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VIA OVERNIGHT-DELIVERY

June 20, 2005

Ms. Elizabeth O'Donnell
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
P.O. Box 615
Frankfort, Kentucky 40602-0615

RECEIVED

JUN 22 2005

PUBLIC SERVICE
COMMISSION

John J. Finnigan, Jr.
Senior Counsel

Re: In the Matter of An Investigation of Increasing Wholesale Natural Gas Prices and the Impacts of Such Increases on the Retail Customers Served by Kentucky's Jurisdictional Natural Gas Distribution Companies
Administrative Case No. 384

Dear Ms. O'Donnell:

I have enclosed an original and one copy of The Union Light, Heat and Power Company's Management Audit Action Plan Progress Report in the above-referenced case.

Please date stamp and return the extra copy in the self-addressed envelope.

If you have any questions, please do not hesitate to contact me at (513) 287-3601.

Sincerely,

John J. Finnigan, Jr.
Senior Counsel

JJF/sew

**The Union Light Heat & Power Company
Management Audit Action Plan Progress Report
Administrative Case No. 384**

Report for Period Ending: June 30, 2005

I. RECOMMENDATION REFERENCE

Chapter 2 – Organization, Staffing and Controls

Recommendation Number: D.2.4

Recommendation Statement: Develop a plan for internal auditing of the Gas Resources Department based on a risk assessment analysis.

Implementation Priority: Normal

Utility Person Responsible: Kim Carlson, GM – Compliance

II. RECOMMENDATION STATUS

- COMPLETE Utility considers this action plan complete and requests that it be closed.
- ON-GOING The implementation of this action plan is still in progress.
- DISAGREE Utility does not agree with this recommendation for the reasons discussed in Section III below.

III. IMPLEMENTATION STEPS TO ACCOMPLISH RECOMMENDATION

The Union Light, Heat and Power Company shares the gas procurement function with its affiliate, The Cincinnati Gas & Electric Company. The same personnel perform this function for both companies, utilizing the same models and procedures. Ohio law mandates a bi-annual audit of the gas procurement function, by an independent third party auditor, and the audit report is reviewed by The Public Utilities Commission of Ohio and interested stakeholders. When the auditor recommends changes to CG&E's gas procurement function and CG&E adopts such recommendations, the resulting process improvements generally are adopted for ULH&P as well, to the extent that the recommendation impacts a function that applies to ULH&P. As a result, a bi-annual internal audit of the Gas Resources Department would be a duplication of effort.

Since bi-annual audits of the gas procurement function will continue as mandated by the PUCO, ULH&P will not perform simultaneous internal

audits of the same procedures. One alternative would be to audit ULH&P on the off years from the PUCO audits. However, this would result in the gas procurement function being audited every year, which would also not be cost effective. Therefore, ULH&P will continue to benefit from the insights and recommendations from the PUCO-supervised audits, without incurring the costs and the drain on management resources from instituting separate, overlapping internal audits of its own.

IV. ACTION TAKEN ON IMPLEMENTATION STEPS

Liberty Consulting recently completed an audit of CG&E’s gas procurement function in Case No. 03-218-GA-GCR. A copy of the final report filed with the PUCO is attached. CG&E did not agree to implement all of Liberty’s recommendations, but did reach a stipulation of settlement with the staff and Ohio Consumers Council as to which recommendations would be implemented. A copy of the stipulation is attached. This stipulation was ultimately approved by the Commission in an order dated May 18, 2005, also attached. Where applicable, ULH&P will incorporate the same recommendations into its gas procurement procedures.

V. ANSWERS TO QUESTIONS OF THE COMMISSION STAFF

None.

VI. ACTIONS CONTEMPLATED PRIOR TO NEXT RESPONSE FILING

None.

VII. COST / BENEFIT ANALYSIS AND SUPPORT

A. Cost Analysis

None.

B. Benefit Analysis

Not Quantifiable.

C. Cost/Benefit Summary

Category	One Time	Annual Recurring
Cost	None	None
Benefit	Not Quantifiable	Not Quantifiable

D. Other Costs or Benefits

None.

RECEIVED

BEFORE

JUN 22 2005

THE PUBLIC UTILITIES COMMISSION OF OHIO

PUBLIC SERVICE
COMMISSION

In the Matter of the Long-Term Forecast)
Report of The Cincinnati Gas & Electric) Case No. 03-118-GA-FOR
Company and Related Matters.)

In the Matter of the Regulation of the)
Purchased Gas Adjustment Clause)
Contained Within the Rate Schedules of) Case No. 03-218-GA-GCR
The Cincinnati Gas & Electric Company)
and Related Matters.)

OPINION AND ORDER

The Commission, having considered the evidence and stipulation, the relevant provisions of the Revised Code and the Ohio Administrative Code (O.A.C.), and being otherwise fully advised, hereby issues its opinion and order.

APPEARANCES:

John J. Finnigan, Jr., Senior Counsel, 139 East Fourth Street, Cincinnati, Ohio 45201, on behalf of The Cincinnati Gas & Electric Company.

Jim Petro, Attorney General of the State of Ohio, Duane W. Luckey, Senior Deputy Attorney General, by Thomas G. Lindgren and Werner L. Margard III, Assistant Attorneys General, 180 East Broad Street, Columbus, Ohio 43215, on behalf of the staff of the Public Utilities Commission of Ohio.

Janine L. Migden-Ostrander, Ohio Consumers' Counsel, by Colleen Mooney and Larry Sauer, Assistant Consumers' Counsel, 10 West Broad Street, Suite 1800, Columbus, Ohio 43215, on behalf of the residential customers of The Cincinnati Gas & Electric Company.

OPINION:

I. SUMMARY OF THE PROCEEDINGS

The Cincinnati Gas & Electric Company (CG&E) is both a "gas company" and a "natural gas company" as defined in Section 4905.03(A)(5) and (6), Revised Code, and is a public utility under Section 4905.02, Revised Code.

Section 4935.04(C), Revised Code, requires certain gas utilities to provide a long-term forecast report (LTFR) to the Commission on an annual basis. This requirement applies to all persons owning or operating gas or natural gas transmission lines and associated facilities which are designed for, or capable of, transporting gas or natural gas at pressures in excess of 125 pounds per square inch or which annually furnish gas or natural gas directly to more than 15,000 customers within the state. The report must include, inter alia, projected demand, anticipated supply, anticipated supply prices, and a

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plan to meet the forecasted demand. Additionally, Section 4935.04(D), Revised Code, requires the Commission to review the report and conduct hearings at least once every five years or when a report contains a substantial change from the preceding report. For CG&E, the last time such a hearing on an LTFR was conducted was in *In the Matter of the Long-Term Forecast Report of The Cincinnati Gas and Electric Company and Related Matters*, Case No. 98-118-GA-FOR.¹ On June 2, 2003, CG&E filed its 2003 LTFR. It was docketed as Case No. 03-118-GA-FOR.

Pursuant to Section 4905.302, Revised Code, this Commission promulgated rules for a uniform purchased gas adjustment clause to be included in the schedules of gas or natural gas companies subject to the Commission's jurisdiction. These rules, which are contained in Chapter 4901:1-14, O.A.C.,² separate the jurisdictional cost of gas from all other costs incurred by a gas or natural gas company, and provide for the recovery of these costs. Section 4905.302, Revised Code, also directs the Commission to establish investigative procedures, including periodic reports, audits, and hearings to examine the arithmetic and accounting accuracy of the gas costs reflected in a company's gas cost recovery (GCR) rates, and to review a company's production and purchasing policies and their effect upon these rates. Pursuant to such authority, Rule 4901:1-14-07, O.A.C., identifies how periodic financial and management/performance audits of gas or natural gas companies shall be conducted. Rule 4901:1-14-08(A), O.A.C., requires the Commission to hold a public hearing at least 30 days after the filing of each required audit report. Rule 4901:1-14-08(C), O.A.C., specifies that notice of the hearing be published in at least one newspaper of general circulation throughout the company's service area at least 15 days, but not more than 30 days, prior to the scheduled date of the hearing.

On October 15, 2003, the Commission, in the above-captioned GCR proceeding, established the financial and management/performance audit review periods, the date upon which the audit reports were required to be filed, and the hearing date, and directed CG&E to publish notice of the hearing.

On February 5, 2004, staff filed a motion for a hearing on the 2003 LTFR proceeding and for consolidation of these two cases. That motion was granted by attorney examiner entry of February 24, 2004.

A motion to intervene in the GCR proceeding was filed by the Office of Ohio Consumers' Counsel (OCC) on April 2, 2004. No memoranda contra were filed. The attorney examiner granted the motion to intervene on December 10, 2004.

¹ In that case, a hearing was called and continued. Thereafter, the parties stipulated to the reasonableness of that LTFR, as well as its fulfillment of the statutory requirements.

² Chapter 4901:1-14, O.A.C., was reviewed by the Commission in 2003-2004. *In the Matter of the Commission's Review of Its Rules Regarding the Uniform Purchased Gas Adjustment at Chapter 4901:1-14, Ohio Administrative Code*, Case No. 03-1384-GA-ORD, Finding and Order (March 11, 2004) and Entry on Rehearing (May 12, 2004). As a result of that review, a number of revisions were made in that chapter. However, those revisions were not in effect during the audit periods involved in this GCR proceeding. We clarify that all references in this decision to the administrative rules in Chapter 4901:1-14, O.A.C., are to the rules in effect just prior to August 29, 2004.

On June 14, 2004, CG&E filed a motion for protective order relating to certain information requested by OCC in discovery relating to these proceedings. On December 10, 2004, the attorney examiner granted that motion.

On June 18, 2004, Deloitte & Touche LLP (Deloitte) filed a financial audit of the GCR mechanism for CG&E, covering the period of September 1, 2002, through August 31, 2003 (financial audit report). Also on June 18, 2004, The Liberty Consulting Group (Liberty) filed a management/performance audit report for CG&E, covering the period of September 1, 2001, through August 31, 2003 (management/performance audit report). Direct expert testimony was filed by CG&E on July 6, 2004.

On August 2, 2004, a public hearing was commenced as scheduled. No public witnesses appeared to offer testimony. At the request of the parties, the hearing was continued *sine die*.

On August 19, 2004, Deloitte filed a supplemental report of interruptible transmission cashouts (supplemental cashout schedule). That report was followed, on August 30, 2004, by OCC and staff motions *in limine* to strike those portions of the supplemental cashout schedule which relate to information covering times outside the financial audit period covered by this GCR proceeding. Also on August 30, 2004, CG&E moved for the scheduling of a date for the continuation of the hearing. On September 15, 2004, CG&E filed a memorandum contra both motions to strike. On September 22, 2004, staff filed a reply memorandum. On December 10, 2004, the attorney examiner ruled that evidence regarding the supplemental cashout schedule would be admitted at the hearing. In that same entry, the attorney examiner also set January 25, 2005, as the date for the continuation of the hearing in these proceedings.

On January 25-26, 2005, the continuation of the public hearing was conducted at the offices of the Commission. No public witnesses appeared to offer testimony. CG&E presented the testimony of four witnesses. OCC and staff each presented the testimony of one witness. CG&E filed, as CG&E Exhibit 1, proof that notice of the hearing was duly published in newspapers of general circulation throughout its service area.

Following the hearing, on February 18, 2005, a stipulation and recommendation (stipulation) was filed on behalf of all parties to these proceedings, intending to resolve all of the issues in these proceedings.

II. SUMMARY OF THE EVIDENCE

A. Summary of the Financial Audit Report

In its financial audit report, Deloitte certified that it examined CG&E's quarterly filings which support its GCR rates for the three-month period ended November 27, 2002, the three-month period ended February 28, 2003, the one-month period ended March 31, 2003, the two-month period ended May 30, 2003, and the three-month period ended August 28, 2003, and that relate to the reporting period for the year ended August 31, 2003. Deloitte found that CG&E fairly determined its GCR rates for those periods in accordance

with the financial procedural aspects of Chapter 4901:1-14, O.A.C., and properly applied those rates to customer bills (CG&E Ex. 4, certificate of accountability). In addition, Deloitte made a number of findings, as detailed below.

1. Exceptions in Prior Year's Report

Deloitte stated that, in its prior year's report, it had noted two misstatements of actual adjustments (AA) relating to transportation customer billing adjustments. Both of those items were correctly rectified by the inclusion of adjustments of (\$312,500) and \$99,407 in the AA for GCR rates effective May 31, 2003. Deloitte also stated that CG&E correctly adjusted the AA for rates effective May 31, 2003, to account for prior clerical errors in compiling total supply costs used to calculate the AA, in the net amount of \$670 in understatement of costs (CG&E Ex. 4, at 3).

2. Current Period Corrections

Deloitte identified one clerical error which had required correction. CG&E had overstated its total supply cost used to calculate the AA in its GCR rate effective June 1, 2002. Although outside the financial audit period, Deloitte pointed out that CG&E corrected this error by including a \$9,000 credit in the AA calculation that was part of the rates effective December 1, 2003.

Deloitte also identified five self-correcting errors. In one of these errors, CG&E understated the volume used to calculate the demand component of expected gas costs (EGC) in a filing effective June 1, 2002. This caused an overstatement of the EGC rate of \$0.051 per Mcf. Two of the self-correcting errors involved the overstatement of estimated purchases used to calculate the commodity component of the EGC rate. These errors caused overstatements of the EGC rate of \$0.001 per Mcf and \$0.002 per Mcf in the filings effective August 29, 2002, and March 1, 2003, respectively. The final two self-correcting errors involved the understatement of estimated purchases used to calculate the commodity component of the EGC rate. These errors caused understatements of the EGC rate of \$0.002 per Mcf and \$0.003 per Mcf in the filings effective May 31 and August 29, 2003, respectively.

B. Summary of the Supplemental Cashout Schedule

The supplemental cashout schedule details overstatements and understatements of gas purchases from, and gas sales to, pool operators. According to the schedule, such "gas purchases and sales occur monthly as part of the balancing process with the pool operators." (CG&E Ex. 5, at 2). CG&E states, in the schedule, that these transactions have been reported incorrectly in the calculation of the AA during the period from August 1998 through August 31, 2003 (CG&E Ex. 5, at 2).

The amount of the errors is shown as follows:

GCR financial reporting period – 12 months ended August 31,	(Overstatement)/ Understatement of Total Supply Costs in the Actual Adjustment
1999	\$ (360,385.00)
2000	1,246,935.00
2001	770,035.00
2002	4,555,529.00
2003	464,854.00
Total Adjustment	\$6,676,968.00

C. Summary of the Management/Performance Audit Report

In the management/performance audit report, Liberty reviewed CG&E's gas purchasing practices and policies for the period of September 1, 2001, through August 31, 2003. Overall, during the review period, Liberty reported that CG&E's:

gas purchasing policies and practices are relatively well run and that the organization is headed in the proper direction. Gas Commercial Operations is staffed with knowledgeable and competent individuals that understand the overall direction of the business. The Department utilizes reasonable tools and procedures in general, and is paying attention to trends in the industry and the gas supply market. It is clear that Gas Commercial Operations has engaged in strategic thinking with respect to their overall business and is communicating these strategies well within the organization.

Liberty suggests, however, that the next management/performance auditor should examine and evaluate the organizational structure and CG&E's performance after the current audit period (CG&E Ex. 3 at ES-4).

Liberty also makes several other specific recommendations, the content of which will be discussed in our consideration of the stipulation (CG&E Ex. 3 at ES-5 through ES-6).

D. Summary of the Long-Term Forecast Report

Chapter 4901:5-7, O.A.C., sets forth the guidelines for preparing the LTFR. CG&E's 2003 LTFR is structured around the guidelines in Rules 4901:5-07-01, -02, and -03, O.A.C. The report identifies the company's forecast methodology, assumptions, peak day requirements, sources of gas, supply prices, storage facilities, reliability of gas sources, and winter season planning. CG&E's 2003 LTFR also discusses several special topics related to

the company's demand and supply forecasts. Moreover, CG&E identifies its existing and planned transmission facilities. Finally, the LTR includes CG&E's peak day forecast information.

