 Risk Plan Analysis

FPC's risk management plan for 2002 through 2004 reflects a planned stable use of coal, a 31 percent decrease in the use of oil, and a 36 percent increase in the use of natural gas. Wholesale power that will be purchased is scheduled to decrease by almost two million MWHs and power to be sold is projected to be stable for the next three years.

Regarding the purchase of oil and coal, the strength of the company's plan hinges on reliability and the ability to switch fuel that flexes with the economy and operations. Also, the current plan has the ability to stabilize natural gas prices by avoiding imbalance penalties and dispatching plants on lower cost fuels.

FPC identifies procurement risks in the oil and coal industries as including supplier problems and changes in laws and regulations, weather, and the economy. Natural gas involves different risks such as contractual disputes, default by suppliers, and high price volatility. Lastly, wholesale energy risk includes supplier default, directional price, physical risk, and credit risk.

FPC's strategy for managing risk associated with fossil fuel purchases is based upon a portfolio mix with various types and lengths of contracts. It believes these types of contracts provide reliability, flexibility, and offer least cost for the utility and the rate payers.

Weaknesses identified in the plan when dealing with coal and oil are the limited activities in the spot market thus limiting the number of suppliers. Weaknesses reflected in natural gas are price volatility which can mislead decision making, particularly in the area of hedging. Hedging cannot be effectively managed when catastrophic and force majeure events take place. Supplier risks cannot always be mitigated effectively.

The entire plan reflects FPC's generally conservative approach. The company feels it can manage its fuel purchase portfolio using contractual agreements and fuel mix.

5.0 TECO'S FUEL PURCHASING PRACTICES

5.0 TEC'S Fuel Purchasing Practices

5.1 Tampa Electric Company Profile

As **Exhibit 16** shows, Tampa Electric Company (TEC) is a regulated subsidiary of TECO Energy, Inc. TEC's territory lies adjacent to Tampa Bay and covers an area of 2,000 square miles. The customer accounts for 2001 totaled an average of 584,000. In other pertinent statistics for year end 2001, operating revenues for TEC totaled $1.412 billion and the workforce totaled 2,823 employees. TEC's summer generating capacity stood at 3,592 megawatts for year end 2001 and was generated by 100 percent fossil-fuel of which 97 percent was coal. The remaining 3 percent was oil and natural gas.

TEC has 16 base-load, steam-driven generating units. Ten of those units are coal powered and five use heavy oil. There is one combustion turbine that uses natural gas. To operate those generators in 2001, total fuel consumption was 7,288,712 tons of coal, 558,044 barrels of oil, and 3,387,801 MCF of gas. In total, the fossil fuel bill to fire TEC's generators was $368.9 million.

TEC's 2001 use of natural gas increased to two percent of its fuel mix, which was more than double from the previous year. According to TEC's 2002 Ten-Year Site Plan, the company will rely more on natural gas for future generation needs. TEC's generation will increase from two percent in 2001 to nearly 36 percent gas-fired in 2004. The plans are to convert Gannon station units five and six from coal to natural gas and keep units one through four in reserve. This is anticipated to be done by 2004. Additionally, Polk combustion turbine units three through six will be added and fueled by natural gas. This is scheduled to be complete by 2009.

Regarding the current status of fuel cost-recovery, TEC has Commission approval for $23,129,476 of underrecovery for the period of January through December 2000 and $65,543,259 estimated/actual underrecovery for 2001 for a total underrecovery of $88,672,735 to be recovered in 2002.

5.1.1 Fuel and Wholesale Power Purchasing Organization

Since TEC is primarily coal dependent, its fuel purchasing department is small and has remained that way for several years. As shown in **Exhibit 17**, the Fuels Department currently consists of ten employees and has responsibility for coal, oil, and gas acquisitions, and transportation. **Exhibit 18** depicts the Wholesale Power Marketing Department, which has 14 employees.