III. STIPULATION AND RECOMMENDATION

On February 18, 2005, the parties filed a stipulation which, if adopted, would resolve all of the issues in this proceeding (Jt. Ex. 1).³ In the stipulation, CG&E, OCC, and Commission staff agree, *inter alia*, that:

- (1) Subject to subsequent provisions of the stipulation, CG&E's GCR rates were accurately computed by CG&E during the audit period, in accordance with administrative rules.
- (2) CG&E accurately applied its GCR rates to bills during the audit period.
- (3) Deloitte conducted its financial audit in accordance with objectives set forth in applicable administrative rules.
- (4) The specific findings set forth under "Summary of Findings" in the Deloitte audit are reasonable and should be adopted by the Commission.
- (5) CG&E adjusted its GCR rates to begin recovering the \$6,676,968 adjustment reflected on the supplemental cashout schedule, beginning in September 2004. CG&E should be required to forego recovery of \$1,669,242 of that amount (25 percent) and should be permitted to recover the remaining \$5,007,726 (75 percent) during the 12-month period ending on August 31, 2005. The current rate should be reduced to collect the correct amount over the remaining portion of that period. The auditor, during the next two financial audits, should verify that adjustment.
- (6) CG&E shall internally audit the process by which cost data are conveyed from various departments to the rates department, for calculation of GCR rates. Three such audits should be performed, in years when no management/performance audit is performed, with the first occurring after the 2005 management/performance audit period. CG&E shall also internally audit any new process established to convey cost information to the rates department. The cost of such audits should not be borne by CG&E customers.

³ Section 13 of the stipulation provides that it should be identified as Joint Exhibit 1 and admitted into evidence in the record of these proceedings. The Commission will allow its admission as Joint Exhibit 1.

- (7) The management/performance audit report complies with the requirements of Chapter 4901:1-14, O.A.C.
- (8) The Liberty recommendations are reasonable and should be adopted by the Commission, except as otherwise set forth in the stipulation. Specifically, the parties agree as follows:
 - (a) Liberty recommended that CG&E revise and update job descriptions for personnel in Gas Commercial Operations. The parties agree with this recommendation.
 - (b) Liberty recommended that CG&E require annual statements from all employees in Gas Commercial Operations acknowledging compliance with the company's code of conduct. The parties agree with this recommendation, with slight modification.
 - (c) Liberty recommended that CG&E improve the gas supply forecasting process by accounting for forward-looking customer and system changes. The parties agree with this recommendation, with slight modification.
 - (d) Liberty recommended that CG&E improve the LTFR so that it will be more consistent with the planning process utilized by Gas Commercial Operations. The parties agree with this recommendation.
 - (e) Liberty recommended that CG&E develop written gas commodity procurement procedures. The parties agree with this recommendation.
 - (f) Liberty recommended that CG&E resolve the issue relating to locking in suppliers prior to the request-for-proposals process, in conjunction with developing procedures for its hedging program. The parties agree with this recommendation, with slight modification.
 - (g) Liberty recommended that CG&E assign propane plant dispatch to the Asset Manager. The parties do not agree that CG&E should assign the propane plant dispatch to the asset manager, but do agree that it should continue managing the propane plants and should monitor the opportunities for economic dispatch, while balancing the need to hold the plants in reserve for reliability

purposes and considering the operational impacts on nearby customers (Stipulation, Attachment A at 2).

- (h) Liberty recommended that CG&E develop written procedures for asset management services procurement, including the use of the company's RFX System. The parties agree with this recommendation.
- (i) Liberty recommended that CG&E develop procedures for monitoring Federal Energy Regulatory Commission cases, including tracking of pipeline refunds. The parties agree with this recommendation.
- (j) Liberty recommended that CG&E continue to use physical contracts at market prices to lock in commodity supply volumes and use a phased approach with financial contracts for its hedging activities. The parties do not agree with this recommendation, on the ground that CG&E believes it should not engage in financial hedging at this time. CG&E states that there are currently too many unresolved issues, such as how the hedges would be audited and how hedging losses would be treated (Stipulation, Attachment A at 2).
- (k) Liberty recommended that CG&E re-examine its hedging policy, especially with regard to mitigating price volatility. The parties agree with this recommendation.
- (l) Liberty recommended that CG&E consider obtaining assistance, adding to its staff, or using commercially available tools in its hedging program. The parties do not agree with this recommendation, on the ground that CG&E believes it should not engage in financial hedging at this time. CG&E states that there are currently too many unresolved issues, such as how the hedges would be audited and how hedging losses would be treated (Stipulation, Attachment A at 2).
- (m) Liberty recommended that CG&E re-evaluate its assignment of curtailment levels, recognizing the new C314 transmission line, and should consider modifying the interruptible rate structure. The parties agree with this recommendation, with slight modification.
- (n) Liberty recommended that CG&E maintain the gas-choice and percentage-of-income-payment-plan

programs, carefully monitoring and evaluating them. The parties agree with this recommendation, with slight modification.

- (o) Liberty recommended that CG&E more aggressively monitor and manage the Lost and Unaccounted For (LAUF) program, especially with regard to collecting and maintaining accurate LAUF data and minimizing LAUF on the CG&E system. The parties agree with this recommendation.
 - (p) Liberty recommended that CG&E meet with suppliers, Commission staff, and large customers to review the emergency curtailment plan and procedures. The parties agree with this recommendation, with slight modification.
- (9) The LTFR complies with the requirements of Section 4935.04, Revised Code.
- (10) CG&E appropriately published notice of these proceedings, in compliance with Section 4905.302(C), Revised Code, and Rule 4901:1-14, O.A.C.

Stipulation at 3-5 and attachment.

IV. DISCUSSION AND CONCLUSION

Rule 4901-1-30, O.A.C., authorizes parties to Commission proceedings to enter into stipulations. Although not binding on the Commission, the terms of such agreements are accorded substantial weight. See *Consumers' Counsel v. Pub. Util. Comm.*, 64 Ohio St.3d 123, 125 (1992), citing *Akron v. Pub. Util. Comm.*, 55 Ohio St.2d 155 (1978). This concept is particularly valid where the stipulation is supported or unopposed by the vast majority of parties in the proceeding in which it is offered. In reviewing the stipulation, our primary concern, however, is that the stipulation is in the public interest.

The standard of review for considering the reasonableness of a stipulation has been discussed in a number of prior Commission proceedings. See, e.g., *Ohio-American Water Company*, Case No. 99-1038-WW-AIR (June 29, 2000); *The Cincinnati Gas & Electric Company*, Case No. 91-410-EL-AIR (April 14, 1994); *Ohio Edison Company*, Case Nos. 91-698-EL-FOR *et al.* (December 30, 1993); *The Cleveland Electric Illuminating Company*, Case No. 88-170-EL-AIR (January 30, 1989); *Restatement of Accounts and Records (Zimmer Plant)*, Case No. 84-1187-EL-UNC (November 26, 1985). The ultimate issue for our consideration is whether the agreement, which embodies considerable time and effort by the signatory parties, is reasonable and should be adopted. In considering the reasonableness of a stipulation, the Commission has used the following criteria:

- (1) Is the settlement a product of serious bargaining among capable, knowledgeable parties?
- (2) Does the settlement, as a package, benefit ratepayers and the public interest?
- (3) Does the settlement package violate any important regulatory principle or practice?

The Ohio Supreme Court has endorsed the Commission's analysis using these criteria to resolve issues in a manner economical to ratepayers and public utilities. *Indus. Energy Consumers of Ohio Power Co. v. Pub. Util. Comm.*, 68 Ohio St.3d 559 (1994) (citing *Consumers' Counsel, supra*, at 126). The court stated in that case that the Commission may place substantial weight on the terms of a stipulation, even though the stipulation does not bind the Commission. *Id.*

Based on our three-prong standard of review, we find that the first criterion, that the process involved serious bargaining by knowledgeable, capable parties, is met. The parties to these negotiations have been involved in many cases before the Commission, including a number of GCR and FOR cases. Moreover, these parties have provided extensive and helpful information to the Commission regarding CG&E's GCR and fuel-related policies and practices.

The stipulation also meets the second and third criteria. In addition to resolving all of the issues relating to the financial audit report, the management/performance audit report, and the LTFR, the stipulation also resolves the questions relating to recovery of the adjustment calculated in the supplemental cashout schedule. As a package, the stipulation advances the public interest by resolving all of the issues addressed by these proceedings. In addition, the stipulation does not violate any important regulatory principle or practice.

However, the Commission also finds that it is appropriate to add to Section 7 of the stipulation (summarized in III(6), above). That section describes CG&E's agreement to audit internal processes used for the communication of cost data to the CG&E Rates Department. Although CG&E agrees in the stipulation to perform the described audits, the stipulation does not provide for the reporting of the results of those audits to the Commission or its staff. We believe that reporting is an important follow-up step. We will, therefore, require CG&E to file, in the then-open GCR docket, a report on each required internal audit. This requirement will terminate upon the filing of the third specifically identified process audit, as scheduled by the second sentence of section 7 of the stipulation. Any subsequent audit that may be performed by CG&E for any new process it establishes between departments, pursuant to the requirements of the penultimate sentence in that section, shall also be filed in the then-open GCR docket.

For these reasons, we believe that the stipulation should be adopted, provided that CG&E shall also comply with our additional requirements for the internal audits it will conduct under the terms of the approved stipulation. Accordingly, we find that, except to the extent adjusted by the terms of the approved stipulation, CG&E fairly determined its

GCR rates, properly applied those rates to customer bills, and used prudent and reasonable procurement policies during the audit periods.

The Commission also notes that the financial auditor failed, in these proceedings, to respond to specific direction given in the GCR proceeding for 2002.⁴ In that case, we adopted the parties' stipulation and recommendation, including a provision which stated that:

[d]uring the next financial audit, the auditor shall examine the deferred bad debt account (Account 182.305) authorized by the Commission in its January 31, 2002 Entry in Case No. 01-3228-GA-AAM . . . and resulting from the Commission's January 25, 2001 Entry in Case No. 83-303-GA-COI . . . , and the amortization of that account. The financial auditor shall verify that the gas asset management revenues during the audit reporting period are allocated in accordance with the Commission's March 7, 2002 Entry in Case No. 01-3227-GA-UNC

The Commission's opinion and order specifically referenced and described that agreement. However, in the present GCR proceeding, Deloitte apparently was unaware of this requirement (Tr. at 27-31). Thus, no reference to these items appears in the financial audit report.

The Commission renews the requirement set forth in the 2002 proceeding with regard to the financial auditor's examination and reporting on the deferred bad debt account, the amortization of that account, and the gas asset management revenues, as described in the preceding paragraph. During the next financial audit,⁵ the auditor shall report on these matters with regard to the audit period covered by the 2002 GCR proceeding, the 2003 GCR proceeding, and the 2004 GCR proceeding. Commission staff and CG&E should be aware that they are responsible for ensuring that the financial auditor in any proceeding is aware of requirements placed on it by this Commission during prior cases.

FINDINGS OF FACT AND CONCLUSIONS OF LAW:

- (1) CG&E is a gas company and a natural gas company within the meaning of Sections 4905.03(A)(5) and (6), Revised Code, and, as such, is a public utility under Section 4905.02, Revised Code. CG&E is also a natural gas company for purposes of Sections 4905.302(C) and 4935.04, Revised Code.

⁴ *In the Matter of the Regulation of the Purchased Gas Adjustment Clause Contained Within the Rate Schedules of The Cincinnati Gas & Electric Company and Related Matters*, Case No. 02-218-GA-GCR, Opinion and Order (October 15, 2003).

⁵ The financial audit with regard to CG&E's 2004 GCR proceeding is complete, as of the date of this opinion and order. Therefore, the next financial audit in which the financial auditor can fulfill this directive will be CG&E's 2005 GCR proceeding.

- (2) Pursuant to Section 4935.04, Revised Code, CG&E filed its 2003 LTFR on June 2, 2003, which was docketed as Case No. 03-118-GA-FOR.
- (3) Pursuant to Section 4905.302, Revised Code, the Commission initiated Case No. 03-218-GA-GCR, involving CG&E's 2003 GCR proceeding, on October 15, 2003, and established financial and management/performance audit periods.
- (4) On February 24, 2004, the examiner consolidated these two proceedings for purposes of hearing. The examiner granted OCC intervention in the GCR proceeding.
- (5) The management/performance audit report was filed on June 18, 2004. The financial audit report was filed on June 18, 2004, and was supplemented on August 19, 2004.
- (6) The examiner called the consolidated hearing on August 19, 2004, but continued it at the request of the parties. Following resolution of motions related to the supplemental cashout schedule, the hearing was scheduled to reconvene on January 25, 2005.
- (7) The consolidated hearing was held on January 25-26, 2005. The parties presented exhibits and the testimony of witnesses.
- (8) On February 18, 2005, all of the parties to these proceedings filed a stipulation and recommendation that is intended to resolve all issues in these proceedings.
- (9) CG&E published notice of the public hearing in these cases in substantial compliance with Commission requirements and with Sections 4905.302 and 4935.04, Revised Code, as applicable. Also, CG&E filed proof of its publications (CG&E Ex. 1).
- (10) The LTFR is in substantial compliance with the content requirements of Section 4935.04(C), Revised Code. The record demonstrates that all applicable provisions of Section 4935.04(F), Revised Code, have been met.
- (11) The financial audit report, as supplemented, and the management/performance audit report were performed in substantial compliance with Section 4905.302, Revised Code, and Rule 4901:1-14-07, O.A.C.

- (12) The stipulation is reasonable and should be adopted.
- (13) Except to the extent adjusted by the terms of the approved stipulation, CG&E fairly determined its GCR rates, properly applied those rates to customer bills, and used prudent and reasonable procurement policies during the audit periods in the GCR proceeding.
- (14) CG&E should take all necessary steps to carry out the terms in the stipulation and our opinion and order.
- (15) The financial auditor in the 2005 GCR proceeding shall specifically review and report on those matters discussed in this opinion and order.
- (16) The management/performance auditor in the 2005 GCR proceeding shall examine and evaluate the organizational structure of CG&E, as suggested in the management/performance audit report. In addition, that auditor shall specifically review and report on CG&E's filed reports of its internal audits of data communication procedures, as required by the stipulation in these proceedings and by this opinion and order. Commission staff and CG&E shall ensure that the management/performance auditor in that proceeding is aware of these requirements.
- (17) CG&E shall file reports on each internal audit conducted pursuant to the approved stipulation.

ORDER:

It is, therefore,

ORDERED, That the parties' Joint Exhibit 1 be admitted in the record of these proceedings. It is, further,

ORDERED, That the stipulation of the parties be adopted. It is, further,

ORDERED, That CG&E take all necessary steps to carry out the terms in the stipulation and in this opinion and order. It is, further,


ORDERED, That the financial auditor in the 2005 GCR proceeding shall make such evaluation and report as is set forth in this opinion and order. It is, further,

ORDERED, That the management/performance auditor in the 2005 GCR proceeding shall make such evaluation and report as is set forth in this opinion and order. It is, further,


ORDERED, That Case Nos. 03-118-GA-FOR and 03-218-GA-GCR be closed of record. It is, further,

ORDERED, That a copy of this opinion and order be served upon all parties of record.

THE PUBLIC UTILITIES COMMISSION OF OHIO

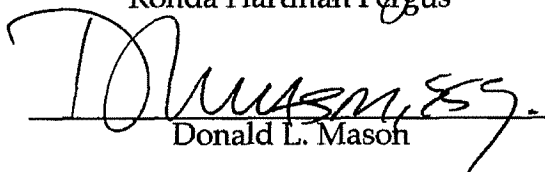


Alan R. Schriber, Chairman

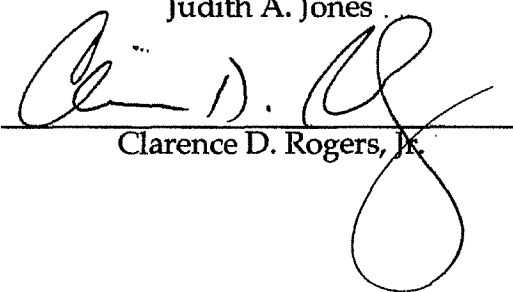


Ronda Hartman Fergus

Judith A. Jones



Donald L. Mason

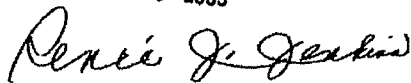


Clarence D. Rogers, Jr.