TECO ENERGY
2002 ORGANIZATIONAL STRUCTURE

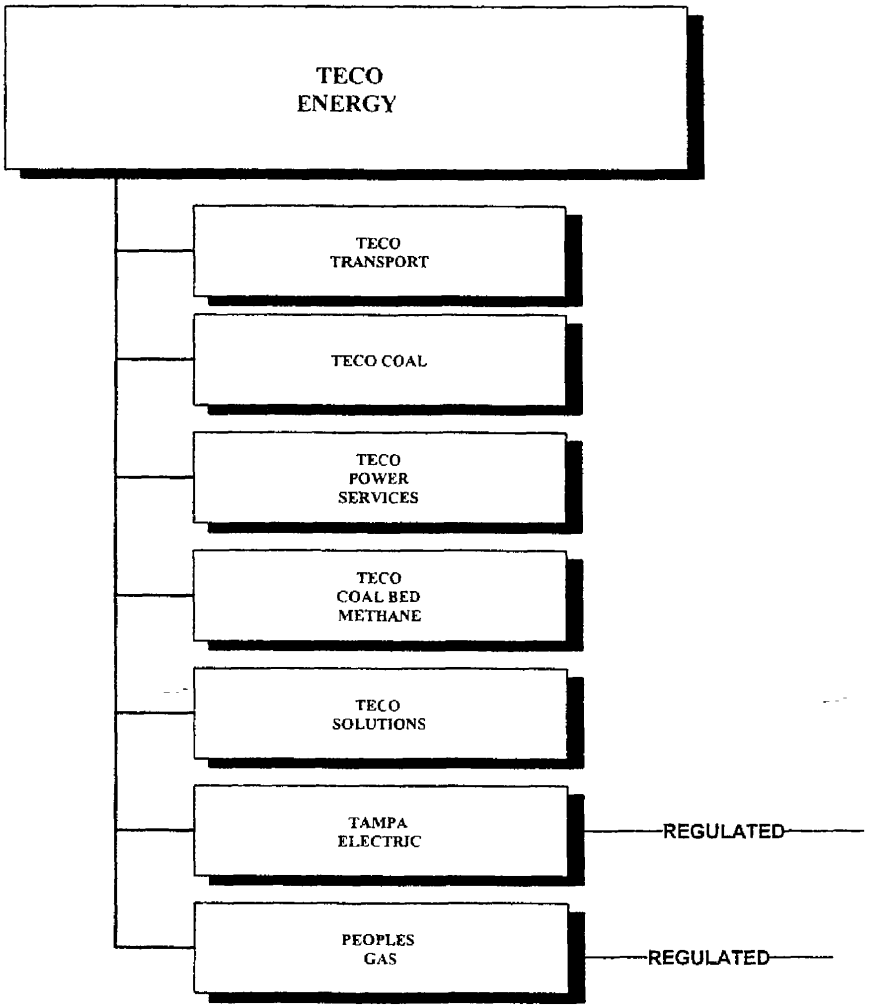


EXHIBIT 16 *Source: 2001 Annual Report*

TAMPA ELECTRIC
FUELS DEPARTMENT

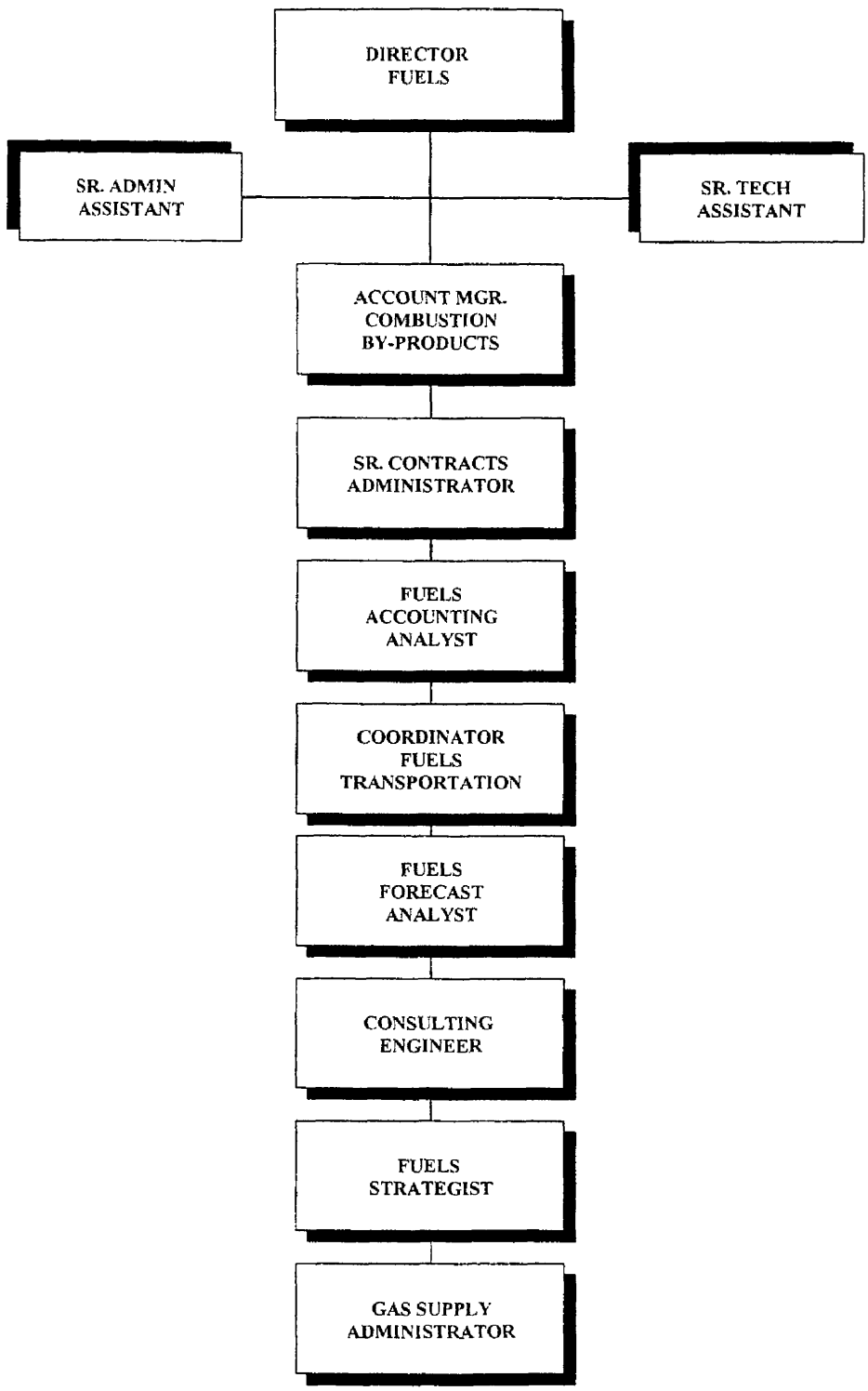


EXHIBIT 17

Source: 2001 Annual Report

TAMPA ELECTRIC
WHOLESALE POWER TRADING

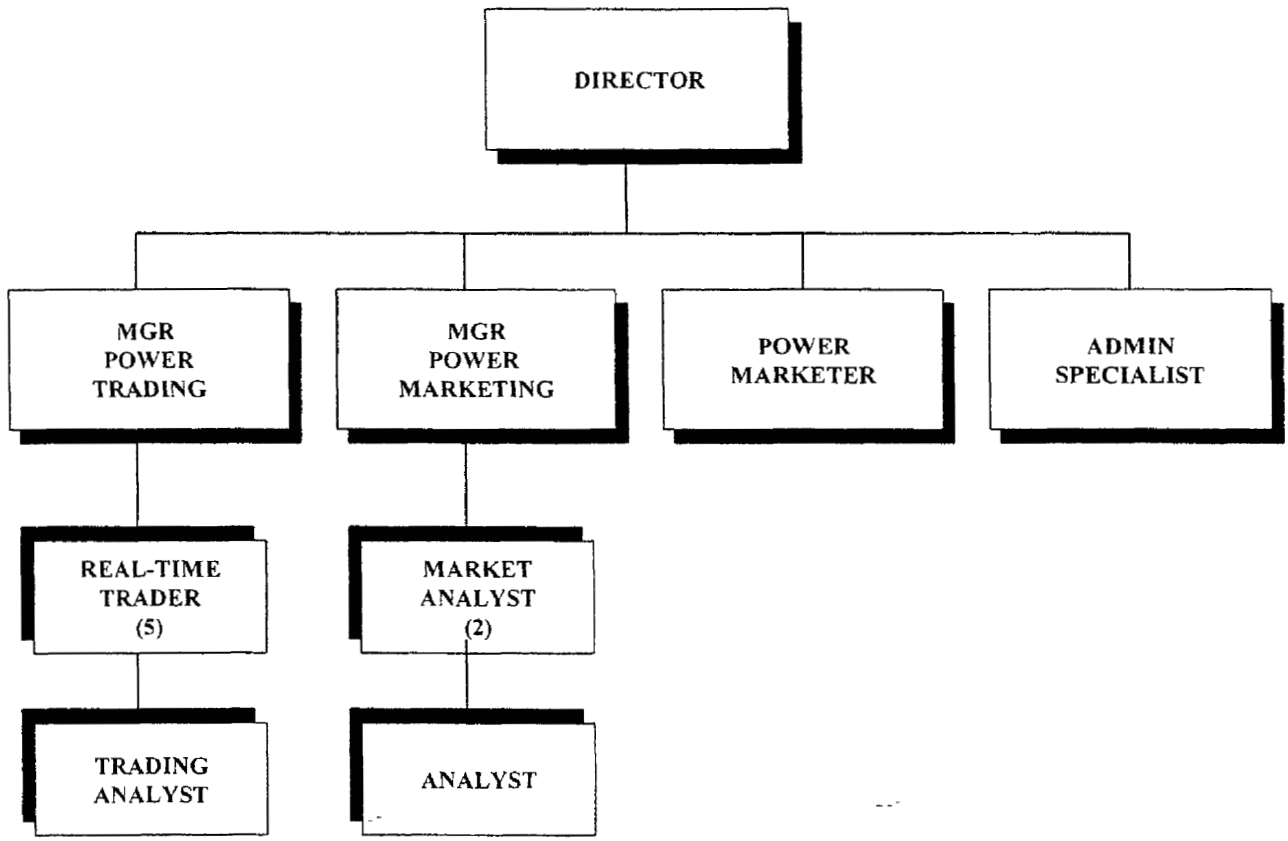


EXHIBIT 18

Source: Dr 1-1

5.2 TEC's Fossil Fuel Purchasing Policies and Controls

The Fuels Department defines its mission as planning, procuring, and coordinating the delivery of fuel which is least-cost, environmentally acceptable, and optimizing power generation capacity. The department has set procedures to accomplish its mission. As noted, 97 percent of TEC's generation is coal-fired, and the Fuels Department's primary objective is the purchasing and transportation of coal.

The procedures for fuel procurement and transportation were last revised in 1995 and TEC asserts they are in the process of being updated. At present, the procedures are used to procure only oil and coal. When the Fuels Department determines there is a need to purchase fuel, it is accomplished through an request for proposal (RFP) and bid solicitation process. Bids are awarded on the lowest acceptable offer based on cents per MMBTU. The supplier will be notified and TEC will negotiate a contract.

Fuel transportation also involves an RFP process. Bids are not evaluated on price alone. The overall evaluation considers delivered price, supplier capability, financial stability, and historical information. Currently, a subsidiary of TECO Energy, TECO Transport, supplies coal transportation for TEC. In addition, Tampa Electric has rail and trucking contracts and does business with other carriers for the transport of foreign coal.

Since there is little volatility in coal pricing, TEC believes the optimal way to control coal prices is contractually using a mix of long and medium-term agreements. Additionally, TEC negotiates flexibility in the contracts such as quantity, flexible scheduling, early pay discounts, and coal quality adjustments. These provisos protect both the company and ratepayers and assure lower costs to the ratepayers.

In 2001, as **Exhibit 19** demonstrates, coal purchases had little variances with approximately [redacted] percent purchased on fixed short-term and [redacted] percent on fixed and indexed long-term. Also in 2001, all gas, distillate oil, and residual oil were bought on the spot market. Due to relatively stable coal prices and TEC's primary reliance on coal, TEC has never used exchange-traded options, swaps, or derivatives as a form of hedging in the purchase of any fuel.

When TEC put natural gas-fired Polk Unit #2 online in July of 2000, the Fuels Department was unfamiliar with the gas purchasing process. Therefore, it asked the TECO Energy subsidiary, TECO Peoples Gas, to administer all natural gas purchases. In May 2002, the Fuels Department hired an experienced gas marketing administrator, and administering TEC's natural gas purchases is now an in-house operation. TEC has a long-term contract with Florida Gas Transmission for the transportation of gas to the new Bayside units.

In October 2001, TECO Energy's Board of Directors sanctioned the creation of the Risk Authorizing Committee (RAC) . It is to be composed of senior company officers and act on behalf of all parent company risk activities. The Committee's oversight responsibilities include:

TEC'S Fossil Fuel Purchases by Type of Contract

Purchased as	Coal Percent				Residual Oil as %				Distillate Oil as %				Natural Gas as %	
	1998	1999	2000	2001	1998	1999	2000	2001	1998	1999	2000	2001	2000	2001
Fixed Long Term														
Indexed Long Term														
Fixed Medium Term														
Indexed Medium Term														
Fixed Short Term														
Indexed Short Term														
Spot Market														

EXHIBIT 19

Source. DR-1-8

- Establishing quantitative risk limits
- Establishing guidelines for risk management measurement
- Approving risk strategies and methodologies
- Enforcing limit violations and trader misconduct
- Frequent review of risk reports and portfolio summaries

As of October 2001, TEC had a written risk management policy and RAC had its first committee meeting in December. TEC's risk management policy conforms to the criteria necessary for a risk management program.

TEC's procedures appear adequate for coal and minor oil acquisitions, but need a complete updating to include all gas purchasing. TEC needs to prepare for short-term fuel procurement changes and consider other long term planned fuel usage changes. In particular, it must consider it is entering into the natural gas market which has experienced price volatility. The company has already taken some steps to address this issue by establishing a Risk Committee, risk procedures, and a risk management department. TEC has some of the basic controls necessary for a risk management program that were referenced in Section 2.6, but lacks the following:

- Updated procedures for all fuel departments and no existing wholesale energy procedures
- Designated front, middle, and back offices
- Personnel experienced in commodity trading and portfolio management

5.3 TEC's Wholesale Energy Purchasing and Sales Policies and Controls

TEC's wholesale energy purchases and sales are transacted by the Wholesale Power Trading Department. The department had no written policy or procedures and no plans to produce them. All operations are verbally expressed step-by-step and communicated as needed.

Wholesale Power Trading department management stated that its wholesale energy plan is dependent on generating unit availability, heat rate, current fuel prices, and market conditions. Fuel price volatility has no effect. The company energy portfolio uses long and short-term transactions. Typically they will sell surplus on short-term.

Exhibit 20 depicts a three-year history of TEC's purchases and sales. Purchases have been consistent in the three-year period. Sales in 2001 were less than half the amounts for 1999 and 2000. TEC has never used any form of options associated with hedging.

TEC's Wholesale Megawatt Hours of Purchases, Sales, and Options (000)			
	1999	2000	2001
Purchased*	3,059	2,921	3,142
Sales	1,721	1,814	826
Call Options	0	0	0

EXHIBIT 20 *Source: FPSC Forms A6, A7, & A8.*

**Includes Qualifying facilities.*

TEC is operationally remiss with the lack of procedures in its Wholesale Power Trading Department. Wholesale Power Trading must draft and write procedures pertinent to its entire operation. Wholesale energy sales and purchases are highly important to the company, stockholders, and rate payers. They involve financial transactions and the lack of written internal control hinders the control process and offers no audit trail.

5.4 TEC's Risk Management Plan

As a culmination of risk planning for fuel purchases and hedging, TEC was asked to submit a risk management plan that would summarize its strategy for year 2002. Included is an excerpt of section four which is the basic strategy of the plan. The company responses are verbatim and identified in *italics*.

IV. Risk Management Strategy

A. Risk Identification

1. Identify each type of risk that the utility encounters when procuring:

a. Coal

b. Residual Oil

c. Distillate Oil

d. Natural Gas

e. Purchased Power

TECO Energy's Risk Management Policy recognizes the following types of risks for all commodity transactions:

Market Risk: *Market risk is the potential change in value of a commodity contract caused by adverse changes in market factors (price and volatility). This includes:*

Price Risk: Price risk refers to the uncertainty associated with changes in the price of an underlying asset. For instance, if Tampa Electric has a short position in the market (e.g., needs to meet load requirements by purchasing electricity or gas), it will be susceptible to price increases. Conversely, if Tampa Electric has a long position (e.g., excess generation or gas supply), it is exposed to decreases in market prices.

Time Spread Risk: This is the risk that the relationship between two points (i.e., one month versus six months) on the forward curve is not constant over time. Because the shape of the fuel or electricity forward curve changes to reflect the market's expectations of spot and future fuel or electricity prices, the relationship between any two points on the curve is not always constant.

Liquidity Risk: Liquidity risk is associated with the lack of marketability of a commodity. It includes the risk of an adverse cost or return variation stemming from the lack of marketability of a financial instrument at prices in line with recent sales. Liquidity risk may arise because a given position is very large relative to typical trading volumes of like commodity and contract tenor, or because market conditions are unsettled. Liquidity risk is usually reflected in a wide bid-ask spread and large price movements in response to any attempt to buy or sell. A firm facing the need to quickly unwind a portfolio of illiquid instruments may find it necessary to sell at prices far below fair value.

Basis Risk: Basis risk is the risk exposure due to a difference in commodity value between different delivery points. Electricity markets are regional. Locational prices can be different because of differences in both supply costs and the cost of transmission between the two locations. These price differences are dynamic, primarily due to changes in transmission availability between the two locations.

Option Risk (Convexity): Option risk is associated with purchasing or writing an option, and represents the risk that the value of an option at expiration or upon exercise is different from the premium paid when the option was sold. Types of option risk include delta risk, the risk posed by a change in the price of the underlying instrument, gamma risk, the risk of a change in the option's delta value due to changes in the price level of the underlying asset, and vega risk, the risk posed by an overall change in the market volatility of the underlying instrument.

Volume Risk: Volume risk is the potential adverse economic impact of unanticipated changes in supply or demand. Tampa Electric faces supply risk, because there is uncertainty associated with the availability of generating units or fuel availability for those units. When generating units fail, Tampa Electric must replace them with other units or through purchases at market prices that may exceed the cost of the failed generator. Tampa Electric also faces demand risk where there is uncertainty associated with customer demand, and thus uncertainty in the determination of the purchase volumes necessary to supply such demand. Either an excess supply that must be sold into a market where prices are falling or the need to purchase supply when prices are rising can lead to financial loss.

Credit Risk: *Credit risk is the risk of financial loss due to a counterparty's failure to fulfill the terms of a contract on a timely basis. It includes both settlement risk associated with payment for fuel or energy received, as well as potential risk, which reflects the risk that the counterparty defaults on an obligation to provide or receive fuel or energy. Credit risk depends on the probability of counterparty default, the amount of counterparty exposure, and the volatility of markets.*

Administrative Risk: *Administrative risk relates to potential risk of loss associated with deficiencies in the internal control structure and management reporting due to human error, fraud or a system's inability to provide adequate capture, storage and report functionality.*

Also see the company's response to Interrogatory No. 110 in Staff's Second Set of Interrogatories, Docket No. 010001-EI, for a list of issues that Tampa Electric considers when assessing risk associated with fuel and wholesale energy transactions. A copy of the response is provided as Attachment A to this response.

2. **Separately identify the utility's goal(s) in managing the recognized risks associated with each fuel or power purchases.**

Tampa Electric's goals in managing risks associated with fuel or power purchases are concentrated on minimizing supply or volume risk to ensure reliability of electric supply to its customers at a reasonable price.

3. **Describe how the utility decides what an acceptable level of risk when associated with fuel procurement and purchased power transactions.**

Tampa Electric is responsible for providing reliable electric service to its customers at a reasonable price. To this end, supply risk is minimized by maintaining adequate fuel stocks and a balance of long-term, short-term and

spot market contracts for fuel purchases, coordinating generating unit maintenance outages, purchasing reliable power and maintaining a minimum 15% capacity reserve.

B. Describe your fossil fuel procurement and wholesale purchased power plans separately for 2002. Please include:

General

1. Types of fuel used and power purchased or sold
2. Quantities and mix and by percent
3. How purchased and by percent
4. Justify all purchasing strategies in items 1-3.

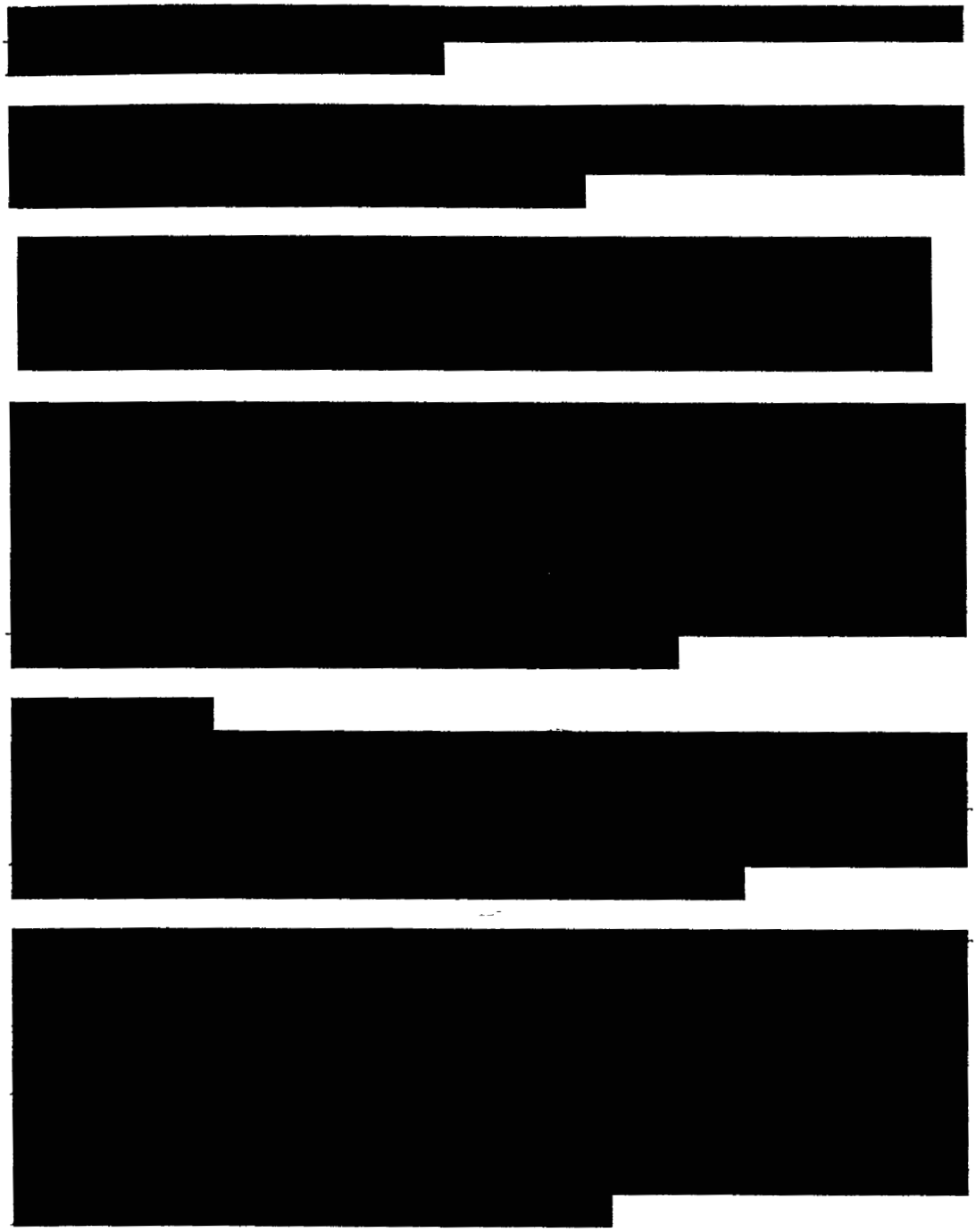
Specific

1. What derivatives will be used and how
2. What will be hedged and how
3. Savings (net of expenses) anticipated and why

SWOT

1. Describe the strengths of the plan
2. Describe the weaknesses of the plan
3. Describe the opportunities within the plan
4. Describe the threats and possible countermeasures

[redacted]



C. **Audits**

1. **Internal Auditor – describe the level of audit oversight that the utility's internal auditor provides to the utility's risk management efforts.**

Internal fuel audits were provided in response to Data Request No. 2. In addition, oversight has been provided by review of the FPSC auditors.

2. **Outside Auditors**

   a. **Indicate which outside auditors, if any, provide oversight to the utility's risk management efforts.**

   b. **Describe the level of audit oversight that these outside auditors provide to the utility's risk management efforts.**

   Tampa Electric's outside auditors do not provide oversight to the utility's risk management efforts.

5.5 Risk Plan Analysis

TEC's risk management plan for 2002 through 2004 reflects a decline in coal use and an increase in natural gas. Projections are for its wholesale power purchases to decline by 42 percent and its sales to increase more than 50 percent.

The company defines procurement risk into five areas: environmental, exposure to market movement, supplier credit, product delivery, and product quality. Additionally and exclusive of its current operations, TEC listed nine risks identified with commodity transactions. These risks are listed and defined in Section 5.4. In 2002, TEC has not purchased derivative instruments in either fuel or wholesale power. However, given that risk management is a dynamic process, the company plans to continually re-evaluate its procurement strategies to determine the appropriate given current market conditions.

To mitigate risk, TEC plans to continue to purchase all fossil fuel with a balance of term-contracts and spot market. This plan reduces uncertainty with known prices and a volume for a time-certain. There are vulnerabilities to possible rising prices but the company asserts that based upon experience, it is the best possible plan for procurement. It appears TEC's plan will be status-quo for 2002. Company management asserts that current fuel acquisition is adequate and time-tested.

6.0 GULF'S FUEL PURCHASING PRACTICES

6.0 Gulf's Fuel Purchasing Practices

6.1 Gulf Company Profile

Gulf is a regulated subsidiary of the Southern Company and provides service to 7,400 square miles of Northwest Florida. In 2001, customer accounts totaled an average of 376,520. For year end 2001, operating revenues for Gulf totaled $725 million and the workforce consisted of 1,307 employees. Gulf's summer generating capacity stood at 2,250 megawatts for year 2001 and was 100 percent generated by fossil-fuel, of which 94 percent was coal-fired.

As of December 31, 2001, Gulf has eighteen base-load on-line generating units, fourteen with steam turbines, and four with combustion turbines. Eleven of those units are coal powered, six use natural gas, and one uses light oil. To operate those generators in 2001, total fuel consumption was 4,360,069 tons of coal, 28,924 barrels of oil, and 1,134,898 MCF of gas. In total, the fossil fuel bill to fire Gulf's generators was $199.7 million.

Citing Gulf's 2002 Ten-Year Site Plan, the company will rely more on natural gas for future generation needs. By June 2002, Lansing Smith Unit 3 will be on-line and will generate 574 megawatts. Unit 4 will be in-service by 2008. Both units will be fired by natural gas with Unit 3 using 87,000 MMBTU per day.

For the current status of fuel cost-recovery, Gulf has Commission approval for $6,907,921 underrecovery for the period of January through December 2000; $17,609,612 estimated/actual underrecovery for 2001; and $10,701,691estimated underrecovery for 2002.

6.1.1 Fuel and Wholesale Power Purchasing Organization

Exhibit 21 depicts Gulf as it relates to the Southern Company regarding fuel acquisitions, wholesale energy, and risk management. As shown in **Exhibit 22**, the Southern Company Services (SCS) Fuel Services Department consists of 70 employees and has responsibility for fossil fuel acquisitions for the entire parent company. Also, the Southern Company has a risk management department within SCS. As **Exhibit 23** shows, risk management activities are functionally segregated to assure proper control.