JWK;geb

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Renee J. Jenkins

Renee J. Jenkins
Secretary

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Joint Exhibit 1

PUBLIC SERVICE
COMMISSION

BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Regulation)	
of the Purchased Gas Adjustment)	
Clause Contained Within the Rate)	Case No.03-218-GA-GCR
Schedules of the Cincinnati Gas &)	
Electric Company and Related Matters)	

In the Matter of the Long Term)	
Forecast Report of the Cincinnati Gas &)	
Electric Company and Related Matters)	Case No.03-118-GA-FOR

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STIPULATION AND RECOMMENDATION

Pursuant to Ohio Administrative Code Rule 4901-1-30, The Cincinnati Gas & Electric Company (CG&E), The Office of Ohio Consumers' Counsel (OCC) and the Commission Staff (Staff)¹ (individually "Party;" collectively "Parties") do hereby stipulate and agree to resolve all issues in the instant proceeding.

While the Parties recognize that this Stipulation and Recommendation (Stipulation) is not binding upon the Commission, the Parties state that the Stipulation is an agreement among all Parties to this proceeding; that the Stipulation is supported by adequate data and information; that it represents a just and reasonable resolution of all issues in this proceeding; that it violates no regulatory principle or precedent; and that, accordingly, the Stipulation is entitled to careful consideration and should be adopted in its entirety by the Commission.

If any Party approves the Stipulation, it shall not be cited as precedent for or against any signatory Party, except for the purpose of enforcing this stipulation. This

¹ Staff will be considered a party for the purpose of entering into this Stipulation by virtue of O.A.C. 4901-1-10(c).

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Stipulation is a compromise involving a balancing of competing positions, and it does not necessarily reflect the position that any Party would have taken if these issues had been fully litigated.

The Parties believe that this Stipulation represents a reasonable compromise of varying interests. Should the Commission reject or modify all or any part of this Stipulation or impose additional conditions or requirements upon the Parties, each Party shall have the right, within 30 days of issuance of the Commission's order, to either file an application for rehearing or terminate and withdraw the Stipulation by filing a notice with the Commission. Upon rehearing, any Party may terminate and withdraw the Stipulation by filing a notice with the Commission within 30 days of the Commission's order on rehearing.

Upon notice of termination or withdrawal by any Party, pursuant to the above provisions, the Stipulation shall immediately become null and void. In such event, a hearing shall go forward and the Parties shall be afforded the opportunity to present evidence through witnesses, to cross-examine all witnesses, to present rebuttal testimony, and to brief all issues that shall be decided based upon the record and briefs as if this Stipulation had never been executed.

Subject to the terms and conditions set forth in this Stipulation, the Parties hereto agree, stipulate and recommend that the Commission find as follows:

1. Subject to the following provisions of this Stipulation and Recommendation, CG&E's GCR rates were accurately computed by CG&E during the audit period, in accordance with the provisions of O.A.C. Chapter 4901:1-14.²

2. CG&E accurately applied its GCR rates to customer bills during the audit period.

3. A financial audit was conducted by Deloitte & Touche, LLP (Deloitte) in accordance with the objectives outlined in O.A.C. Chapter 4901:1-14, Appendix C.

4. The Deloitte Independent Accountants' Report on the Uniform Purchased Gas Adjustment for the Year Ended August 31, 2003 (Deloitte Audit), and filed in this proceeding on June 18, 2004, shall be identified as CG&E Exhibit 4 and admitted into evidence in the record in this proceeding.

5. The specific findings presented in the "Summary of Findings" of the Deloitte Audit are reasonable and should be adopted by the Commission.

6. Deloitte also prepared a report entitled: "Report of Independent Registered Public Accountants on Supplemental Schedule of Interruptible Transmission Cashouts" dated May 21, 2004 (Deloitte Supplemental Report) and filed in this proceeding on August 19, 2004. CG&E adjusted its GCR rates to begin recovering the total adjustment of \$6,676,968 over a 12-month period through the Actual Adjustment component of its GCR rates beginning in September, 2004. The Deloitte Supplemental Report shall be identified as CG&E Exhibit 5 and admitted into evidence in the record in this proceeding. The parties stipulate and agree that CG&E shall forego recovery of \$1,669,242 of this adjustment, and shall be permitted to recover the remaining \$5,007,726, during the

² OCC does not agree or disagree with the statement that the rates were accurately computed in the

remaining 12-month period scheduled to end on August 31, 2005. The current rate will be reduced to collect the correct amount over the remaining months of the period ending August 31, 2005. During the next two financial audits, the auditor shall verify whether CG&E adjusted its GCR rates in accordance with these terms.

7. CG&E agrees to perform an internal audit of the process by which cost data is conveyed from its Gas Commercial Operations Department and other departments within the Company to the Rates Department for calculating GCR rates. CG&E shall perform three such process audits, at off-cycles to the years when the management/performance audit is performed, with the first internal audit taking place after the 2005 management/performance audit period. CG&E will also perform an internal audit of any new process it establishes to convey such cost information between these departments. The costs of these audits shall not be borne by CG&E customers.

8. A management/performance audit was conducted by The Liberty Consulting Group (Liberty) in accordance with the objectives outlined in O.A.C. Chapter 4901:1-14.

9. The Liberty Final Report Management/Performance Audit Cincinnati Gas & Electric Company Case No. 03-218-GA-GCR (Liberty Audit), and filed in this proceeding on June 18, 2004, shall be identified as CG&E Exhibit 3 and admitted into evidence in the record in this proceeding.

10. The specific findings presented in the Liberty Audit are reasonable and should be adopted by the Commission, except as modified by Attachment A hereto.

11. CG&E filed its long-term forecast report in this proceeding on June 2, 2003 and a hearing was held on the report on January 25-26, 2005. The report shall be

audit period because OCC cannot verify the accuracy of the GCR calculation.

identified as CG&E Exhibit 2 and admitted into evidence in the record in this proceeding. The report complies with the requirements of R.C. 4935.04.³

12. In satisfaction of the requirements of R.C. section 4905.302(C) and O.A.C. 4901:1-14, CG&E caused notice to be published in various newspapers of general circulation throughout CG&E's service territory for this proceeding. The tear sheets and affidavits were filed in this proceeding on July 19, 2004, and shall be identified as CG&E Exhibit 1 and admitted into evidence in the record in this proceeding.

13. This Stipulation shall be identified as Joint Exhibit 1 and admitted into evidence in the record in this proceeding.

The undersigned hereby stipulate, agree and represent that he or she is authorized to enter into this Stipulation on behalf of his or her respective Parties effective this 18th day of February, 2005.

THE CINCINNATI GAS & ELECTRIC COMPANY

By: John J. Finnigan by T66 per authorization
John J. Finnigan, Jr., Senior Counsel,
its Attorney

THE OFFICE OF OHIO CONSUMERS' COUNSEL

By: Colleen L. Mooney by T66 per authorization
Colleen L. Mooney, Assistant Consumer's
Counsel, its Attorney

³ OCC did not intervene in the CG&E Long-Term Forecast case, and does not join in paragraph 11 of this Stipulation

STAFF OF THE PUBLIC UTILITIES
COMMISSION OF OHIO

By: Thomas G. Lindgren
Thomas G. Lindgren, Assistant Attorney
General, its Attorney

**CG&E's Position on Matters Raised
in Management/Performance Audit**

1 **With regard to the recommendations of the Management/Performance Auditor:**

- 2 **(a) The Company has carefully considered all of the auditor's**
3 **recommendations.**
- 4 **(b) The Company agrees to revise and update job descriptions for personnel in**
5 **Gas Commercial Operations so that they are current and properly reflect**
6 **the current responsibilities of the position.**
- 7 **(c) The Company agrees to require annual statements from all non-union**
8 **employees in Gas Commercial Operations acknowledging that they have**
9 **received, read, understand and are complying with the CG&E Affiliate**
10 **Code of Conduct, and to request similar annual statements from union**
11 **employees in Gas Commercial Operations.**
- 12 **(d) The Company agrees to improve the gas supply forecasting process by**
13 **incorporation of model parameters that account for additional forward-**
14 **looking customer and system changes.**
- 15 **(e) The Company agrees to improve the information provided in its Long-**
16 **Term Forecasting Report ("LTFR") in order to achieve more consistency**
17 **with the planning process utilized by Gas Commercial Operations.**
- 18 **(f) The Company agrees to develop a set of written procedures for the gas**
19 **commodity procurement function.**

- 1 (g) The Company agrees, in conjunction with the development of written
2 procedures for its hedging program, to resolve the issue related to locking
3 in suppliers prior to the RFP process, by including language that gives the
4 Company the option to annually lock in suppliers prior to the RFP or not,
5 depending on which method would allow the Company to optimize the
6 price of the gas supplies.
- 7 (h) The Company will not assign the dispatch of its propane plants to the
8 Asset Manager, but will continue to manage the propane plants, and
9 monitor the opportunities for economic dispatch, while balancing the need
10 to hold the plants in reserve for reliability purposes, and considering the
11 operational impacts on customers located near the plants.
- 12 (i) The Company agrees to develop a set of written procedures for the
13 procurement of asset management services, including description of how
14 the RFX System is to be used in support of all procurement activities
15 within Gas Commercial Operations.
- 16 (j) The Company agrees to develop procedures for monitoring FERC cases
17 and activities, including the tracking of pipeline refunds.
- 18 (k) The Company will not engage in financial hedging at this time because
19 there are too many unresolved issues such as how the financial hedges
20 would be audited; how losses from financial hedging would be treated, etc.

- (l) The Company agrees to re-examine its hedging policy and refine its objectives with respect to mitigating price volatility.
- (m) Given that the Company will not engage in financial hedging at this time, the Company will not make any commitments to change its current level of staffing or obtain outside consultants' services or commercially available tools for its hedging program.
- (n) The Company agrees to re-evaluate its assignment of Rate IT customers' curtailment levels and will consider modifying the interruptible transportation rate structure in its next gas base rate case.
- (o) The Company will maintain the Choice and PIPP programs at the current level, and will carefully monitor and evaluate these programs. The Company agrees to meet with the OCC and Staff to discuss these programs at a mutually convenient date.
- (p) The Company agrees to undertake a focused two-part program, under the auspices of the Gas Measurement Committee, to more aggressively monitor and manage the Lost And Unaccounted For (LAUF) program, including the following:
 - (i) the collection and maintenance of accurate LAUF data; and
 - (ii) based on those results, a program to minimize LAUF on the CG&E system.
- (q) The Company agrees to continue meeting with Staff and Rate IT customers to review its emergency curtailment plan and procedures. If the

Company revises its emergency procedures due to a change in gas pipeline safety rules set forth at O.A.C. Chapter 4901:1-16, the Company will provide a copy of the new procedures to the Commission Staff. The Company also agrees to review its emergency plan to take into account homeland security issues, including the possibility of a terrorist incident.

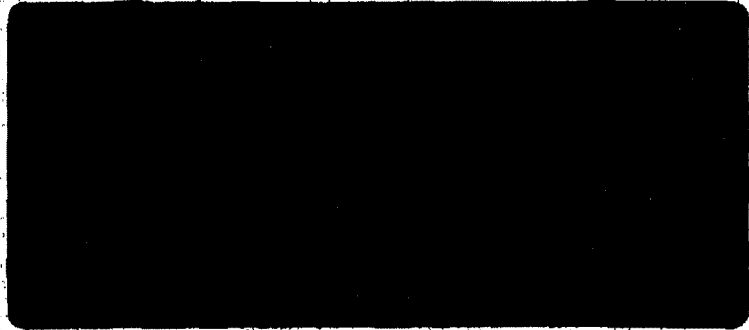
THE CINCINNATI GAS & ELECTRIC COMPANY

SUPPLEMENTAL SCHEDULE OF INTERRUPTIBLE TRANSMISSION CASHOUTS

GCR Financial Reporting period - 12 months ended August 31,	(Overstatement) / Understatement of Total Supply Costs in the Actual Adjustment
1999	\$(360,385)
2000	1,246,935
2001	770,035
2002	4,555,529
2003	464,854
Total adjustment	\$6,676,968

The above supplemental schedule summarizes required adjustments of The Cincinnati Gas & Electric Company's (CG&E) gas cost recovery (GCR) rates relating to gas purchases from and gas sales to pool operators. These gas purchases and sales occur monthly as part of the balancing process with the pool operators. These balancing transactions have been a normal part of the monthly gas balancing process since the inception of the Customer Choice program in Ohio in August 1998. Due to inadvertent clerical errors, these transactions have been reported incorrectly in the calculation of the Actual Adjustment in CG&E's historical GCR filings. The above schedule summarizes the cumulative impact of these clerical errors from the inception of these balancing transactions in August 1998 through August 31, 2003. During 2004, CG&E has modified its procedures for compiling its GCR filings in order to properly report balancing transactions in the calculation of the Actual Adjustment.

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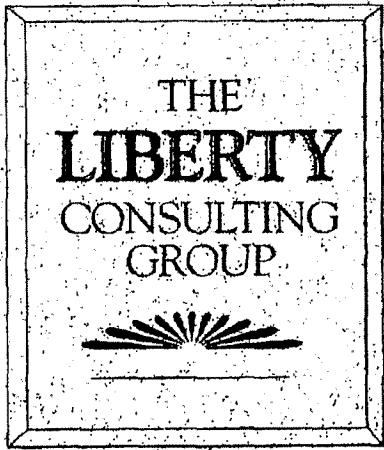


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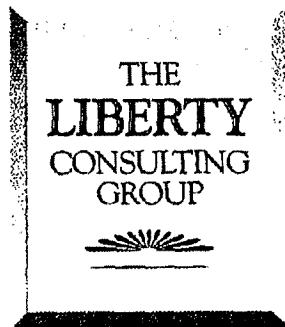
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**Final Report
Management/Performance Audit
Cincinnati Gas & Electric Company
Case No. 03-218-GA-GCR**

Presented to:

The Public Utilities Commission of Ohio

By:



65 Main Street
Quentin, Pennsylvania 17083

(717) 270-4500 (voice)
(717) 270-0555 (facsimile)
Admin@LibertyConsultingGroup.com (e-mail)

June 18, 2004

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Executive Summary

A. Purpose and Scope of this Report

1. Background

To evaluate gas distribution company purchasing practices and policies in compliance with Ohio's Uniform Purchase Gas Adjustment Clause, Chapter 4901:1-14 of the Ohio Administrative Code, the Public Utilities Commission of Ohio (*Commission*) ordered a management/performance audit of those practices and policies of The Cincinnati Gas & Electric Company (*CG&E*) referred to as *Company*. Accordingly, the Commission sought proposals for consulting services required to perform the management/performance audit of the gas purchasing practices and policies of the Company. To provide for the required audit of the Company, the Commission issued a Request for Proposal No. U03-GCR-1, dated November 21, 2003 (*RFP*). The Liberty Consulting Group (*Liberty*) responded to this RFP and was subsequently awarded the contract to conduct the audit of CG&E.

The Liberty Consulting Group (*Liberty*) is a management and technical consulting firm that specializes in the public-utility industries. Liberty has extensive experience in conducting management and operations audits of utilities in the electric power, natural gas, and telecommunications industries. Liberty has served commissions in thirty-five different states and the District of Columbia in conducting management/performance audits similar to this audit of CG&E.

This report presents the results of Liberty's management/performance audit of CG&E for the Audit Period of 09/01/01 – 08/31/03.

2. Audit Scope and Objectives

The overall mission of the audit was to investigate the Company's management policies, and operational procedures. The audit was also to determine the Company's effectiveness in fuel procurement to achieve an adequate and reliable supply of gas at minimum prices, at the same time minimizing transition costs associated with choice programs through its capacity negotiations. The audit was also to examine the steps the Company is taking to encourage competitive alternates to traditional utility services. This audit report documents those areas where management and operations are working effectively and efficiently. This audit report also makes appropriate recommendations, focusing on future improvements and net costs and benefits, in areas where enhanced effectiveness or efficiency may be obtained.

Section III of the RFP, Scope of Work, set out both the general requirements and the company-specific requirements of the audit. These requirements were as follows:

General Requirements

- a. Closely examine the Company's peak day and winter season forecasting methodology, as it is the starting point for determining capacity entitlements. Examine the variables utilized in the development of the forecasting methodology, as well as the assumptions and probability of occurrence. Compare the forecast results to actual send-outs to assess the accuracy of the forecasting methodology. Verify that the forecasting methodology is constant between sales and choice customers. Compare the Company's forecasted peak day and seasonal demands to the portfolio of commodity and capacity entitlements under contract; also compare these demands with anticipated choice program migration rates to ensure there's appropriate matching of capacity and commodity provisions to anticipated demand levels.
- b. Review the Company's audit period activities as they relate to the utilization of supply and capacity agreements.
- c. Examine the Company's monthly supply purchases and determine the extent to which the Company took actions to foresee pricing volatility, hedge risks, and reduce the level of pricing volatility by means of hedging techniques (natural gas futures, fixed prices contracts, etc.) or other means.
- d. Evaluate the Company's efforts to maximize unutilized capacity through capacity release programs or capacity assignment agreements with third parties.

Company-Specific Requirements

- a. Assess the Company's progress in reaching its goal of designing a peak forecasting model which is able to predict actual peak day send-out to within approximately plus or minus three percent on a consistent basis.
- b. Verify that if the Company incurred a cost to ensure adequate supplies were available (city gate deliveries) in the event that choice marketers failed, that these insurance costs were recovered through its CCCR Rider.
- c. Review CG&E tariffs to determine if propane has been allocated to choice customers and if so, the methodology for such an allocation.
- d. Examine the accounting treatment change, if any, of the Energy Cooperative litigation and its impact on the Company's GCR.
- e. Review the Company's bid process for selection of an asset manager.

In order to address the full scope of the General Requirements as described above, Liberty divided the audit into separate Task Areas. Each of these Task Areas is discussed in a separate chapter of the report, as indicated below. In addition, each of the five Company-Specific

Requirements (CSR) was addressed during Liberty's examination of the individual Task Areas, and the results of Liberty's conclusions and recommendations related to these Company-Specific Requirements are presented in the appropriate chapters of the report, as also indicated below.

<u>Task Area</u>	<u>Title</u>	<u>Report Chapter</u>
One	Organization, Staffing and Controls	One
Two	Gas Supply Planning and Forecasting	Two
Three	Gas Supply Management	Three
Four	Commodity Pricing & Price Risk Management	Four
Five	Gas Transportation	Five
Six	Operational Issues	Six
Seven	Company-Specific Requirements (CSR)	See Following
	CSR Number 1	Two
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	CSR Number 3	Five
	CSR Number 4	Five
	CSR Number 5	Three

B. Cincinnati Gas & Electric Company Natural Gas Operating Information

Cinergy Corp., a Delaware corporation created in October 1994, owns all outstanding common stock of The Cincinnati Gas & Electric Company (CG&E) and PSI Energy, Inc. (PSI), both of which are public utility subsidiaries. CG&E supplies natural gas in the Greater Cincinnati area and also to its two regulated utility subsidiaries, Union Light Heat and Power (ULH&P), and Lawrenceburg Gas Company. The Gas Operations function within CG&E is responsible for planning and managing the gas supply needs of CG&E, ULH&P and Lawrenceburg.

Gas Operations is located in the Operations Section of the Regulated Business Unit of Cinergy Services. Gas Operations is led by the Cinergy Vice President of Gas Operations who reports to the Senior Vice President and Chief Operating Officer Regulated Businesses, Energy Services for Cinergy, who in turn reports to the President of Cinergy Regulated Businesses.

The Gas Commercial Operations Department is located within Gas Operations, and at the end of the Audit Period, had responsibility for the development of all gas supply and system management strategies and the procurement of all natural gas and pipeline transportation services required to reliably deliver adequate quantities of natural gas to CG&E and its customers.

Management/Performance Audit of Cincinnati Gas & Electric Company
Executive Summary

For the year ended December 31, 2002, CG&E natural gas operating statistics were as follows:

Description	Residential Sales	Commercial Sales	Industrial Sales	Sub Total Sales	Sub Total Transportation	Total Sales & Transportation
\$ Revenue	\$198,843,529	\$78,398,736	\$13,644,136	\$302,129,419	\$41,507,252	\$343,636,671
Sales MCF	28,555,868	12,052,866	2,384,394	44,898,759	31,821,668	76,720,427
Customers	323,240	31,563	1,306	357,215	48,524	405,739
MCF/Month	2,379,656	1,004,406	198,700	3,741,563	2,651,806	6,393,369
\$ Revenue/ MCF	\$6.9633	\$6.5046	\$5.7223	\$6.7291	\$1.3044	\$4.4791
\$Average GCR/MCF	\$3.698	\$3.698	\$3.698	\$3.698		

Note: The sum of residential, commercial and industrial sales is less than the total sales because of additional "other" sales to public entities. Transportation is both firm and interruptible. MCF Sales/Month is an average for the twelve month period.

C. Summary

During the course of this project, Liberty used a complementary set of work steps and methods. Liberty interviewed personnel in several departments within the Cinergy organization, and reviewed data and documents. At the completion of its data gathering and analysis, Liberty then prepared observations and findings about performance in each of the six areas of management and performance under review. Liberty then drew conclusion, and formed recommendations for each conclusion that identified an open need. The following list summarizes these recommendations categorized by each of the principal areas of investigation.

This list of recommendations provides an overall perspective on the operation of CG&E's gas planning, procurement and management functions. Overall, Liberty found that CG&E's gas operations are relatively well run and that the organization is headed in the proper direction. Gas Commercial Operations is staffed with knowledgeable and competent individuals that understand the overall direction of the business. The Department utilizes reasonable tools and procedures in general, and is paying attention to trends in the industry and the gas supply market. It is clear that Gas Commercial Operations has engaged in strategic thinking with respect to their overall business and is communicating these strategies well within the organization.

Liberty, however, has one concern that is expressed in several chapters of the report. This concern relates to the lack of sufficient expertise in natural gas matters at higher levels in the Cinergy organization in the chain of command above Gas Commercial Operations.

Liberty does not question the overall capability of the Gas Commercial Operations Department, and has not noted particular harm from this situation related to experience levels of senior management in the chain of command. But we feel that there must be sufficient levels of natural gas expertise in the direct chain of command at higher positions in the Cinergy organization in order to ask the insightful questions, and provide the proper level of management expertise

necessary for validation and oversight of decision-making. Unfortunately, this situation exists at a time when all of CG&E's pipeline contracts are expiring and must be replaced. Seasoned Cinergy expertise at senior levels of management, who have been through this process before, would be very valuable during this time.

In view of the fact that one of the important changes in management structure occurred after the conclusion of the Audit Period, Liberty feels that a good starting point for the next management/performance auditor would be an examination and evaluation of the organizational structure and the company's performance after the current Audit Period.

While the following list of recommendations does indicate a number of areas where CG&E's gas operations can be improved, such improvement can be viewed as enhancements and refinements to operations that are already satisfactory. Liberty is comfortable that CG&E can make the necessary adjustments in its gas operations to satisfactorily resolve these issues.

1. Detailed Recommendations

Chapter One – Organization, Staffing and Controls

1. Revise and update job descriptions for personnel in Gas Commercial Operations so that they are current and properly reflect the current responsibilities of the position.
2. Require annual statements from all employees in Gas Operations acknowledging that they have received, read, understand, and are complying with the CG&E Affiliate Code of Conduct.

Chapter Two – Gas Supply Planning and Forecasting

1. Improve the gas supply forecasting process by incorporation of model parameters that account for forward-looking customer and system changes.
2. Improve the LTFR in order to achieve more consistency with the planning process utilized by Gas Commercial Operations.

Chapter Three – Gas Supply Management

1. CG&E should develop a set of written procedures for the gas commodity procurement function.
2. In conjunction with the development of written procedures for its hedging program, CG&E should resolve the issue related to locking in suppliers prior to the RFP process.
3. CG&E should assign the dispatch of the propane plants to the Asset Manager.

4. CG&E should develop a set of written procedures for the procurement of asset management services, including description of how the RFX System is to be used in support of all procurement activities within Gas Commercial Operations.
5. CG&E should develop procedures for monitoring FERC cases and activities, including the tracking of pipeline refunds.

Chapter Four – Commodity Pricing & Price Risk Management

1. CG&E should continue to use physical contracts at market prices to lock in commodity supply volumes and develop a plan that specifies a phased approach to the use of financial contracts for its hedging activities.
2. CG&E should re-examine its hedging policy and refine its objectives with respect to mitigating price volatility.
3. CG&E should explore the use of outside assistance and/or additions to staff as well as commercially available tools in its hedging program.

Chapter Five – Gas Transportation

1. CG&E should reevaluate its assignment of curtailment levels, recognizing the benefits of the new C314 line, and should consider modifying the interruptible rate structure in next major rate filing.
2. There are no quick fixes for the Choice and PIPP programs. They should be maintained at the current level and carefully monitored and evaluated.

Chapter Six – Operational Issues

1. CG&E should undertake a focused two-part program, under the auspices of the Gas Measurement Committee, to more aggressively monitor and manage the LAUF program. The program should include the following:
 - a. The collection and maintenance of accurate LAUF data, and;
 - b. Based on those results, a program to minimize LAUF on the CG&E system.
2. CG&E should meet with suppliers, PUCO staff and the largest customers to review the emergency curtailment plan and procedures.

I. Organization, Staffing and Controls

A. Scope

This chapter of Liberty's report addresses the following topics in Cincinnati Gas & Electric Company's (CG&E) organization, staffing and controls area:

- Organization Structure
- Staffing
- Approval Authorities
- Work Process Definition and Control
- Documentation Requirements
- Auditing

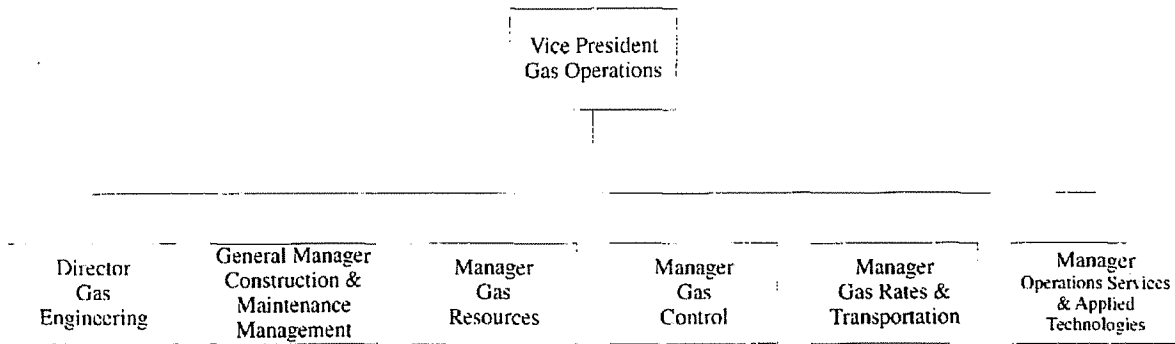
B. Background

1. Organization Structure

During the Audit Period, first the Gas Resources Department, and later because of a reorganization, the Gas Commercial Operations Department, had responsibility for gas supply planning and forecasting, the development of all gas supply and system management strategies and the procurement of all natural gas and pipeline transportation services required to reliably deliver adequate quantities of natural gas to CG&E and its customers. These Departments, located within the Gas Operations Group of CG&E, were also responsible for gas procurement for the other two regulated LDCs of CG&E, Union Light, Heat and Power Company (ULH&P) and Lawrenceburg Gas Company.

The Gas Operations Group is located in the Operations Section of the Regulated Business Unit of Cinergy Services. Gas Operations is led by The Cinergy Vice President of Gas Operations who reports to the Senior Vice President and Chief Operating Officer Regulated Businesses, Energy Services for Cinergy, who in turn reports to the President of Cinergy Regulated Businesses.

At the beginning of the Audit Period, there were six departments reporting to the Vice President of Gas Operations, as indicated in the following organization chart. One of these departments was the Gas Resources Department, responsible for gas procurement and gas management activities.



**Gas Operations Organization
Beginning of Audit Period
Figure I.1**

The responsibilities of the Manager, Gas Resources, as described in the Job Description for this position were as follows:

“Manages and directs, with a latitude for independent judgment and decision-making authority, the procurement of natural gas and securing the necessary interstate pipeline capacity to deliver such gas to Cinergy’s core market gas customers on a daily, monthly, and seasonal basis. Directs the administration of Cinergy’s subsidiary, KO Transmission. Responsible for the implementation and success of business unit goals pertaining to gas procurement. Directs, coordinates, and assists in staffing, training, development, evaluation, and counseling of personnel within the department. Approves all payments to natural gas suppliers and interstate pipeline companies regarding gas procurement and transportation of natural gas for Cinergy’s regulated gas companies. Testifies on behalf of Cinergy’s regulated gas companies before the state PUC’s regarding gas supply and transportation matters.”

During the first half of the Audit Period, the Gas Resources Department worked most closely with two of the other six departments reporting to the Vice President of Gas Operations, the Gas Control Department and the Gas Rates & Transportation Department.

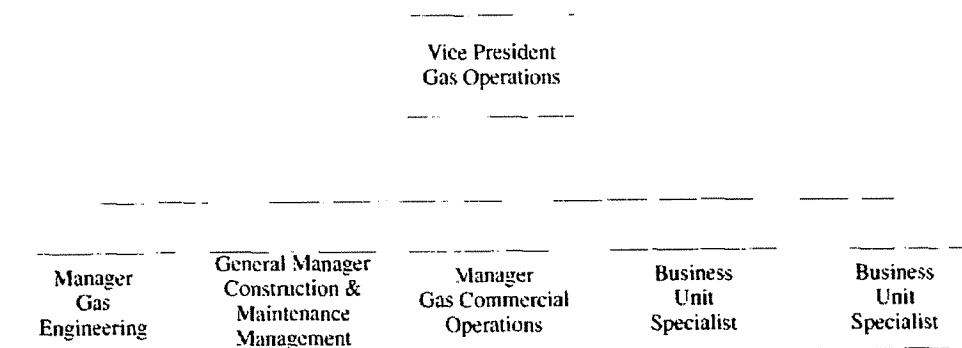
The Gas Control Department consisted of a Manager, Gas Control, and his support staff of gas controllers and supervisors who handled the gas control operations. Gas Control operates 7 days per week, 24 hours per day. The gas control section is responsible for the daily operation of the Company’s gas control function by monitoring, balancing, and controlling of gas supply deliveries across the systems to ensure that the systems are performing in a safe and reliable manner.

The Gas Rates & Transportation Department consisted of a Manager and his support staff. This group was responsible for certification of suppliers in transportation programs, and for contracting and supplier deliveries on interstate pipelines. The group monitored daily pipeline

deliveries and handled billing for large volume customers. They administered the KO Transmission pipeline, an interstate pipeline affiliate, and were involved in FERC rulemaking and rate case issues.

Approximately midway through the Audit Period, there was a significant change in the organizational structure of the various gas planning, procurement and management activities within Gas Operations.

In June 2002, Gas Resources, Gas Control and Gas Rates & Transportation were merged into a new entity, Gas Commercial Operations. Thus, for the second half of the Audit Period, there were three departments reporting to the Vice President of Gas Operations, as well as two Business Unit Specialists. One of these departments was the new Gas Commercial Operations Department. These new relationships are shown in the following organization chart:



Gas Operations Organization
End of Audit Period
Figure I.2

The reasons for this change in organizational structure were twofold. Overall, there was an interest within Cinergy of improving the management efficiency of Gas Operations, which this change accomplished. In addition, at this time, there were also several planned retirements of senior individuals and managers within Gas Operations, such that this was an appropriate time to make the change in structure.