SOUTHERN COMPANY
FUEL ORGANIZATIONAL STRUCTURE
2002

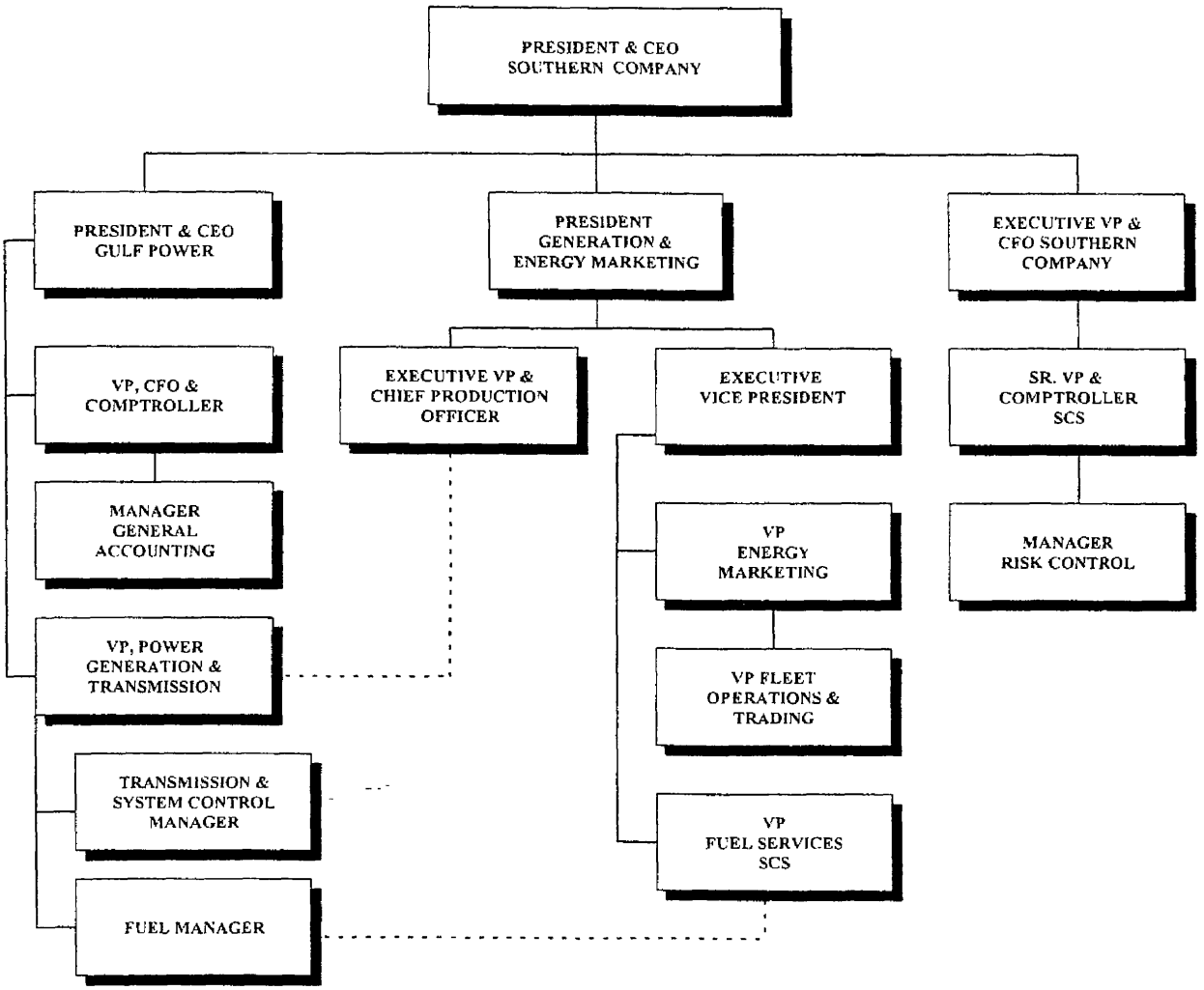


EXHIBIT 21

Source: DR-2-1.

SOUTHERN COMPANY SERVICES
FUEL SERVICES DEPARTMENT
2002

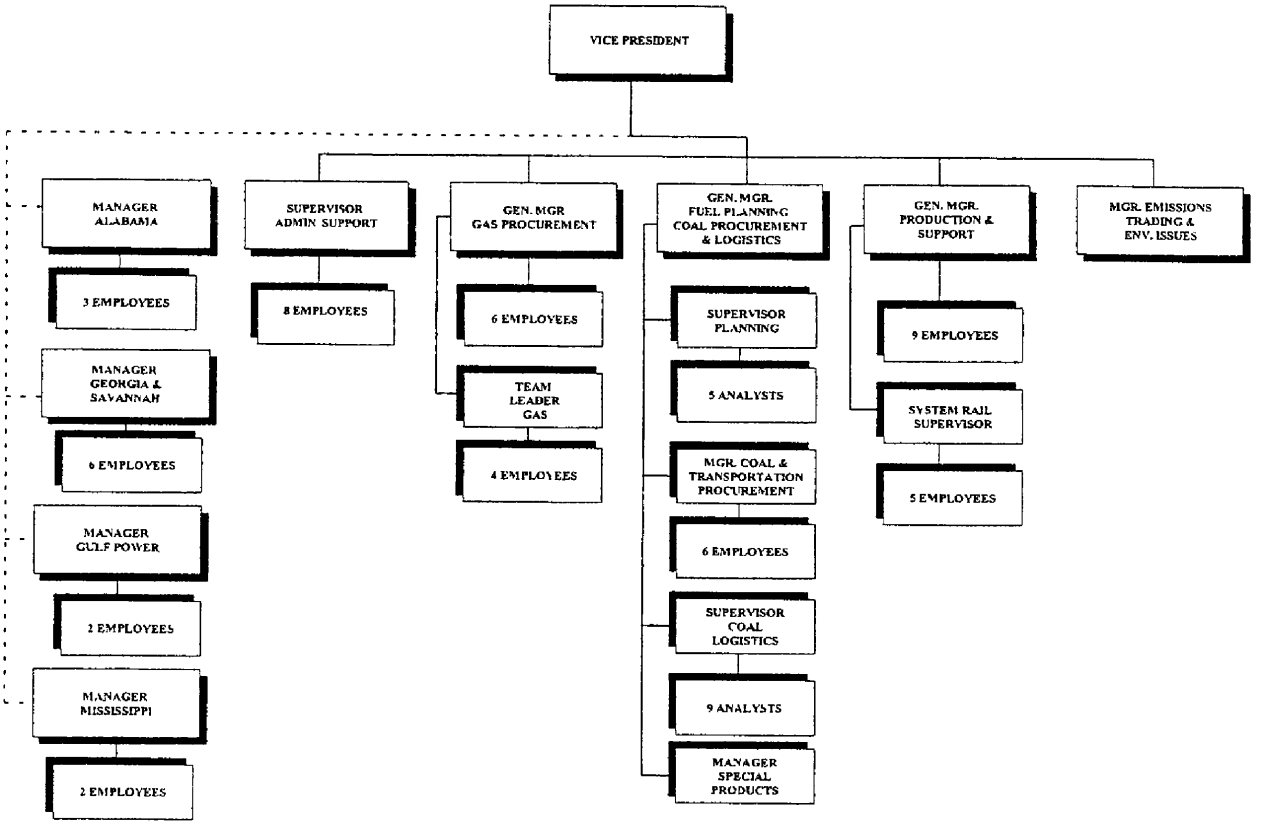


EXHIBIT 22

Source DR 1-1

SOUTHERN COMPANY SERVICES
RISK MANAGEMENT FUEL SERVICES
SEGREGATION OF DUTIES
2002

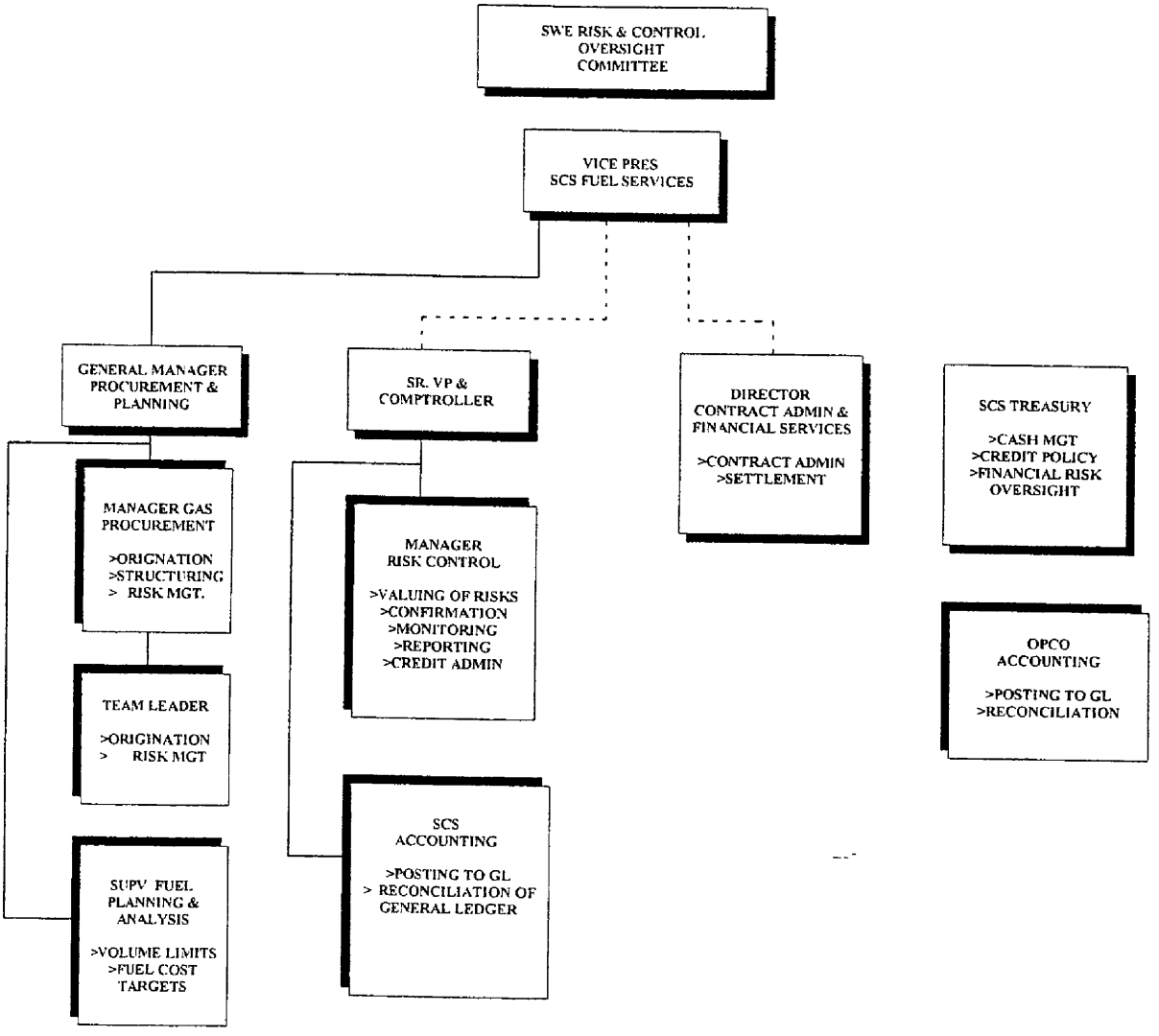


EXHIBIT 23

Source DR 1-1.