For the second half of the Audit Period, job descriptions were not updated to reflect the new organization and merging of responsibilities. The new Manager of Gas Commercial Operations assumed the responsibilities listed above for the Manager, Gas Resources, and also assumed the responsibilities for Gas Control and Gas Rates & Transportation. Thus, some job descriptions are not current, since the nature of many jobs within Gas Operations changed as a result of the merger in June 2002.

Performance Measurement

Performance measurement for employees in the Gas Operations group is handled in accordance with the overall Cinergy program for employee performance management. In general, this program consists of several components. Employee performance is evaluated annually using the KPI, or Cinergy Key Performance Indicator program. This method evaluates measurable performance, not just activity, and applies to all exempt employees. Through this system, the Manager's performance is measured against other Ohio LDCs, Columbia Ohio, DP&L and East Ohio Gas. Reviews conducted at the end of each year between employees and managers can result in salary increases.

Beyond this structured performance measurement system, the Vice President of Gas Operations monitors the performance of her people on a number of issues to determine if the overall performance of her group is meeting her expectations. For example, she follows the daily gas meetings and observes whether or not gas is available in the quantities, locations and pressures necessary to meet the forecasted requirements.

A further checkpoint on the short-term outlook is the regularly scheduled weekly updates on activities within Gas Commercial Operations. On a weekly basis, the staff members of Gas Resources/Gas Commercial Operations send a report on their activities to the Manager of Gas Commercial Operations, who forwards a summary to the Vice President of Gas Operations.

Another measure of performance is the monthly supply planning meeting. This meeting looks at monthly supply planning – how much base gas is nominated, how much swing gas is needed, what the storage position is at the beginning of the month and what it should look like at the end of the month. The managers attending agree on the monthly plan, and the Vice President determines if the plan is adequate, if it is implemented as planned, and if the supplies are available to carry out the plan.

A further measure of performance is the Vice President's monitoring of the development of the annual winter plan. The managers are responsible for developing an achievable and logical plan based upon review of the annual pipeline contracts, evaluation of other pipeline availability, evaluation of overall capacity, where incremental storage might be obtained, and a detailed review of existing supply contracts – should they be renewed, or should the group go out for bid? In summary, the Vice President is very involved in the activities of the gas planning, procurement and management functions, and through this involvement is able to effectively assess the overall performance of his Gas Operations Group, as well as the individual employees of the group.

Training

There is no formal training program, or training manual, for employees in the gas planning, procurement and management functions. However, a more informal cross-training program is currently underway. All of the key positions in Gas Commercial Operations have designated individuals with backup responsibility. The merger of the three departments in June 2002 provided the overall organization with more "bench strength" such that more cross-training was possible and designation of individuals with backup responsibilities was more meaningful.

To reinforce the cross-training efforts, increased emphasis was placed on formalized and detailed procedures for conduct of many of the key activities within the Department. Especially important are the procedures for the Administrator Gas Procurement & Administrative Services, which are very detailed.

Recently, within Cinergy, a program entitled Q12 was conducted by the Gallup organization. The outcome of this program was the development of department action plans that created greater engagement of individuals within departments. Part of this program includes formal monthly face-to-face meetings between key department individuals for sharing of information and better understanding of job responsibilities. These meetings are tracked by the Manager of Gas Commercial Operations to ensure their effectiveness.

The Manager of Gas Commercial Operations also reinforces cross-training and better intra-departmental job understanding through his regular staff meetings held every two weeks. Individuals come prepared to participate, and the structured sharing of information maintains good general understanding of activities throughout the Department.

Job Descriptions

Most job descriptions for employees involved in Gas Commercial Operations are not current, and have not been updated since the merger of departments in June 2002.

2. Staffing

During the Audit Period, in 2002, two individuals with considerable experience in the areas of natural gas supply planning, procurement and management left Gas Operations. These individuals left due to their retirement. The retiring individuals were the Manager, Gas Resources, and the Manager, Gas Rates & Transportation. In November 2003, after the end of the Audit Period, the Vice President of Gas Operations left for another position within Cinergy.

The individual assuming the new position of Manager of Gas Commercial Operations when the reorganization took place in June 2002 was well qualified for this position. He has a B.S. degree in Business Administration and an MBA degree. He has been in the natural gas business since 1990 and with Cinergy since 1996 where he has held a number of positions related to both the regulated and non-regulated natural gas business, as well as other management development positions.

Consolidation of the Gas Control and Gas Rates & Transportation functions under this individual in the new Gas Commercial Operations Department was a sound organizational move, and these activities have been effectively managed by the new Manager of Gas Commercial Operations since the time of the consolidation.

Effective June 2002, and through the end of the current Audit Period, with the consolidation of departments, sufficient talent and longevity in the natural gas business was retained in Gas Operations for effective planning, procurement and management. Essentially, the only significant changes related to departure of senior managers, while the important expertise at the

individual contributor level was retained. Since the retirement of the two senior managers was anticipated, there was sufficient time to accomplish an orderly transfer of information and ensure that the organization benefited as much as possible from the many years of accumulated experience of these individuals.

On a looking forward basis, after the end of the current Audit Period, Liberty found that the highest level in the organization with any significant level of natural gas experience was the Manager of Gas Commercial Operations. The new Vice President of Gas Operations has minimal natural gas operational experience, and the next higher management position of Senior Vice President & COO, Regulated Businesses has considerable strength and longevity with Cinergy on the electric power side of the business, but limited experience in natural gas. Thus, Cinergy must rely on the expertise of the Manager of Gas Commercial Operations for any important decision-making related to natural gas activities, since a higher level of management expertise necessary for validation and oversight of decision-making does not exist.

Accentuating the problem associated with this lack of senior level natural gas experience was the assignment of the Manager of Gas Commercial Operations to the CIN10 project in 2004. This has taken this experienced manager away from natural gas operations, such that the department is currently being managed by the Supervisor of Gas Control. Now is a particularly inappropriate time for the Manager of Gas Commercial Operations to be away from the natural gas business because of the major gas pipeline contracts that expire later this year and that must be renegotiated or replaced.

3. Approval Authorities

Approval of activities within Gas Operations are controlled by a formal Cinergy decision matrix, or chart of approval authorities, that specifies the magnitude of commitment that various levels of management can make. These limits are specified in the Cinergy Authorized Approvals Manual, dated May 2000.

Gas Operations does adhere to these approval authorities, and personnel in the Department were knowledgeable of the existence of these procedures and their limits.

4. Work Process Definition and Control

While there are no formal policies and procedures documents guiding the overall operations of Gas Commercial Operations, there are procedures in place for certain specific activities within the organization, but not for all of the important activities within the organization. The procedures currently in place and created for specific functional areas are those supporting the operations of Gas Control, Gas Rates & Transportation Programs, and Gas Procurement & Administrative Services. In fact, in recognition of the critical nature of the responsibilities of the position of Administrator, Gas Procurement & Administrative Services, the procedures for this position are remarkably detailed and complete. In spite of the lack of overall policies and procedures for Gas Commercial Operations, Liberty found that the business strategy of the

organization and the specific roles and responsibilities of individuals within the organization were well understood and communicated internally between staff members.

In several important areas of operations, specific procedures were lacking. Liberty found that specific procedures were lacking in the following areas:

- Procedures for procurement of natural gas supplies, and
- Procedures for selection of an Asset Manager, and the associated support procedures related to use of the RFX System for this purpose.

A complete discussion of the importance of these procedures, along with accompanying Conclusions and Recommendations related to resolution of this situation is contained in Chapter III, Gas Supply Management.

In addition to the specific procedures for the various groups within Gas Commercial Operations, there are other specific procedures for certain activities as described below.

Hedging Plans, Policies and Procedures

CG&E utilizes two distinctly different types of documents to define and control the hedging activities. The first set of documents is the hedging plan for each of the winter heating seasons. These plans were prepared for each of the heating seasons during the Audit Period, as well as for the subsequent heating seasons. These documents are specific with respect to how the hedging plan for that season will operate, and include the following categories:

- Introduction to the overall plan for the season
- Amount of CG&E's Gas Supply Subject to the Hedging Plan
- Schedule for Purchase of Hedging Instruments
- Types of Hedging Products
- Price Ranges for Purchases
- Conclusion/Summary of Plan

The second category of documents is the actual policies and procedures for hedging. During the Audit Period, there were no specific policies and procedures for CG&E. However, policies were formalized for ULH&P for filing with the Kentucky Public Service Commission in a document dated August 2, 2002. Since the same gas management group within Cinergy is responsible for hedging for both CG&E and ULH&P, the same policies and procedures were followed by both companies during the Audit Period, and subsequently. Such policies and procedures for CG&E were not officially published until April 27, 2004. The CG&E document is essentially the same as the one for ULH&P.

The policies and procedures documents are actually policy statements, and do not contain any hedging procedures. Gas Commercial Operations uses the Hedging Plans described above for more detailed guidance on hedging activities. The contents of the policies and procedures document as simply four overall policy statements that include the following:

- Use of Hedging Instruments – stating that hedging programs can reduce the volatility in gas costs;
- Goals of Natural Gas Hedging Program – stating that the goals of the program are to evaluate the risk and reward of purchasing hedging instruments in a structured manner;
- Process for Evaluating the Purchase of Hedging Instruments – stating that there will be a Natural Gas Hedging Committee within Gas Operations that will continuously monitor the current market conditions for natural gas and develop the appropriate hedging recommendations; and
- Evaluation of Natural Gas Hedging Program Policies and Procedures – stating that the Natural Gas Hedging Committee will evaluate the subject policies and procedures prior to the beginning of each heating season and make appropriate changes.

The CG&E hedging plans do not call for entry into, or use of, financial hedges. Thus, the more elaborate hedging procedures, and risk management procedures normally associated with financial hedging have not been necessary for the physical hedging program conducted by CG&E. The existing plans, policies and procedures have been adequate, but will need to be re-examined as CG&E looks to the future. A complete discussion of changes required in the area of hedging policies and procedures, along with accompanying Conclusions and Recommendations related to resolution of this situation, is contained in Chapter IV, Commodity Pricing & Price Risk Management.

Cost Allocation Manual (CAM)

CG&E has developed a cost allocation manual (CAM), pursuant to Ohio Administrative Code §4901:1-20-16 – Corporate Separation. This is a comprehensive “virtual” document that contains (i) physical copies of selected materials; (ii) indexes to physical copies of required materials; and (iii) descriptions of processes and procedures by which CG&E can readily assemble required physical materials.

Code of Conduct

Policies for dealing with affiliates are covered in the CG&E Affiliate Code of Conduct. All employees have received orientation on these procedures, and every employee has signed a statement of understanding regarding these procedures. Employee orientation on these procedures has been on a periodic basis, and infrequent. In March 1999, nine of the employees of the Gas Operations Group were given Code of Conduct Training by Cinergy’s Legal Department. This was a small number of the total number of employees in that group at that time. In the Spring of 2001, these employees viewed a Code of Conduct training video, along with a number of other employees in Gas Operations. Since that time, there have been no refresher programs, or corporate efforts to ensure that employees are maintaining a current understanding of Code of Conduct issues, and that they are complying with the appropriate Code of Conduct procedures.

In addition to this Code of Conduct, CG&E has included “Supplier’s Code of Conduct” requirements as part of its filed tariff for suppliers participating in the Company’s firm transportation programs. This particular Code of Conduct is found in P.U.C.O. Gas No. 18,

Sheet No. 44.4, filed pursuant to an Entry dated June 11, 2002 in Case No. 01-1228-GA-AIR before the PUCO.

Risk Management

Cinergy has complete procedures covering Risk Management, entitled “Cinergy Corp. Enterprise Credit Risk Management Policy”. The purpose of these procedures is to minimize and mitigate the credit exposure of Cinergy and its affiliates resulting from wholesale energy commodities transactions. The Enterprise Credit Risk Management Department (*Credit Department*) is responsible for overseeing all aspects of Credit Risk management, and reports directly to the Vice President – Global Risk Management of Cinergy, and indirectly to the Risk Policy Committee of Cinergy (*RPC*).

Gas Commercial Operations has had considerable interaction with Global Risk Management on issues such as the Choice Program, the hedging program and the asset management agreement. Both potential Asset Managers were specifically evaluated in terms of creditworthiness, as well as other suppliers. Weekly reports are provided from Gas Commercial Operations to Global Risk Management on hedging transactions and mark to market information. Global Risk Management determines that hedging transactions are within established guidelines for such transactions, and that the appropriate backing guarantees exist. Gas Commercial Operations also provides Global Risk Management with the RFP list so that counterparty risk may be determined for potential suppliers to CG&E.

Strategic Plan

Every two years, Gas Commercial Operations prepares a Gas Supply Strategic Plan (*Plan*). Covering the Audit Period, a plan was published in the Spring of 2001, and again in the Spring of 2003. The purpose of the plan is to identify and communicate the specific strategies that, when implemented, will assist CG&E in meeting its long-term gas supply goals. A more detailed discussion of the Plan, and the process used in its preparation is contained in Chapter II of this report, Gas Supply Planning and Forecasting. Personnel within Gas Commercial Operations have been kept up to date on the Plan through discussion at department staff meetings where the Plan has been addressed in a specific agenda item.

5. Documentation Requirements

Documentation of gas procurement and supply management activities within Gas Commercial Operations is satisfactory. A number of reports and records are used and maintained to manage the gas supply process and include, but are not limited to, reports on actual gas flow data, forecast estimates, capacity requirements estimates, and related financial documents. A number of detailed documents related to virtual storage and virtual dispatch are maintained and used to monitor the activity of the CG&E system, as managed by the Asset Manager, and as compared to the CG&E forecast for this activity.

As discussed above under the Section entitled *Performance Measurement*, the Vice President of Gas Operations maintains very close contact with the operations related to gas planning,

procurement and management through the regularly scheduled meetings and reports that flow from these meetings.

On a weekly basis, the Manager of Gas Commercial Operations prepares detailed and comprehensive reports for the Vice President of Gas Operations. These reports are prepared around the theme of “Regulated Businesses Unit Value Creation Machine” and include the following categories describing the operations of the department:

- Customers
- Operations
- Regulatory Initiatives
- Employees
- Financial Performance

Senior management is also kept well advised of activities within Gas Operations. The Vice President of Gas Operations keeps superiors informed of what’s going on through regular reports and meetings. Weekly and monthly reports that essentially mirror those submitted by the Manager of Gas Commercial Operations, as described above, are also submitted by the Vice President of Gas Operations to the immediate superior, the Senior Vice President, Chief Operating Officer Regulated Businesses. In addition, the Vice President of Gas Operations has a face-to-face meeting with the Senior Vice President in the regular staff meetings and in the weekly operational meetings each Monday.

The Strategic Plan is central to overall documentation of CG&E strategies and plans for gas procurement and management. It is well prepared, comprehensive, available to personnel, and with sufficient detail to provide meaningful documentation of strategies and plans.

6. Auditing

The internal auditing capability of Cinergy is limited, and so recently, outside auditors have been used to conduct internal audits of Gas Commercial Operations. During the Summer of 2002, PricewaterhouseCoopers, LLP conducted such an internal audit of Gas Commercial Operations. The underlying objective of this audit was to assess how effectively Gas Commercial Operations demonstrated or showed prudent measures to supply gas at low cost and to provide reliable service in accordance with regulatory standards. In order to assess these objectives, the following audit criteria were established:

- Processes are in place to provide adequate gas supply to the Cinergy system;
- Processes are in place to ensure that prudent measures are taken to procure low cost gas;
- Processes are in place to ensure sufficient capacity is reserved, especially for peak demand season;
- An adequate regulatory reporting framework is in place.

The audit found that Gas Commercial Operations had adequate processes in place to effectively supply gas at low cost and to provide reliable service in accordance with regulatory standards, and no high-risk control issues were identified.

Internal Audit has plans for an audit of the GCR calculation to be conducted during the Summer of 2004 by PricewaterhouseCoopers.