6.2 Gulf's Fossil Fuel Purchasing Policies and Controls

Gulf's fuel is purchased by the SCS Fuel Services, which is a subsidiary of the Southern Company. SCS acts as an agent for Gulf and works under the oversight of a fuel manager who reports to the Senior production Officer of Gulf Power Company. All contracts are negotiated by SCS employees under the auspices of the Gulf fuel manager.

[redacted]

Gulf states these procedures are outdated and are currently being revised. They lack specific detail such as procedure number, forms used for bids, and contract content. Although these procedures do not include gas and oil contract policy, gas procurement is addressed in the Risk Management Policy provided, and it is being revised to include oil.

Gulf has a risk committee referred to as the Southern Company Oversight Committee that approved risk management guidelines in 1997. The guidelines apply to any company business unit engaged in risk management activities. In particular, this includes the purchase of gas, coal, and wholesale energy. The general guidelines specify the following objectives in energy acquisition:

- Deliver the lowest energy cost to customers
- Maximize returns on resources
- Provide reliability of power supply

Additionally, natural gas fulfillment function objectives are more specific and are listed as follows:

- Deliver risk-optimized gas to resources
- Deliver risk-optimized gas to support sales of wholesale energy
- Optimize natural gas assets associated with supply, transportation, and storage
- Support operations for cross-commodity spreads

The approved instruments under this policy are futures, forwards, options, and swaps. The acquisition of oil is not addressed in these guidelines. However, the guidelines include the necessities for a valid hedge program: credit limits, VaR, market risk, legal, segregation of duties, monitoring and reporting. Segregation of duties is of key importance in risk management. Southern acknowledges this and their risk control procedural process demonstrates that concept as shown in Exhibit 23.

Gulf's Fossil Fuel Purchases by Type of Contract

Purchased as	Coal Percent				Distillate Oil as %				Natural Gas as %			
	1998	1999	2000	2001	1998	1999	2000	2001	1998	1999	2000	2001
Fixed Long Term	[redacted]											
Indexed Long Term	[redacted]											
Fixed Medium Term	[redacted]											
Indexed Medium Term	[redacted]											
Fixed Short Term	[redacted]											
Indexed Short Term	[redacted]											
Spot Market	[redacted]											
Storage Inv.	[redacted]											

EXHIBIT 24

Source: DR 1-8

Gulf has the ability to store natural gas. In 1997, it contracted to store up to 100,000 MMBTU and, at any one time, it can withdraw 10,000 MMBTU per day. If the stored gas is not needed by Gulf's power plants, SCS may buy it and compensate the company at market value and restore the inventory after depletion.

SCS, on behalf of Gulf, needs to update, revise, and create procedures that would enhance and complement all of Southern Company's risk management policy. It appears much more detail is needed to assure proper management control over fuel related transactions. Southern should also consider further department consolidation if it intends to hedge fuel and wholesale energy for its regulated companies.

6.3 Gulf's Wholesale Energy Purchasing and Sales Policies and Controls

Wholesale energy purchases and sales are transacted by SCS Energy Marketing on behalf of Gulf Power Company. Energy Marketing is part of Southern Wholesale Energy. The Gulf Generation Service Department acts as liaison between Gulf and Southern Wholesale energy. Like SCS fuel services, Southern Wholesale Energy also has segregation of duties as described in Section 6.2. It is set up similarly to Exhibit 23 and assures a risk management control over wholesale energy trading.

The Energy Marketing Department states that its wholesale energy plan is dependent upon the following:

- Direct the lowest cost off-system energy to territorial customers if there is a savings
- Jurisdictional resources are marketed elsewhere and treated as an economy sale
- If energy that is not jurisdictional is marketed elsewhere, all losses and gains will be directed to the wholesale jurisdiction

As Gulf's agent, SCS does not enter the wholesale energy market to hedge, rather it uses the off-system approach mostly in short-term. In the short-term, SCS constantly compares existing resources with the availability of off-system energy resources. If a purchase can lower prices, SCS will institute a transaction. SCS also looks at long-term and determines if a purchase would be conducive for a system mix.

Gulf also participates in the Southern electric system power pool and states that the off-system spot market has desirable low-cost energy savings. This is especially true when purchased power is cheaper then company generation. The balanced approach is reliable and is low-cost to Gulf customers.

As noted in **Exhibit 25**, Gulf has substantially increased its purchases in wholesale power. As management states: Gulf buys energy if it is cheaper than we can produce it and we will sell if the price is greater. Wholesale energy was cheaper in 2001; therefore, Gulf purchased 37 percent more wholesale power when compared to 2000. As a result, sales have dropped 30 percent when comparing the same two years. Gulf had no option activity for financial hedging purposes during the last three years.

Gulf's Wholesale Megawatt Hours of Purchases, Sales, and Options (000)			
	1999	**2000**	**2001**
Purchases*	1,417	1,858	2,479
Sales	4,001	3,525	2,710
Call Options	n/a	n/a	n/a

EXHIBIT 25 *Source: FPSC Forms A6-A9.*

**Includes Purchases from Qualifying Facilities.*

6.4 Gulf's Risk Management Plan

As a culmination of risk planning for fuel purchases and hedging, Gulf was asked to submit a risk management plan that would summarize its strategy for year 2002. Included as an excerpt of the plan's strategy which is part four. The company responses are verbatim and identified in *italics*.