C. Conclusions

- 1. Personnel in the Gas Commercial Operations Department have solid analytical skills and sound experience in the natural gas area, which suits the objectives of the organization.**

Gas Commercial Operations Department personnel have sufficient experience in the essential activities of natural gas planning, procurement and management. Liberty's review of work products created within the department during this audit indicated that the capabilities of all of the individuals in the department are strong and consistently applied. Interviews with department members indicated that these employees possess the proper skills to perform the tasks that they have been given. They have also demonstrated the ability to grow into larger roles if their development is appropriately supported.

- 2. Some job descriptions for personnel in Gas Commercial Operations are out of date and do not adequately relate to the current responsibilities of the position.**
(Recommendation #1)

The job descriptions related to the activities of Gas Commercial Operations were last written and revised prior to the merging of Gas Resources, Gas Control and Gas Rates & Transportation in June 2002, and therefore do not reflect the current responsibilities of positions within Gas Commercial Operations in some cases.

- 3. Communication within Gas Commercial Operations, and between Gas Commercial Operations and upper levels of management is satisfactory.**

Personnel within Gas Commercial Operations displayed a good understanding of the overall mission of the department, as well as knowledge of current activities and key strategic issues within the organization. This reflects the good communication within the organization that has been accomplished through regular staff meetings and management attention to the importance of involving all personnel in the activities of the organization.

Communication with upper levels of management is also effective through a regular process of staff meetings and formal written reports prepared for the Vice President of Gas Operations, and the Senior Vice president & COO, Regulated Businesses, that reflect the status of activities within Gas Commercial Operations.

4. Cinergy has insufficient senior management natural gas expertise in the direct chain of command above the Manager of Gas Commercial Operations.

In 2003, the Vice President of Gas Operations was transferred to another position within Cinergy, and replaced with another Cinergy employee. The departing Vice President was a seasoned executive with considerable experience in the natural gas business. The new Vice President of Gas Operations, while an experienced Cinergy executive who has been with the company for approximately 29 years, has minimal background in the natural gas business. At the next higher level of management, the Senior Vice President & COO Regulated Businesses is a seasoned Cinergy executive, with experience primarily in the electric power side of the business. His natural gas experience has been developed over the last four years since he has been in this position.

Liberty feels that this situation is problematic in both the near term, and in the long term. The immediate concern associated with this lack of senior level natural gas experience in the direct chain of command above the Manager of Gas Commercial Operations was the assignment of this manager to the Cin10 project in 2004. This has taken this experienced manager away from most day-to-day aspects of the natural gas operations, such that the department is currently being managed by the Supervisor of Gas Control. Now is a particularly inappropriate time for the Manager of Gas Commercial Operations to be away from the natural gas business because of the major gas pipeline contracts that expire later this year and that must be renegotiated or replaced. While the Manager of Gas Commercial Operations has continued his involvement in the pipeline negotiations, it poses a significant challenge for him to give his full attention to that project while on another high profile assignment.

Liberty does not question the overall capability of the Gas Commercial Operations Department, and has not noted particular harm from this situation related to experience levels of senior management in the chain of command. However, there is still the longer-term concern associated with this situation where the current Manager of Gas Commercial Operations is the highest level in the Cinergy organization with the necessary amount of natural gas expertise. Consequently, there are no higher levels of management in the direct chain of command with the necessary amount of natural gas experience to ask the appropriate in-depth questions, to suggest alternatives to be examined, and to provide the necessary validation and oversight of decision-making.

In view of the fact that one of the important changes in management structure occurred after the conclusion of the Audit Period, Liberty feels that a good starting point for the next management/performance auditor would be an examination and evaluation of the organizational structure and the company's performance after the current Audit Period.

5. Gas Commercial Operations has a satisfactory program for training and cross-training of individuals within the department.

While Gas Commercial Operations does not have a formal training or cross-training program that is documented through a training manual, or training plan, the department has taken a more informal, but effective approach to training and cross-training. Training is an ongoing process and the Cinergy Virtual Academy has been effectively used in this area. Classes are offered as

well as on-line training courses, with subjects ranging from computer applications to leadership development. The department has a log for each individual that indicates the courses taken, and participation by department personnel has been effective.

In addition, Gas Commercial Operations cross-trains employees to ensure that all mission critical tasks can be accomplished by at least two individuals. For each task, there is an employee with primary responsibility for that task as well as a backup. The employee with primary responsibility for a task provides their backup person with both training and documentation, such as formalized procedures, to ensure that the task can be accomplished in the absence of the individual with primary responsibility. The department maintains a listing of each of these critical tasks, along with designation of the individuals with primary and backup responsibility.

6. Cinergy maintains an appropriate decision matrix, or chart of approval authorities.

Cinergy maintains a corporate procedure, entitled the Cinergy Authorized Approvals Manual that specifies the magnitude of commitment that can be made by various levels of management throughout the corporation. This Manual is current, and was published in May 2000. Liberty found that employees in Gas Commercial Operations were aware of, and followed, these procedures guiding the approval process.

7. Management of the program for employee training and compliance monitoring in the area of Code of Conduct can be improved. (Recommendation #2)

Adequate procedures governing ethical behavior have been developed and published by Cinergy for all employees in the CG&E Affiliate Code of Conduct. A strong ethics program is essential for functions such as Gas Operations, where individuals are responsible for major expenditures.

All employees have received orientation on these procedures, and every employee has signed a statement of understanding regarding these procedures. However, employee orientation on these procedures has been on a periodic basis, and infrequent. In March 1999, nine of the employees of the Gas Operations Group were given Code of Conduct Training by Cinergy's Legal Department. This was a small number of the total number of employees in that group at that time. In the Spring of 2001, these employees viewed a Code of Conduct training video, along with a number of other employees in Gas Operations. Since that time, there have been no refresher programs, or corporate efforts to ensure that employees are maintaining a current understanding of Code of Conduct issues, and that they are complying with the appropriate Code of Conduct procedures. While Liberty found no indication that there were any abuses of the Code of Conduct procedures, management of Gas Operations has no assurance that employees in the organization have read, understand, and are complying with these procedures on a current basis.

8. Gas Commercial Operations has a satisfactory set of procedures developed for many of the specific functional areas within the department, but needs to develop other specific procedures related to the gas procurement and management function.

While there are no formal policies and procedures documents guiding the overall operations of Gas Commercial Operations, there are procedures in place for many of, but not all of, the

specific activities within the organization. The procedures currently in place are those that have been created for specific functional areas such as Gas Control, Gas Rates & Transportation Programs, and Gas Procurement & Administrative Services. In spite of the lack of overall policies and procedures for Gas Commercial Operations, Liberty found that the business strategy of the organization and the specific roles and responsibilities of individuals within the organization were well understood and communicated internally between staff members.

The department also has other specific procedures related to hedging, procedures that are part of the Cost Allocation Manual, and corporate procedures related to code of conduct, as well as risk management.

In several important areas of operations, specific procedures were lacking. Liberty found that specific procedures were lacking in the following areas:

- Procedures for procurement of natural gas supplies;
- Procedures for selection of an Asset Manager, and the associated support procedures related to use of the RFX System for this purpose;
- Hedging policies and procedures for expanded future operations in this area.

A complete discussion of the importance of these procedures, along with accompanying Conclusions and Recommendations related to resolution of these situations is contained in the following chapters of this report:

- Natural gas procurement – Conclusion #2 and Recommendation #1 of Chapter III, Gas Supply Management;
- Selection of an Asset Manager, and use of the RFX System – Conclusion #14 and Recommendation #4 of Chapter III, Gas Supply Management;
- Hedging policies and procedures – Conclusion #3 and Recommendation #2 of Chapter III, Gas Supply Management, and Conclusion #4 and Recommendations #1 & #2 of Chapter IV, Commodity Pricing & Price Risk Management.

9. Documentation of gas procurement and supply management activities within Gas Commercial Operations is satisfactory.

The Strategic Plan is central to overall documentation of CG&E strategies and plans for gas procurement and management. It is well prepared, comprehensive, available to personnel, and with sufficient detail to provide meaningful documentation of strategies and plans.

The department also uses a number of other reports and records to manage the gas supply process and include, but are not limited to, reports on actual gas flow data, forecast estimates, capacity requirements estimates, and related financial documents. A number of detailed documents related to virtual storage and virtual dispatch are maintained and used to monitor and activity of the CG&E system, as managed by the Asset Manager, and as compared to the CG&E forecast for this activity.

Upper levels of management are also kept up to date on activities within Gas Commercial Operations through regular weekly and monthly reports.

D. Recommendations

- 1. Revise and update job descriptions for personnel in Gas Commercial Operations so that they are current and properly reflect the current responsibilities of the position. (Conclusion #2)**

Job descriptions, which describe the details of individual responsibility and qualifications necessary for proper job performance, are necessary to support any organization with complex responsibilities such as gas planning, procurement and management. Such job descriptions are essential both for the individual performer and for the manager responsible for directing the activities of that position. Written job descriptions provide clear definitions of responsibilities, boundaries, and interfaces, which allow individual performers to know specifically what is and is not expected of them. Proper job descriptions also assist managers lay out the complete spectrum of tasks to be accomplished by the organization involved, in order to ensure that there are no gaps or overlaps in what has to be accomplished. Current job descriptions are especially important in organizations responsible for large dollar commitments, such as procurement of natural gas. Without proper job descriptions, the dynamics of a critical organization, such as Gas Commercial Operations, can lead to uncertainty as to responsibilities, or even inaction on critical issues.

- 2. Require annual statements from all employees in Gas Operations acknowledging that they have received, read, understand, and are complying with the CG&E Affiliate Code of Conduct. (Conclusion #7)**

In order to ensure that all employees are aware of the requirements and of the comprehensiveness of the ethics procedures, all employees of Gas Operations must be required to sign annual statements acknowledging that they have received an individual copy of the procedures, have read and understand them, and are complying with the procedures. This is particularly important for Gas Operations employees, who, by the nature of their responsibilities, are involved in procurement of natural gas involving millions of dollars on an annual basis. Their conduct must be beyond reproach, and management must assure itself that every reasonable precaution has been taken to ensure that the ethical conduct of these employees is of the highest nature.

II. Gas Supply Planning and Forecasting

A. Scope

This chapter of Liberty's report addresses the following topics in CG&E's gas supply planning and forecasting practices area:

- Peak Day and Winter Season Methodologies, including Variables, Assumptions and Probabilities
- Comparing Forecast Results to Sendout
- Comparing the Forecast to Capacity Entitlements
- Commodity and Capacity for Choice Customers
- Integration with Corporate Plans
- Planning Flexibility, Including New Markets

B. Background

Gas supply planning and forecasting is conducted within the Gas Commercial Operations (*GCO*) organization. A complete description of how this organization fits into the overall CG&E organization and of the organizational changes that took place during the Audit Period is contained in Chapter I, Organization, Staffing and Controls.

1. Peak Day and Winter Season Methodologies, including Variables, Assumptions and Probabilities

A sound analysis of historical weather is the foundation of supply planning. The weather for a day in January is influenced by typical January weather, and even more so by the previous day's weather. However, there is always the possibility of a record-breaking high or low temperature, and weather can also vary across a service territory.

Liberty feels that weather analysis is a very important component of natural gas forecasting and is crucial in determining the two main elements of a natural gas forecast, namely the design day sendout and the forecasted total annual sendout.

For demand forecasting purposes, CG&E uses Cincinnati Northern Kentucky Airport (CVG) as the weather station that approximates the weather for its service territory. Liberty constructed the following monthly heating degree-day (HDD)¹ table based on daily temperature data, indicating

¹ A heating degree-day is a measure relating temperature to the demand for heating fuel. Heating degree-days for a particular day is determined by taking the arithmetic average of the day's high and low temperatures. If the resulting number is above 65, there are no heating degree-days for that day. If the number is less than 65, then the resulting number is subtracted from 65 to find the number of heating degree-days. For example, if the day's high temperature is 60 and the low is 40, the average temperature is 50 degrees. 65 minus 50 equates to 15 heating degree-days.

maximums and minimums for the weather station, obtained from the National Oceanic and Atmospheric Administration (NOAA) for the period of 1/1/1948 through 2/29/2004.

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Month:	1	2	3	4	5	6	7	8	9	10	11	12	Annual
Std.Dev	175	144	116	81	60	16	1	5	34	91	99	152	380
Min	735	659	452	209	31	0	0	0	19	125	451	692	4235
-2 std	746	601	470	199	10	0	0	0	0	129	433	654	4404
Avg	1095	888	703	360	131	17	1	3	67	311	632	958	5165
+2 std	1444	1175	935	522	252	50	3	13	134	493	831	1262	5925
Max	1645	1312	1098	517	258	83	6	22	152	519	903	1346	6087
EXTREME:	841	1238	859	337	205	10	0	1	1	271	504	85	6087

Monthly Degree Days Figure II.1

The statistics in this table were calculated by Liberty on a calendar month basis, with the columns 1 through 12 indicating the standard deviation, minimum, average, maximum monthly HDD, and the +/- 2 standard deviation bounds around the average. The Annual column is not the summation of the associated row, but instead indicates the variation in (calendar) annual HDD. Thus, the annual HDD for each year with 12 months of observations were summed and then divided by the number of years to determine the annual average number. The minimum and maximum annual HDD for the observed calendar years are indicated, and the standard deviation is calculated based on the annual figures.

The 'Extreme' line is a combination of the maximum January degree-days that occurred in 1977, along with a distribution of the total annual HDD that occurred in 1978, which is the coldest weather year in the dataset. It is this scenario, with the coldest month (January) and the maximum annual degree-days (the coldest calendar year), against which Liberty evaluated CG&E's existing capacity portfolio.

Peak Day Analysis

Liberty found that the 56 years of NOAA weather data for Cincinnati, Ohio from 1/1/1948 to 2/29/2004 contains 27 days where the weather was 0 degrees or colder. The three coldest days, 1/17/1977, 1/18/1977 and 1/20/1985 all indicated an average temperature of -12.5 degrees, corresponding to 77.5 HDDs. The 27 coldest days are listed in the following chart:

Coldest days for Cincinnati, OH (CVG)

Date	Average Temp.	HDD	Date	Average Temp.	HDD
1/17/1977	-12.5	77.5	2/2/1951	-4	69
1/18/1977	-12.5	77.5	1/10/1962	-3	68
1/20/1985	-12.5	77.5	1/15/1972	-3	68
1/19/1994	-11.5	76.5	1/28/1963	-2.5	67.5
1/18/1994	-10	75	1/19/1984	-2.5	67.5
1/10/1982	-9	74	1/20/1984	-2.5	67.5
1/21/1984	-8	73	1/15/1994	-2.5	67.5
12/22/1989	-8	73	2/4/1996	-2.5	67.5
1/24/1963	-7.5	72.5	12/21/1989	-2	67
1/17/1982	-7.5	72.5	1/21/1985	-1.5	66.5
1/16/1977	-5.5	70.5	1/29/1977	-1	66
12/24/1983	-5	70	1/8/1970	-0.5	65.5
1/30/1966	-4.5	69.5	1/16/1972	-0.5	65.5
12/25/1983	-4.5	69.5			

Coldest Days for Cincinnati, OH (CVG)
Figure II.2

The coldest day observations can be translated into percentages by dividing the number of coldest days by the number of years in the dataset.² The following table converts the HDD data from the previous table to a display of the probability of a cold day occurring within a given year.

Cincinnati, OH - Coldest Days		
Data days	20477	
Data yrs	56	
	Count	Prob / Year
Days>=78 HDDs	0	0.00%
Days>=77 HDDs	3	5.35%
Days>=76 HDDs	4	7.13%
Days>=75 HDDs	5	8.91%
Days>=74 HDDs	6	10.69%
Days>=73 HDDs	8	14.26%
Days>=72 HDDs	10	17.82%
Days>=71 HDDs	10	17.82%
Days>=70 HDDs	12	21.39%
Days>=69 HDDs	15	26.74%
Days>=68 HDDs	17	30.30%
Days>=67 HDDs	23	41.00%
Days>=66 HDDs	25	44.56%
Days>=65 HDDs	27	48.13%

Probabilities of Coldest Days
Figure II.3

² This analysis is conservative since it assumes coldest days do not take place during the same year.

This table shows that over the 56-year period there were 5 days where 75 HDDs were exceeded, and only 3 days where 77 HDDs were exceeded. It is noteworthy that two of the three coldest days followed each other. Thus, the planning process must consider not just individual peak days, but also consecutive such days.

Design Day Assumptions and Calculations

CG&E develops an annual Long Term Forecast Report (*LTFR*), which includes a description of the methodology of calculating the peak day gas sendout for the CG&E system. However, this description is dated because it does not reflect current forecasting practices within Gas Commercial Operations.

The 2001, 2002 and 2003 *LTFRs* indicate that a peak load with a 1% probability of being exceeded based on occurrences during the past 40 plus years is roughly equivalent to a temperature of -19.52 degrees combined with a wind speed of 11.56 mph. This same level of peak load could also be achieved at higher temperatures with higher wind speed. However, according to daily NOAA data, the coldest day temperature was -12.5 degrees. CG&E also uses hourly NOAA data to compute a daily temperature average on a gas day (average of 24 hourly observations from 8am to 7am the next day until June 1997, and 10am to 9am thereafter) basis. This hourly data indicates a coldest gas day of -15.375 degrees and 12.65 mph wind for 1/16/1977.

Rather than using a specific temperature and wind speed in developing a design day, GCO uses a design day based upon a 97% probability level for coverage. GCO uses a peak day expected value analysis to calculate the 'optimal' level of peak day coverage, by minimizing the sum of the expected cost of a deficiency (the cost of buying gas at market price on a peak day)³ and the cost of acquiring different levels of firm peaking capacity. The 97% probability coverage level that was considered optimal for the winter of 2002/03 was equivalent to a temperature of -11.88 degrees, a wind speed of 13.46 mph, and a prior day temperature of -2.89 degrees. These figures are very close to the coldest day observations in the NOAA data cited above.

Weather Normals

The 2001 *LTFR*, prepared in May 2001, states that the weather normals for 1961 through 1990, with annual HDDs of 5248 as calculated by NOAA, are no longer representative of weather normals due to recent warming trends. CG&E therefore calculated its own new weather normals and started using this new data based on its own observed weather trend, which is shown in the following table as 'CG&E - New'.

³ The calculation assumes an incremental cost of citygate deliverable gas at \$50/dth, which may have been relatively high in previous years, but appears plausible under current market conditions.

NOAA Normals	1	2	3	4	5	6	7	8	9	10	11	12	Total
Year 2001 (*)	1144	930	682	354	151	11	0	0	51	327	621	977	5248
Year 2002 (**)	1110	881	670	368	130	19	1	3	68	319	626	953	5148
CG&E - new	1021	818	692	360	128	19	0	2	70	311	631	898	4950

(*) these NOAA normals were calculated using weather for 1961 through 1990

(**) these were NOAA normals for 1971 through 2000, as revised in February 2002 by NOAA

CG&E Weather Normals Figure II.4

In February of 2002, NOAA updated its weather normals to reflect the warmer decade of 1991 through 2000, and reported weather normals of 5148 HDDs. CG&E's recently calculated normal weather assumption of 4950 HDDs is lower than the latest NOAA data for the Year 2002 by 198 HDDs, or 4%.

CG&E uses its own newly calculated value of weather normal of 4950 HDDs as the basis for calculations related to budget amounts and for assessing normal gas supply demand. CG&E's use of HDDs that are lower than NOAA data translate into lower forecast amounts for budgets and gas supply planning, and also affect revenue requirement calculations. The calculation and appropriateness of these weather normals were approved per Case 01-1228-GA-AIR on an interim basis, with the understanding to return to the use of 30-year weather normals at the time of a future rate case.

Gas Energy Forecast

CG&E uses econometric forecasting equations to develop a forecast of the number of customers, base usage per customer and heat sensitive usage per customer for the residential customers, along with commercial firm and interruptible sendout, industrial firm and interruptible sendout, and sendout for other public authorities. Base gas usage is defined as the minimum monthly usage during the year, usually occurring in July, August, or September.

In addition to its forecast model, CG&E employs a Monte Carlo simulation analysis of the company's gas supply and capacity requirements. Statistical information based on historical load is used to simulate potential sendout and to determine the optimal mix of supply sources such as base supply, swing supply, storage withdrawal and propane air production. CG&E's Monte Carlo analysis enables a proper risk analysis with respect to meeting demand.

2. Comparing Forecast Results to Sendout

CG&E prepares a monthly comparison of actual gas sendout compared to historical gas sendout. Market Analysis also tracks its forecast performance through variance reporting that compares these forecasts with gas sendout, using billing data and weather normalized actual sales. Analysis of forecast performance versus actual performance could lead to adjustments to the forecasting

methodology. However, this information is neither presented nor discussed in the LTFRs. LTFRs would be an appropriate place to discuss the results of variance analysis, and whether adjustments to forecasting methodology are warranted.

CG&E uses the same sendout forecast prepared by the Market Analysis Department for both financial planning and gas supply planning. Once developed, the annual sendout and design day sendout forecast equations are not revised until the next year. While the LTFR does not include it, the Administrator of Gas Procurement and Administrative Services prepares load duration curves to analyze resource usage based on various load requirement scenarios. This analysis includes resources to meet total annual demand as well as design day demand as projected by its peak sendout forecast equation.

Based on a main weather forecasting service and 7 other weather forecast sources for comparison, Gas Control uses weather data on a gas day basis, as a 24-hour average from 10am to 9am the next day, to develop the daily system sendout forecasting equation. The forecasting equation is updated on an annual basis, and more often if necessary.

The equation developed by Gas Control requires inputs for temperature, prior day temperature, wind, sun, and day of the week, modeled as an 'effective temperature' variable, along with total system firm load, and yields a demand forecast for firm requirements. In tandem, Gas Control uses a similar-day database to make comparisons of similar conditions among historical days based on the above weather variables and comparable winter, summer, or shoulder gas months. Gas Control then compares this information to the sendout estimate from the forecasting equation as a check on the validity of the equation. In addition, Gas Control maintains a load comparison file to do a backcast of the actual data and track how much sendout was under/overforecasted over time. Gas Commercial Operations also uses data from the daily sendout forecast equation for comparison with the gas sales peak estimation equation each year after a new LTFR has been developed.

In addition to the firm sendout estimate developed by Gas Control, which includes sendout to firm sales customers and sendout for Choice Customers (also called Firm Transportation/Residential Firm Transportation, or FT/RFT), the total daily system sendout estimate is developed. This estimate also includes interruptible transportation (IT) sendout. IT sendout corresponds to approximately 25% of the system load, and is tracked through the Metretek automated metering system, which allows the tracking of usage for all IT customers. Gas Control deducts the IT sendout from the daily forecasted sendout to obtain the total firm load, which is subsequently split into firm sales and FT/RFT requirements.

Over the Audit Period, the percentage of gas throughput attributable to FT/RFT – the Choice Program - has decreased from 17.5% and is currently assumed to be approximately 15%. The daily forecast for total firm sendout is split into firm sales and FT/RFT requirements.

When forecasted temperature for the next gas day drop below certain threshold levels, Gas Control will evaluate whether curtailments⁴ are necessary. Interruptible customers are assigned to one of four levels of curtailment based on location in the system, among other parameters.

⁴ Curtailments and curtailment levels are discussed in Chapter VI, Operational Issues.

Each successive level is curtailed only as necessary to maintain service to firm customers. The company may initiate curtailments when forecasted temperature reach close to 97% probability design temperatures of -11.88 degrees.

Comparing the Forecast to Capacity Entitlements

CG&E's gas supply planning is performed in tandem with planning for ULH&P, and considers the appropriate balance of gas requirements for both systems. Considerations include delivery constraints on the ratio of gas delivered from pipelines in Northern Kentucky vs. gas delivered from pipelines intersecting at Lebanon, OH. CG&E is directly served by Texas Gas Transmission and Texas Eastern Transmission in the North, and by KO Transmission in the South. CG&E can also take limited deliveries through the Springboro tap from the ANR/Texas Eastern Lebanon Lateral. In the South, KO Transmission delivers gas transported via Tennessee Pipeline, Columbia Gulf Transmission and Columbia Gas Transmission. CG&E also maintains storage contracts through Texas Gas Transmission (No-Notice Service - NNS) and Columbia Gas Transmission (Firm Storage Service - FSS).

CG&E renews its gas supply contracts on an annual basis. Revisions to pipeline, storage and peaking capacity throughout the Audit Period were made as necessary to adjust the portfolio to match the load duration curve. Furthermore, CG&E's Monte Carlo analysis enables the evaluation of potential variation and hence formalization of the degree of coverage ensured by the portfolio mix. Additional peaking services were procured to make up for the necessary capacity to meet design day requirements, reflecting the 97% probability planning criteria for the design day. The following table summarizes CG&E's maximum delivery amounts in dekatherms per its capacity contract maximum daily quantities (MDQ) during each of the winter seasons.⁵

Liberty notes that because the figures in the following table are used for design day calculations, they appear somewhat different from the figures in Chapter III, Gas Supply Management, which discusses capacity entitlements. For example, a citygate pipeline might have a stated level of capacity, but if upstream deliveries into that pipeline are less than that level, the lower number is used for planning purposes.

⁵ The LTFRs provide calculations of requirements at the 95% and 99% levels, but not the 97% level, which CG&E uses as the optimal design day coverage probability. To approximate the design day requirements at the 97% probability level in this discussion, Liberty has used the midpoint between the 95% and 99% figures. Assuming a normally distributed tail-end, the arithmetic mean of the 95% and 99% design day requirement figures would yield a conservative result, higher than what the actual distribution would require for design day at the 97% level.

**Management/Performance Audit of Cincinnati Gas and Electric Company
Chapter II - Gas Supply Planning and Forecasting**

Resource	Contract Type	Number	2001-2002	2002-2003	2003-2004
Upstream Pipelines					
Columbia Gulf	FTS-1 (a)	43877	111,640	112,059	112,025
	FTS-2	42788	81,760	81,760	81,760
Tennessee	FT-A (b)	37338	44,375		
	FT-A (c)	40312		24,745	38,788
Columbia Gas	SST	39326	220,514	220,514	220,514
Storage					
Columbia Gas	FSS	39327	220,514	220,514	220,514
Texas Gas	NNS-nom	N000405	71,500	65,000	65,000
	NNS-unnom	N000405	25,000	25,000	25,000
Citygate Pipelines					
KO	FT(d)	1	156,015	136,804	150,813
Texas Gas	FT	T05420	12,810	12,810	12,810
	STF	T019208		18,000	18,000
	STF - additional				23,700
ANR	FTS-1	106398	18,000	0	0
Citygate Peaking					
Peaking Services (e)			43,100	89,400	60,000
Propane Service (f)			141,904	140,209	140,698
Total Citygate Capacity (dth/day):			688,843	707,737	716,535

(a) Indicates citygate capacity. Total Maximum Daily Quantity (MDQ) is 113,214 dth.

(b) Indicates citygate capacity. Total MDQ is 45 kdth.

(c) Indicates citygate capacity. Total MDQ is 25 kdth for 2002-03, 41 kdth for 2003-04.
1.8 kdth was released to ULH&P for 2003-04

(d) Indicates citygate deliverable via upstream Col. Gulf FTS-1 and Tennessee. Contract MDQ is 184k.

(e) Peaking contracts are for 25 day delivery during winter months for 2001-03, and 15 days for 2003-04.

(f) Total Propane plant capacity is 166k. Figure above indicates amount allotted to firm sales.

Total Citygate Capacity Excludes Upstream Pipelines

**CG&E Maximum Delivery Levels
Figure II. 5**

With the majority of contracts expiring on October 31, 2004, as discussed in Chapter III, Gas Supply Management, GCO is evaluating how to reshape its portfolio vis-à-vis the load shape it expects to see, including the necessary amounts of FT, storage capacity and peaking capacity. Included in this process are the evaluations of changes to the gas supply portfolio resulting from system demand and load shape changes expected in the future.

CG&E's current portfolio provides a relatively good fit to forecasted demand for the system, especially for peak day demand. For 2001-02, the total citygate capacity under contract was 688,843 dth, compared to a firm peak day forecast at the 97% level of 688,842 dth. For 2002-03, total citygate capacity was 707,737 dth, compared to a firm peak day forecast at the 97% level of 707,760 dth.

For 2003-04, the peak design day requirement for CG&E firm sales at the 97% probability level was 716,511 dth, compared to CG&E citygate capacity of 716,535 dth. The total sales requirement, including FT/RFT, was 844,342 dth. This figure compares to the 99% probability firm peak day forecasted sendout level of 861,036 dth.

3. Commodity and Capacity for Choice Customers

Since its inception, the Choice program, discussed more fully in Chapter V, Gas Transportation, affects CG&E's portfolio decisions. As mentioned above, the participation level in the Choice program has declined over time, and CG&E has been seeking ways to reduce its capacity portfolio. The potential for such reduction is documented in the LTFR. CG&E does not have a general reserve margin for the Choice program to account for potential third party supplier failures to deliver, nor for the daily weather forecast error that would result from a mismatch of third party deliveries with actual usage. However, the allocation of propane peaking capacity to supplier demand above 79% of the maximum daily requirements, discussed in Chapter V, Gas Transportation, ensures that peaking capacity will be available on the coldest days. In addition, CG&E's cost optimization models assume that gas is always available, albeit at a fairly high price.

FT/RFT sales figures are tracked by the Supervisor of Gas Rates and Transportation Programs. During growth of the Choice program, CG&E tracked and forecasted its Choice participation rates, and made demand predictions based on simple projections of their linear econometric equation. However, during the past few years and over the Audit Period, this method has been replaced because of declining participation in the Choice program. Thus, CG&E has been holding their Choice program participation predictions flat, and closely monitors the plans and programs of the 3rd party suppliers. Of interest to CG&E at this point is the level of marketing, and special rate programs of the 3rd party suppliers.

4. Integration with Corporate Plans

The Vice President of Gas Operations oversees gas operations for all three Cinergy LDCs. Gas supply planning and forecasting for the three LDCs mainly involves the:

- Vice President of Gas Operations
- Manager of Gas Commercial Operations
- Administrator, Gas Procurement and Administrative Services
- Administrator, Gas Transportation and Customer Service
- Manager, Load Forecasting – Market Analysis Department

Gas supply plans are well integrated with corporate plans through the preparation of both the Gas Supply Strategic Plan and the LTFR. The Gas Supply Strategic Plan is prepared by GCO every two years, but reviewed annually for any significant industry or company changes that would impact the plan; it is approved by the Senior Vice President of the Regulated Business Unit.

LTFRs are developed by the Manager of Load Forecasting in the Market Analysis Department, which also provides demand forecasts on an annual and peak day basis for each of Cinergy's three local distribution companies. GCO provides some input in support of the Market Analysis Department's preparation of LTFRs.

The planning process begins by assessing the success of CG&E's existing gas supply strategies. CG&E's gas procurement performance over the past several years is reviewed and compared against peer LDCs and alternate fuels to assess its relative competitive position. This process enables CG&E to deduce its existing strengths and opportunities. Next, trends in the gas industry are evaluated to determine their potential impact on CG&E. These impacts can represent future opportunities or potential threats. CG&E then identifies key strategic issues facing LDCs.

Strategies which best fit the Company's long-term goals and address the key issues are then selected. An action plan defining specific tasks, completion dates and responsibilities is developed for each strategy. In addition, a contingency plan for each of the selected strategies is developed. The contingency plan recommends a course of action that can be taken in the event market conditions invalidate the key assumption(s) of the original strategies. A monitoring process is then initiated to periodically evaluate the effectiveness of the strategy implementation.