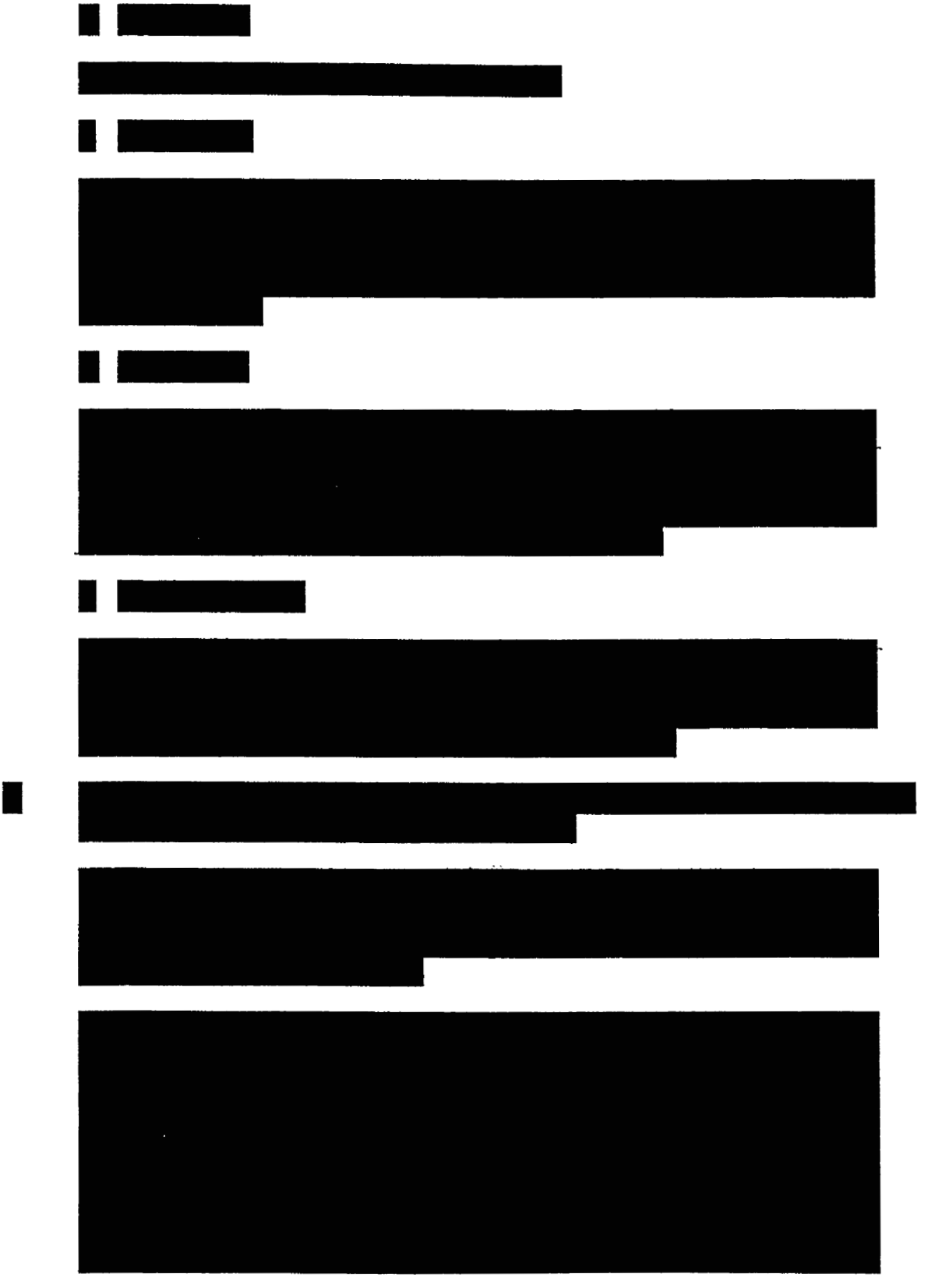
IV. Risk Management Strategy

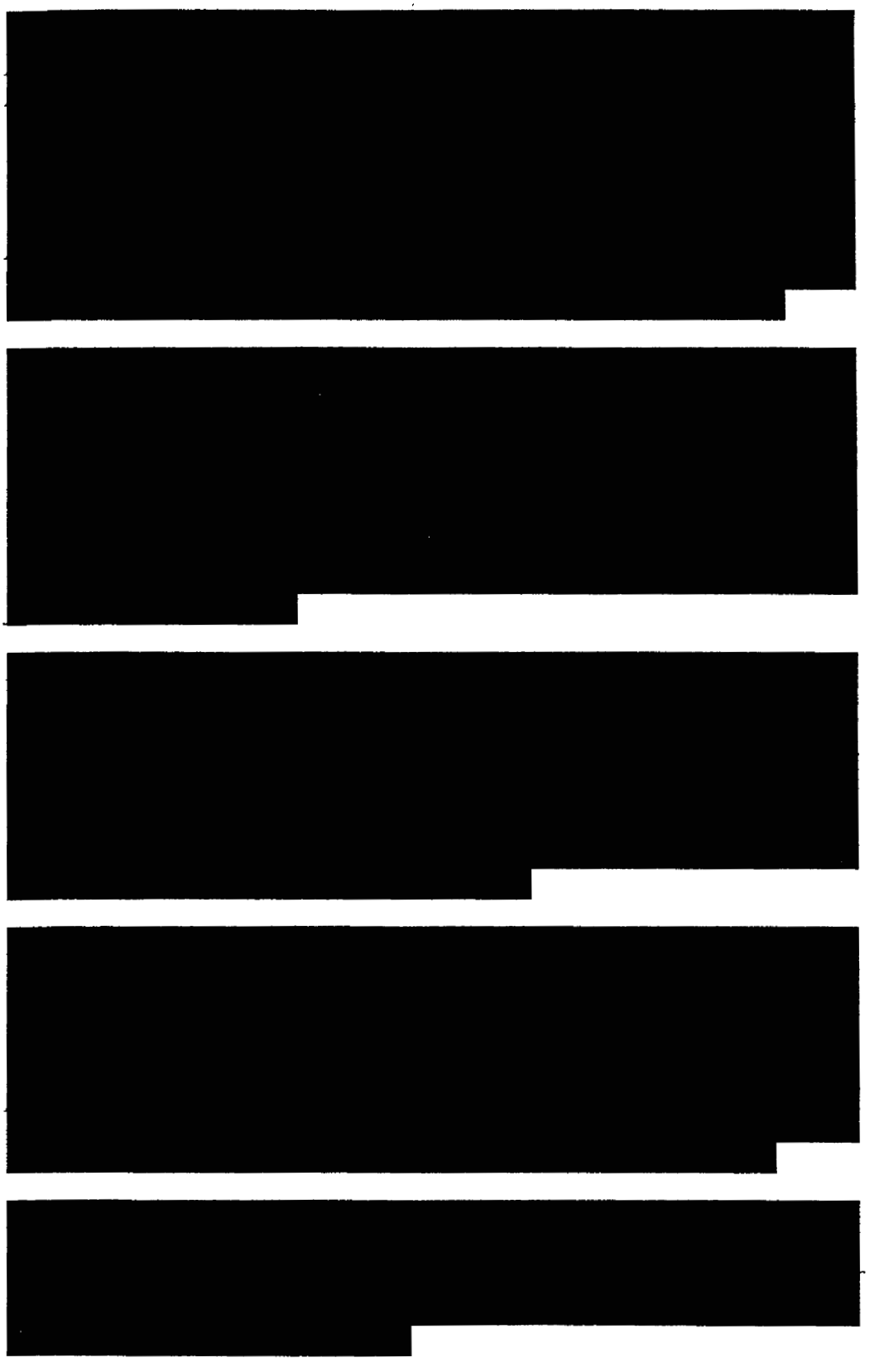
A. Risk Identification

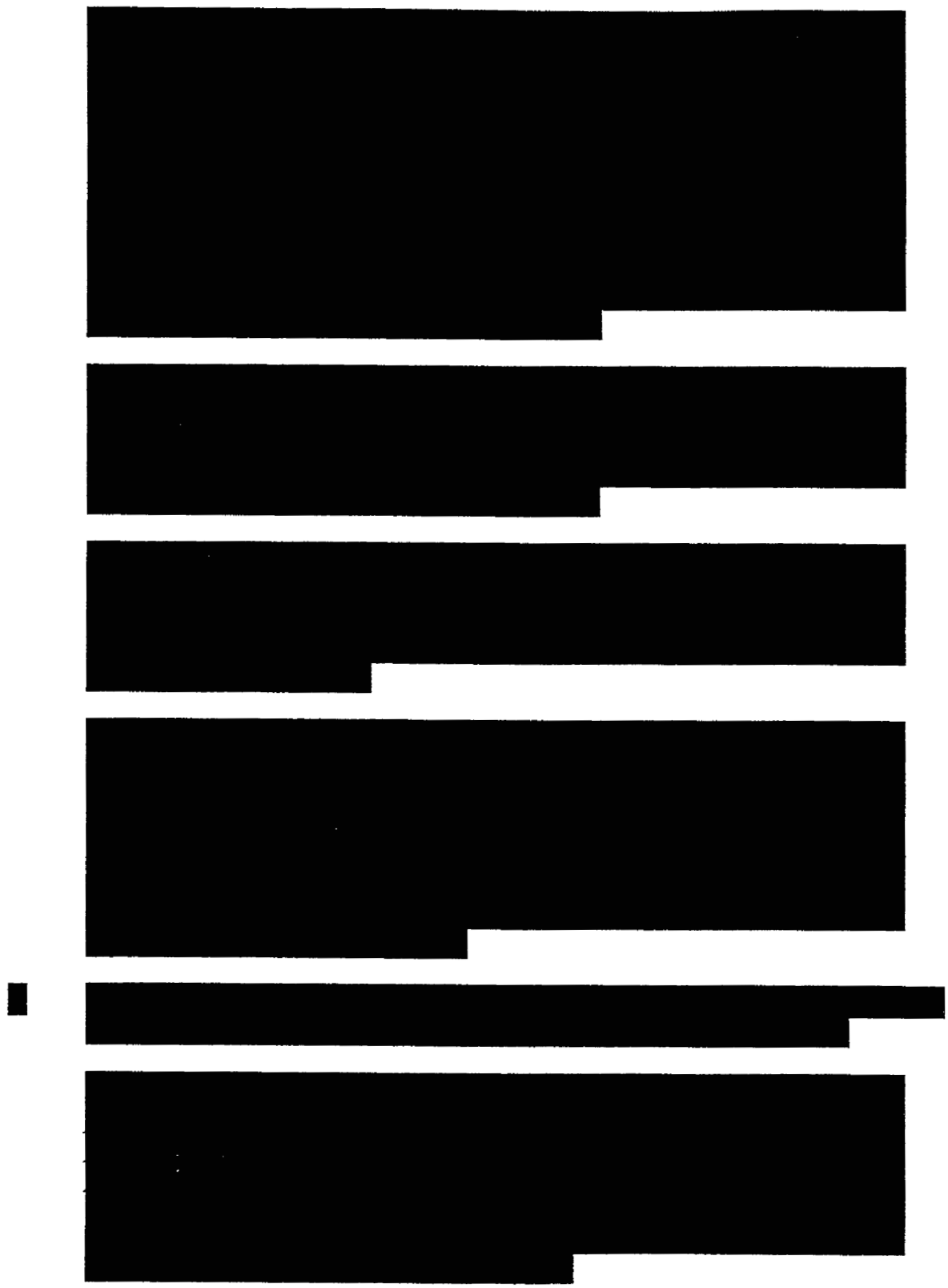
1. Identify each type of risk that the utility encounters when procuring:

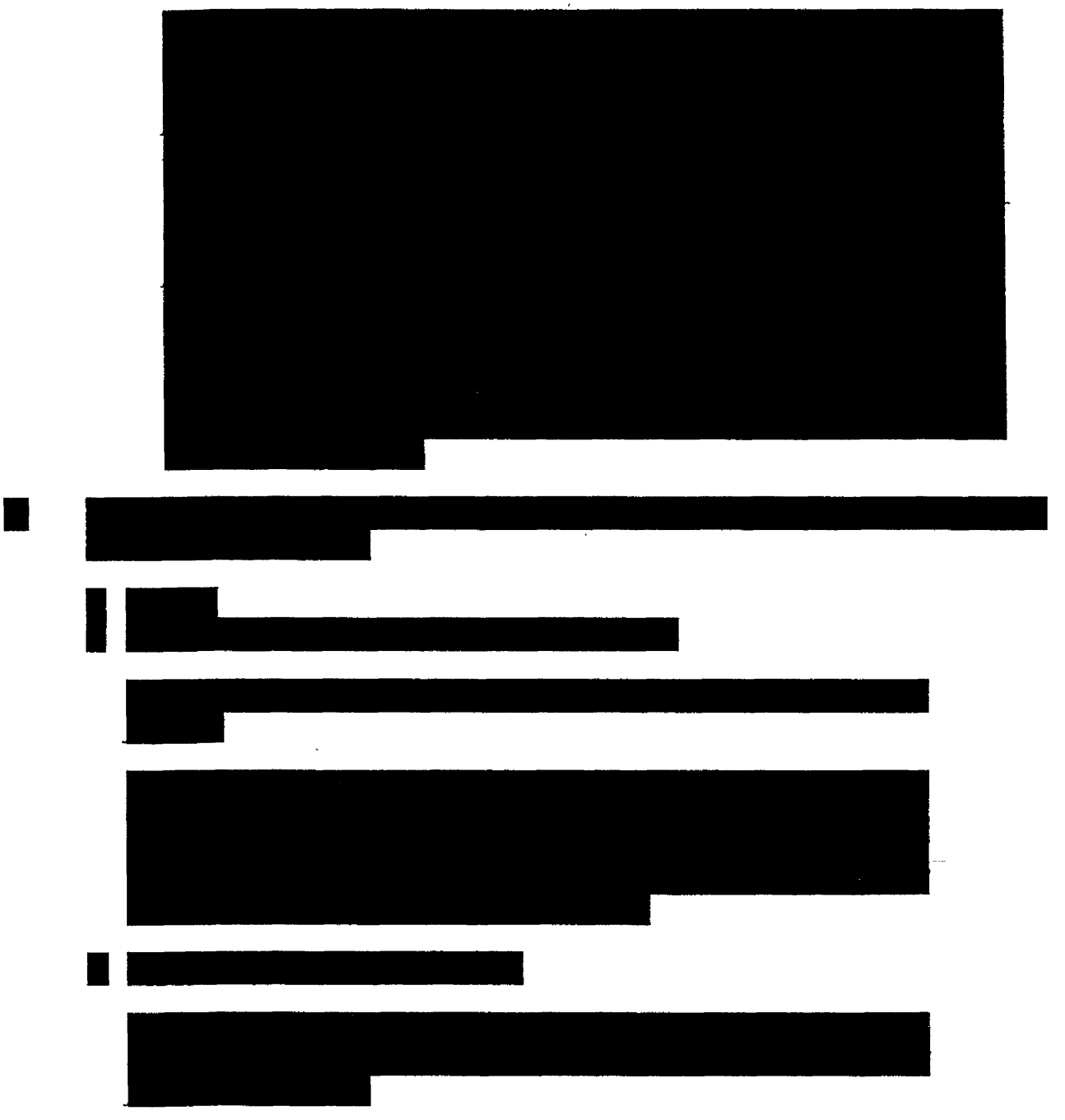
a. Coal

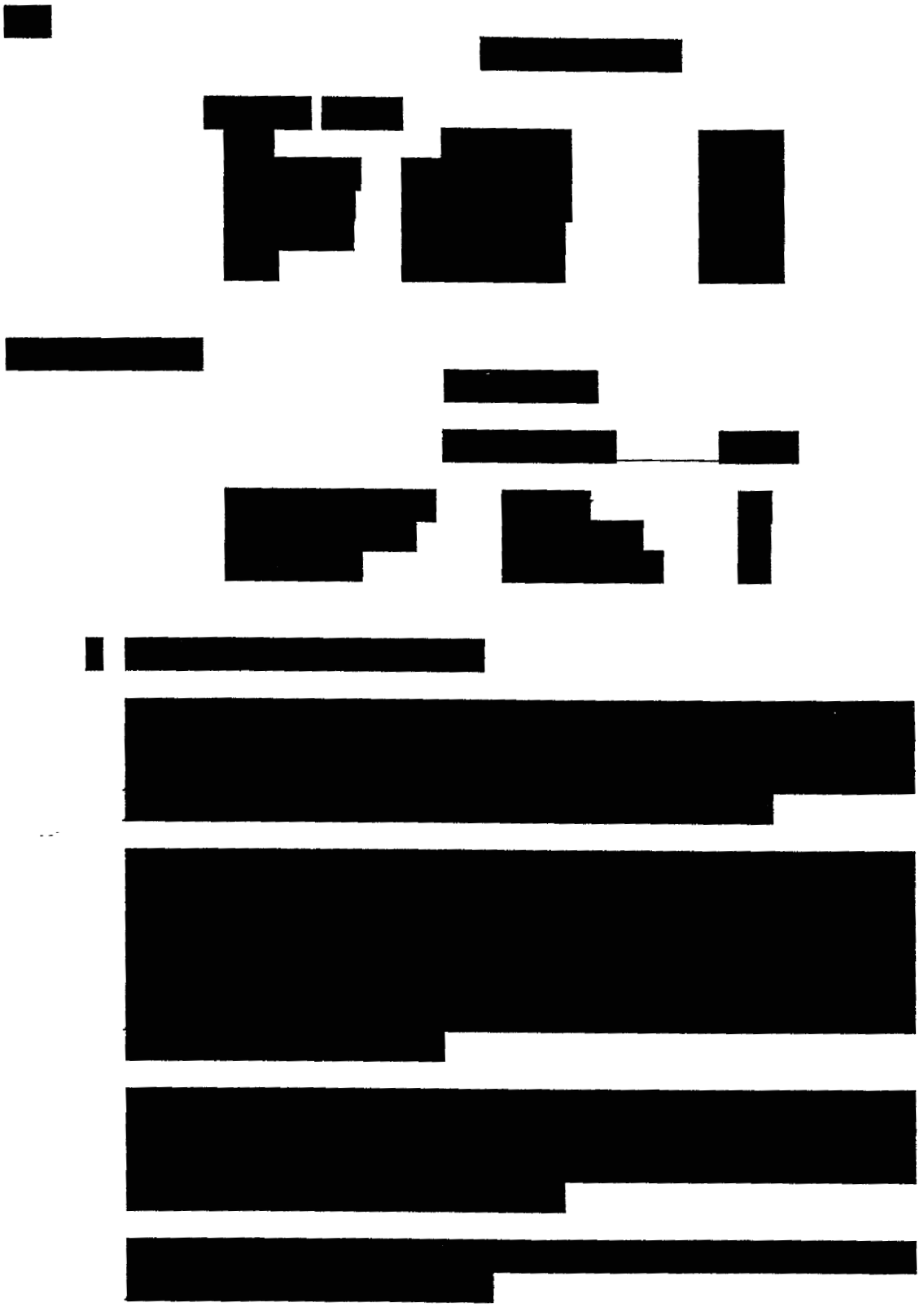
[redacted]

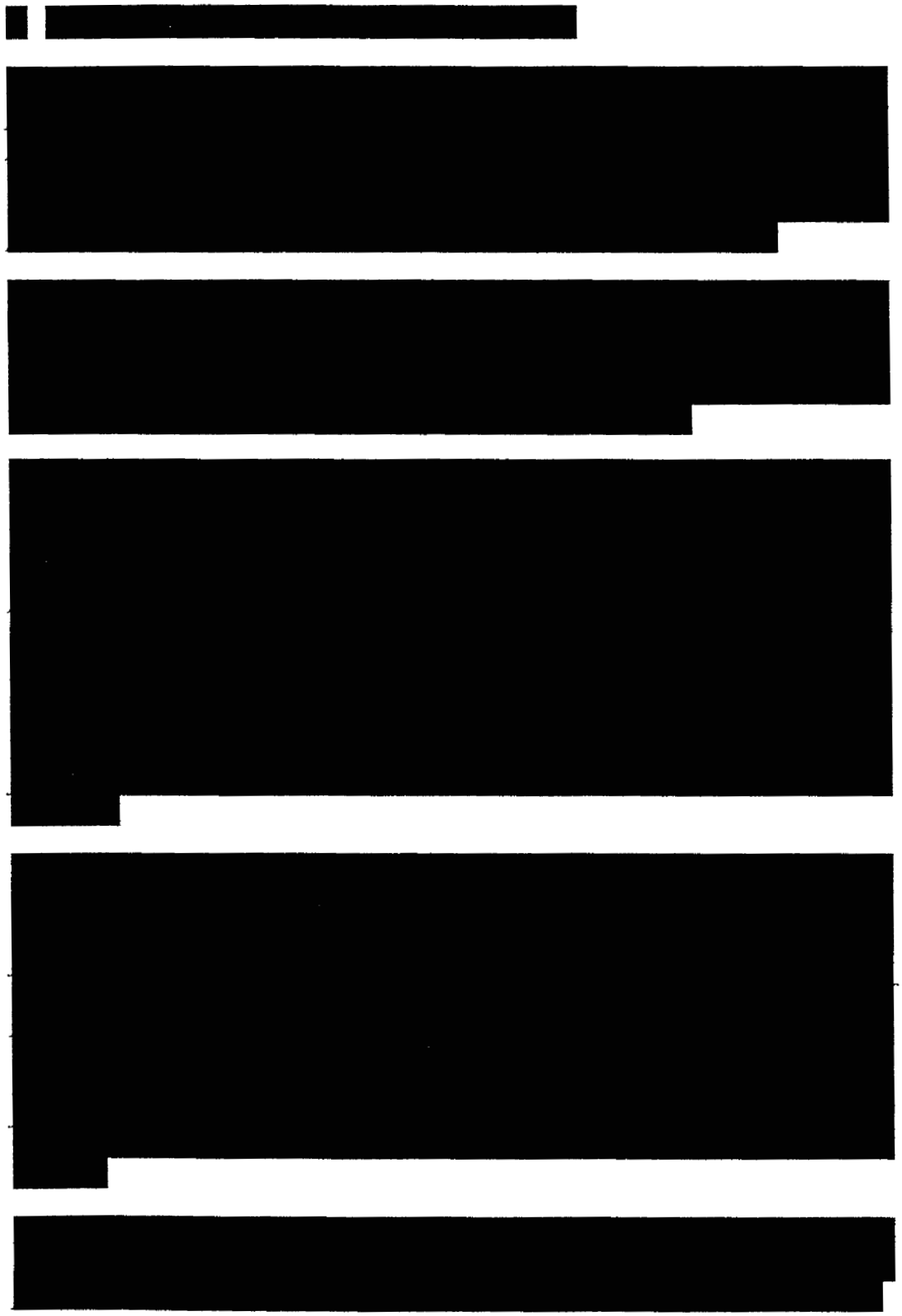


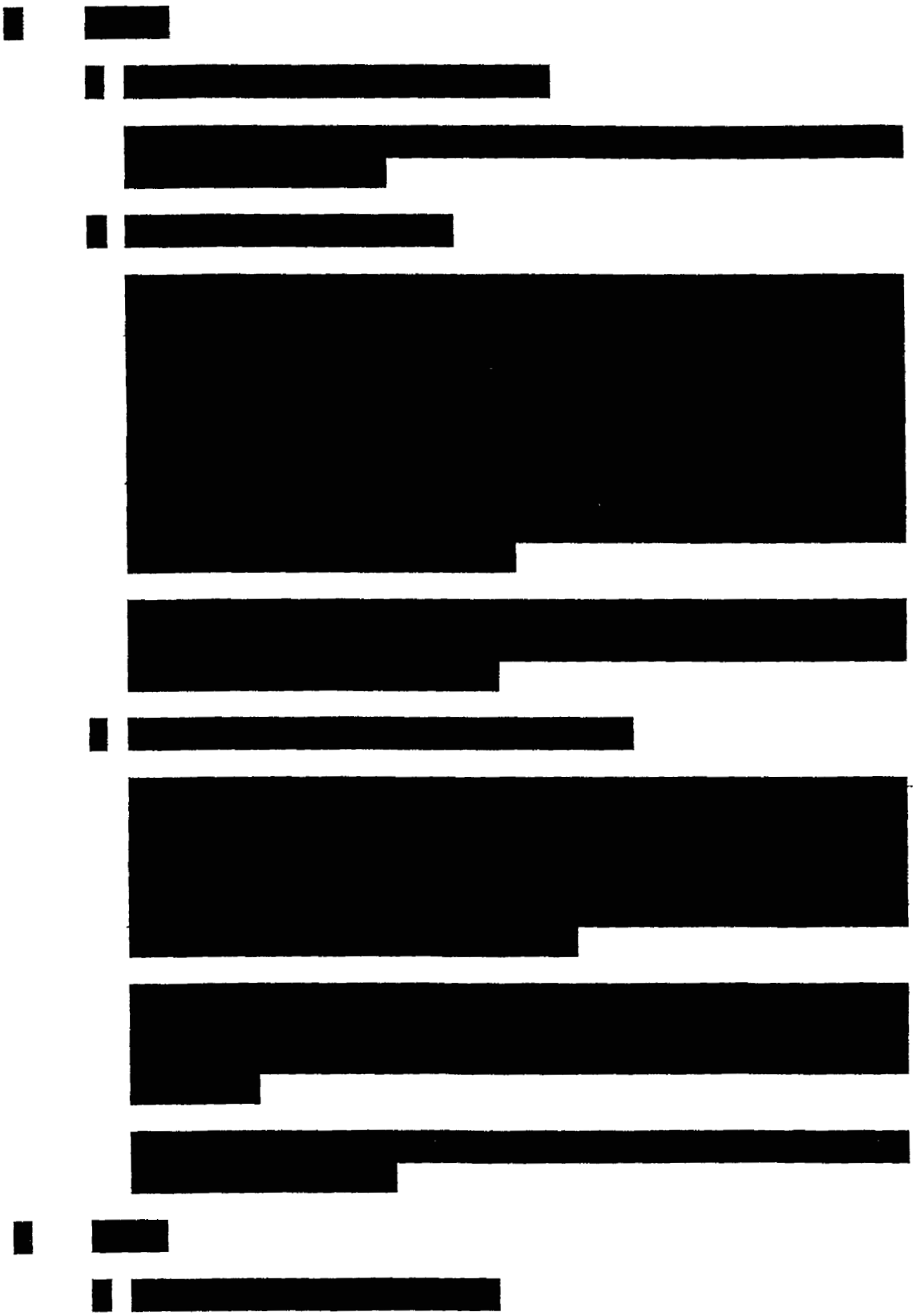


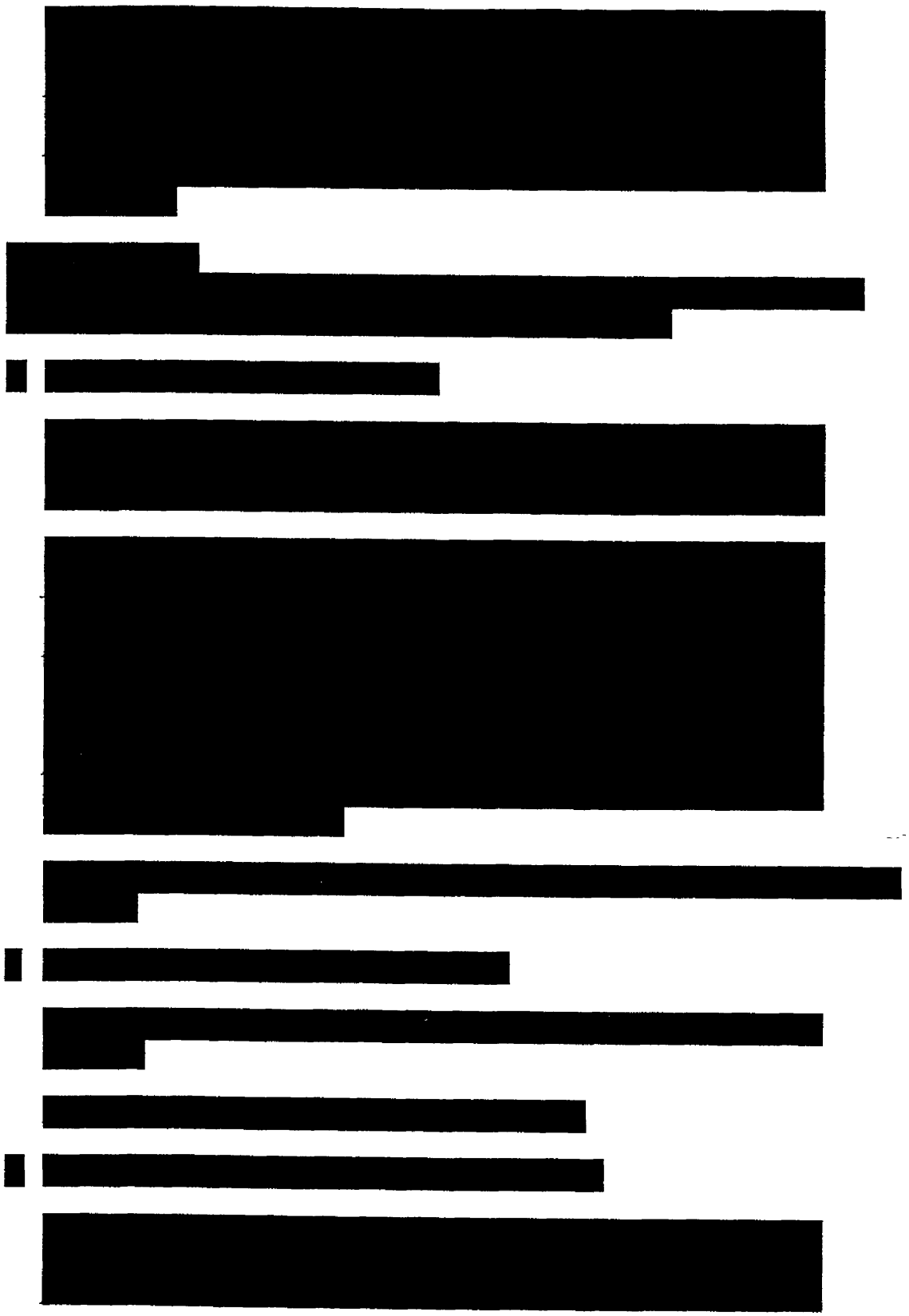


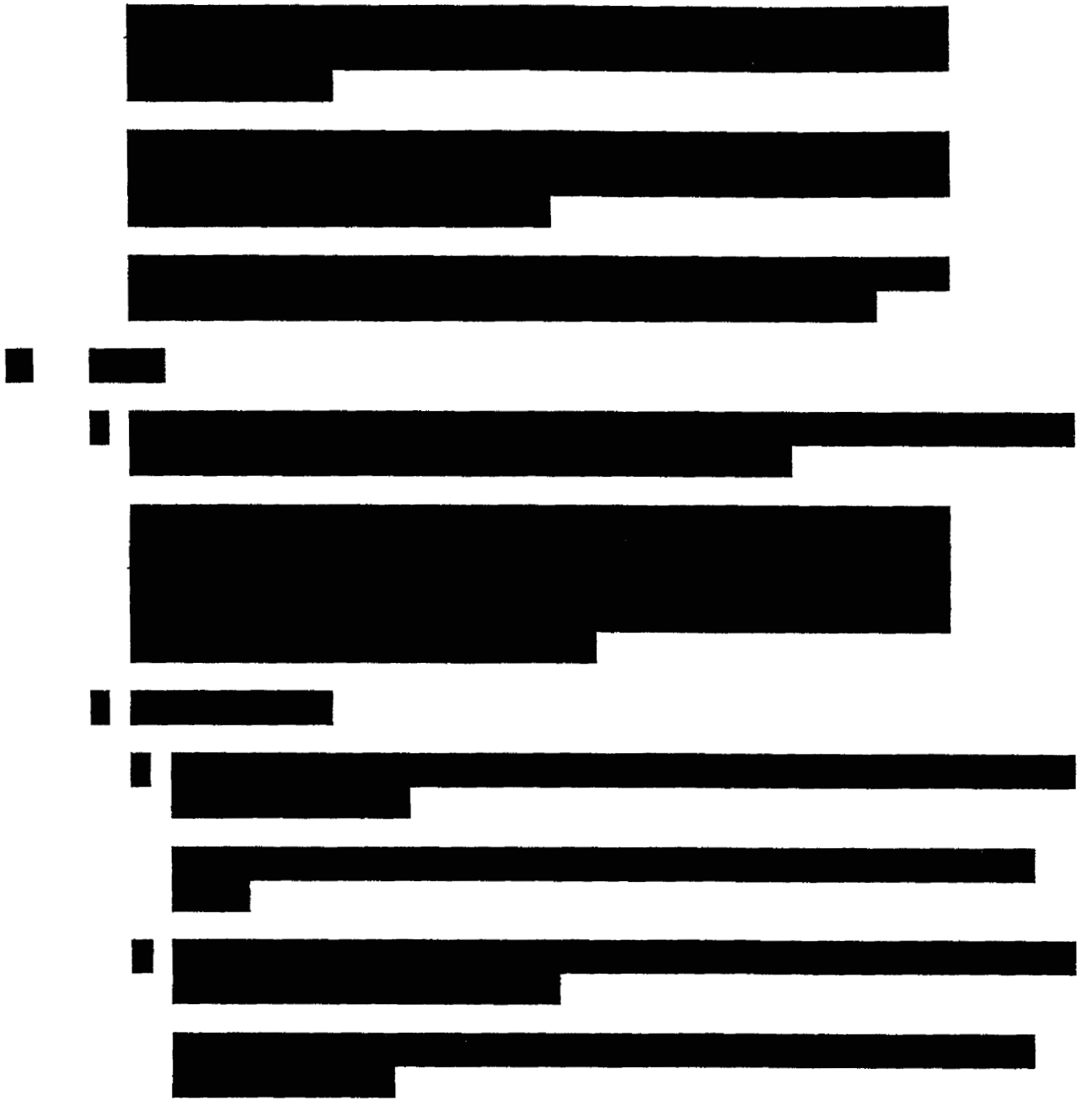












6.5 Risk Plan Analysis

Beginning this year and through 2004, Gulf's risk management plan projects coal purchases to decline by [redacted] percent and natural gas dependence to more than double. According to the plan, wholesale energy purchases will be reduced by [redacted] percent and sales will decline by [redacted] percent. These changes are primarily due to additional territorial capacity resulting from the commercial operation of a state of the art natural gas-fired combined cycle unit, Smith 3.

At present, Gulf's plan is mainly for the purchase of coal and its goal to offset price risk is a balanced mix of spot market and long-term contracts. The strategy has built in flexibility and will change over time. Gas strategy is to purchase at or below market price. Historically, this is accomplished through the use of spot and long-term contracts. Gulf also has the means of gas storage, which ensures availability.

Gulf's plan in wholesale energy designates reliability and price as the risks when buying and selling power. Once the company identifies both risks in advance, it arrives at a high degree of certainty that a purchase or selling will be beneficial to the customer. The risk that cannot be discounted is that the decision must be in advance of the action. If conditions do not occur as forecasted, the customer may not realize a benefit from the purchase or sales transactions.

In summary, Gulf's risk plan acknowledges that fuel has price volatility and is currently managed through physical commodity purchase and sale. It further recognizes that opportunities exist through financial instruments. If authorized by the Commission, Gulf asserts some price risk can be mitigated by those instruments.

7.0 COMPANY COMMENTS

7.0 Company Comments

This chapter contains the companies' comments in response to the audit report. These comments are included verbatim.

7.1 Florida Power & Light Company Comments

Florida Power & Light has no comments.

7.2 Florida Power Corporation Comments

Florida Power Corporation has no comments.

7.3 Tampa Electric Company Comments

Reference Section 5.3

As previously stated, coal is 97 percent of TEC's fuel use, and the commodity price is relatively stable. As a result, fuel price volatility per se has not been a focus in the company's planning processes. However, the fuel price forecast and the wholesale price forecast used in the company's planning processes do inherently incorporate expected fuel price volatility.

Reference Section 5.5

Additionally, as TEC continues to gain natural gas marketing expertise by administering gas purchases in-house, the company plans to evaluate hedging strategies as a component of its overall procurement strategy.

7.4 Gulf Power Company Comments

Reference Section 1.4.4

Southern Company Services (SCS) manages three State Commission-approved hedging programs under its Risk Management Policy. Gulf Power Company (Gulf) contends that the policy is adequate and meets the internal control requirements and intent of the NYMEX Guide to Hedging referenced in Section 2.6.

SCS, as agent for Gulf, maintains the controls necessary to operate a risk management program. SCS conducts hedging activities for multiple operating companies and departments. Therefore, Southern Company has a centralized Risk Oversight group that evaluates, monitors, and reports on the risks associated with fuel and wholesale energy procurement. The Risk Control and Oversight Committee is an independent, executive level group under the authority of the Board of Directors. The Southern Wholesale Energy Merchant Floor Risk Management Policy document contains procedures that govern the procurement and trading operations of the Southern electric system. Currently, SCS has not engaged in any financial hedging transactions for Gulf, but is hedging with financial instruments on behalf of Savannah Electric and Power Company, Alabama Power Company, and Mississippi Power Company.

Certain procedures that support the Company Risk Management Program need revision. For example, the Company is currently revising the contract procedures for coal procurement and the Risk Management Policy is being revised to include oil.

As stated above Gulf does not currently have an approved hedging plan to utilize financial instruments. Additional internal controls will be necessary for Gulf to implement a hedging plan. A hedging plan should include certain specific additional controls such as, Gulf Power Company Board approval of the plan and details on the financial limits of the program specific to Gulf.