5. Planning Flexibility, Including New Markets

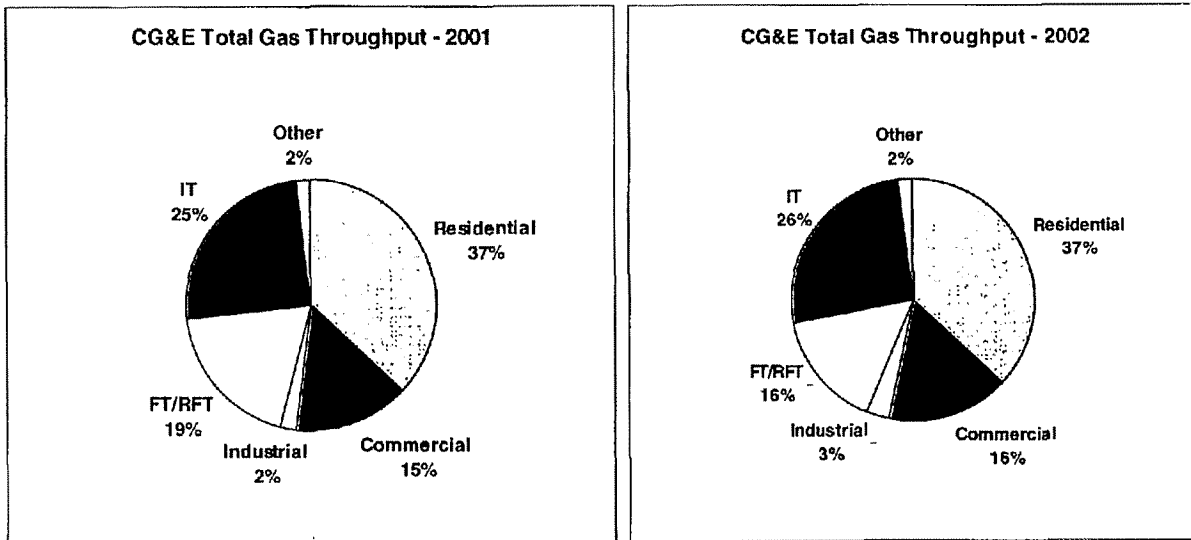
CG&E does not consider the impact of new markets beyond expected increases in the number of customers and changes to saturation figures. However, CG&E's current capital improvement program involving cast-iron main replacement is likely to change system parameters by reducing Lost and Unaccounted for Gas (LAUF) volumes. In addition, the new C314 distribution line gives CG&E the capability to better serve loads in the Eastern part of its system, and may bring additional demand growth to the system. In a sense, these changes could be considered as having the impact of a new market. This would warrant a reevaluation of the gas supply plan to incorporate potential increases or decreases in system sendout.

Currently, CG&E's reliance on the Crystal Ball model includes the calculation of sendout statistics (both mean and variance) based on historical sendout, which will change over time as system improvements take place. However, the model does not directly include a forward-looking provision to account for significant new system changes, such as installation of the C314 line, or any impacts of the cast-iron main replacement program. A model that incorporates additional components of the forecast of the number of customers and usage per customer over time, on the other hand, would enable CG&E to more effectively incorporate any decreases in usage per customer resulting from the system improvements.

Gas companies typically face competition from alternate fuels, such as oil, coal, propane and electricity. This is especially true for more flexible commercial, industrial and IT loads. In 2001, commercial sales load accounted for 15% of total gas throughput, while industrial sales load was around 2% of the total. The corresponding figures for 2002 were 16% and 3%, respectively. Competition in this area has been managed at CG&E through competitive pricing and better customer service, including negotiated rates in some cases. Furthermore, capped

electricity rates in CG&E's service territory, along with a sharp increase in natural gas prices has caused some developers of new home construction and some residential customers to consider installing electric appliances in lieu of gas appliances.

The following charts show the distribution of CG&E's loads for the two calendar years during the Audit Period:



CG&E Total Gas Throughput by Customer Segment
Figure II.6

C. Conclusions

1. **CG&E had commendable gas demand forecasting procedures during the Audit Period, but can improve these procedures through incorporation of forward-looking parameters that account for system and customer changes. (Recommendation #1)**

Gas demand forecasting procedures used by CG&E contain the desired elements of analysis such as number of customers, usage per customer, a cost trade-off analysis of weather variation coverage, and an appropriate peak-day forecast procedure.

CG&E uses Crystal Ball to perform Monte Carlo simulations of the Company's monthly gas supply requirements. This ensures that gas supply purchases are made after incorporating consideration of potential variation in demand. The same methodology is also being applied to long-term demand forecasting, and is used to evaluate the upcoming renewal of its capacity contracts.

However, on a forward-looking basis, CG&E's forecasting model should incorporate and account for increases in demand that may result from known system and customer changes that are projected to occur at some point in the future.

2. CG&E should improve the LTFR by incorporating planning assumptions and reporting that are consistent with forecasting and peak day design procedures currently used by Gas Commercial Operations. (Recommendation #2)

Currently, there is inconsistency between the forecasting data and procedures used by Gas Commercial Operations and the forecasting data and procedures contained in the LTFR. The results of demand forecasting presented by CG&E were not easily reconciled with LTFRs. The description of the forecasting methodology contained in the LTFR should be modified to be consistent with actual demand forecasting procedures used by Gas Commercial Operations. For example, the LTFR procedures should include the sendout variation analysis that is applied for design day and annual sendout planning purposes. To allow for proper reconciliation, the description of this analysis in the LTFR needs to be consistent with the 'optimal' design day planning calculation for portfolio planning that is actually used, and should include the 97% probability level assumed by CG&E for peak day design along with the breakdown of firm sales vs. FT/RFT forecasted sendout.

3. CG&E has commendable gas supply portfolio-planning procedures.

CG&E has one of the lowest gas costs among Ohio utilities. This is due to a number of factors including the match between the Company's gas supply resource portfolio and its load duration curve, and to its employment of Monte Carlo analysis for monthly gas supply requirements. The geographical location of CG&E close to the Lebanon hub and access to a variety of pipelines allows CG&E diversity in its resource mix and also contributes to lowering capacity costs and gas prices through competitive pressure.

CG&E's supply planning is integrated with the planning for the other two Cinergy LDCs, ULH&P and Lawrenceburg Gas. Balancing between these systems also allows for more flexibility. CG&E seems to adequately manage its portfolio by retiring unused contracts, and seeks adequate supplier diversity in the assembly of its gas portfolio.

CG&E currently uses a Monte Carlo simulation model to analyze various capacity portfolio options, and determine which resources are used vis-à-vis simulated demand and price scenarios. While this simulation does not ensure optimality of a resource portfolio for a given demand scenario, it allows valuable comparative analysis of portfolio costs and shortcomings vis-à-vis potential demand scenarios. Once an adequate portfolio is established, CG&E employs an optimization model to determine the allocation of supply requirements among suppliers to minimize reservation fees while seeking supply diversity.

CG&E's resource mix seems to provide the Company with an adequate level of supply-planning flexibility. Incorporating load variation in the Monte Carlo analysis enables the proper assessment of appropriate levels of the more costly swing gas and storage requirements. CG&E should consider incorporating its propane capacity as a part of the daily sendout price ranking

methodology for resources, which will consider cases where it is cost-optimal to run propane/air facilities rather than purchase peaking capacity at high prices.

D. Recommendations

1. Improve the gas supply forecasting process by incorporation of model parameters that account for forward-looking customer and system changes. (Conclusion #1)

Gas Commercial Operation's gas supply forecasting process, while commendable, could be improved through the addition of model parameters that address forward-looking customer and system changes. While the forecast for the peak day is based on the LTFR, which includes customer growth, the current historical orientation of the forecast will not immediately incorporate significant changes that might be introduced to the system. CG&E should enhance the model by incorporating any changes resulting from system improvements or changes in customer usage. Such changes to the model would allow the tracking and comparison of changing demand sensitivity to weather, and hence a more timely update of the resource mix. The result would be a continued molding of the resource portfolio to demand requirements, and customers would reap the benefits of system improvements. Otherwise such benefits accrue to the Asset Manager.

2. Improve the LTFR in order to achieve more consistency with the planning process utilized by Gas Commercial Operations. (Conclusion #2)

Following are recommendations for enhancement of the LTFR in order to achieve more consistency with the gas supply forecasting and planning process utilized by Gas Commercial Operations:

- The LTFR should properly describe the evaluation of sendout variation based on weather, and how the peak day probabilities are calculated. This discussion should also clarify corresponding weather conditions to ensure that forecasts are in line with expected weather variation and historical observations of cold weather.
- The peak day expected value analysis now in the LTFR should be augmented to include varying levels of cost assumptions for deficiencies and capacity acquisition prices, as well as the different probability levels considered, especially the 97% probability planning level currently used by Gas Commercial Operations.
- The LTFR can be improved through the addition of sample historical and forecasted load curves describing potential usage of resources.
- Usage of weather normals other than NOAA weather normals should be referenced or documented.
- The LTFR should be improved through the addition of historical forecast vs. actual sendout figures to track performance of forecasts.
- The LTFR must include FT/RFT forecast estimates as a part of total CG&E system sendout in order to properly reflect the split between firm sales and Choice sales. A breakdown for FT/RFT at different levels should be incorporated into

calculations, including the total annual sendout and peak day forecasted sendout at various confidence levels. Furthermore, the current peak day deliveries forecast should include a 97% probability level estimate, consistent with the optimal planning methodology used.

III. Gas Supply Management

A. Scope

This chapter of Liberty's report addresses the following topics in CG&E's gas supply management area:

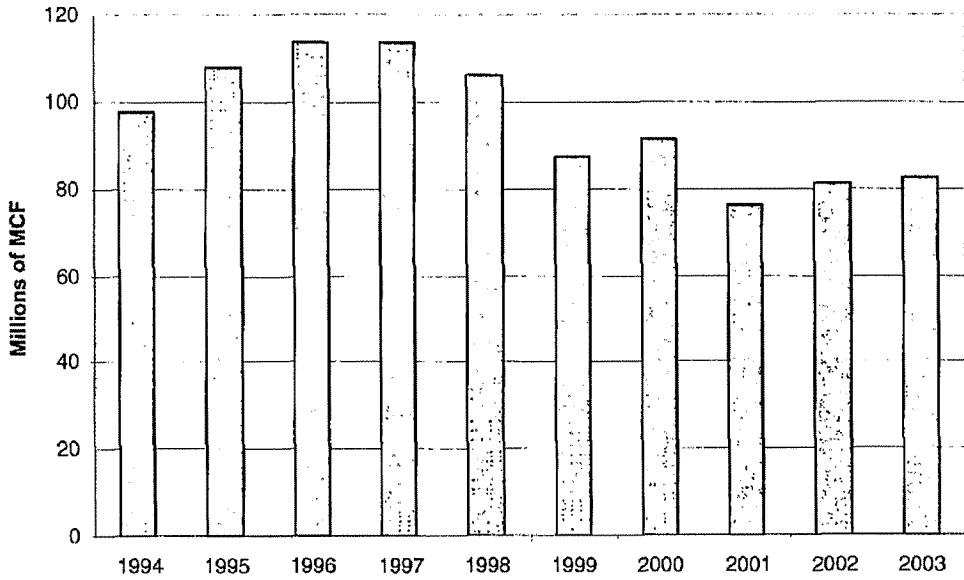
- Natural Gas Commodity
- Pipeline Capacity and Storage
- Peaking Facilities (Propane)
- Peaking Contracts
- Asset Management Agreements
- FERC Intervention Policies and Actions (include pipeline refunds)

B. Background

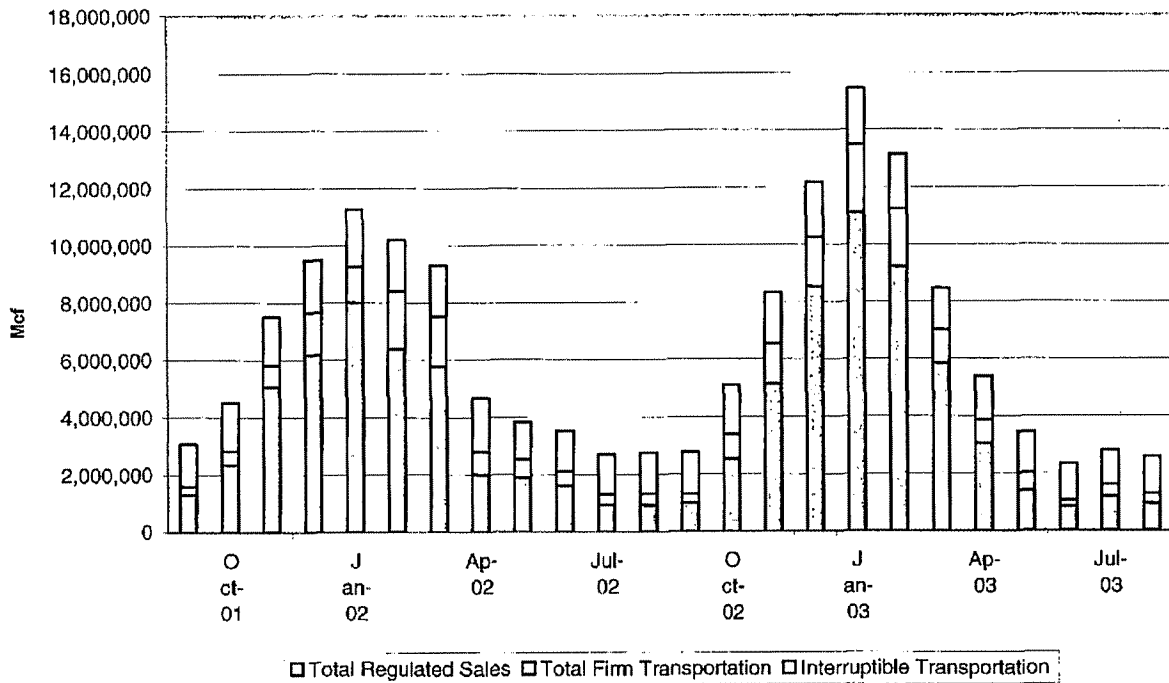
1. Natural Gas Commodity

Volumes

Over the last 10 years, annual throughput on the CG&E system has varied from a low of approximately 80 million dth (2002) to a high of 114 million dth (1995 and 1996). During the two years of the Audit Period, throughput on the CG&E system was 162 million dth, with a ratio of firm sales to firm transportation to interruptible transportation of approximately 50%/15%/25%. Figures III.1 and III.2 depict system throughput for the last 10 years and monthly sales volumes for the Audit Period.



Total System Throughput
Figure III.1



Audit Period Throughput
Figure III.2

Commodity Pricing

As described in Chapter IV, Commodity Pricing & Price Risk Management, pricing of gas commodity is almost exclusively based on indices at trading points or on NYMEX prices, with “basis differentials” added or subtracted to reflect transportation costs between the specified receipt or delivery point and the index reference point.

CG&E required the 10 suppliers who bid on commodity supply for the 2002-2003 winter to price bids for base gas at the *Inside FERC* First of the Month Index for the designated pipeline at the zone specified in the contract, and to price swing gas at the *Gas Daily* Midpoint price for the designated pipeline at the receipt point designated in the contract. Thus, the only variable from the supplier’s perspective was the reservation fee (demand charge). From CG&E’s perspective, other variables also included credit rating and past history with the supplier.

Procurement Process

Winter 2001-2002:

For the winter of 2001-2002, CG&E decided to stay with the suppliers from the previous year, and with quantities of base and swing gas approximately the same as the previous year. The company based its decision on its determination that those suppliers had performed adequately during the prior winter and that some of the volumes with two of the suppliers, Aquila and Mirant, had already been locked in as part of the hedging strategy.

After internal approval of the winter gas plan, RFPs were faxed to the following entities on July 30, 2001:

- Anadarko Energy Service Company
- Aquila Energy Marketing Corp.
- Dynegy Marketing and Trading
- Mirant Americas energy Marketing, LP
- Texaco Natural Gas, Inc.

Discussions were conducted via fax and telephone, and all responded with bids. One supplier, Noble Gas Marketing, Inc. sent an unsolicited bid, expressing disappointment that it had not been included on the RFP list. All five solicited suppliers were eventually awarded supply contracts effective November 1, 2001. After the selection of the Asset manager, the supply contracts were amended to include assignment of the supply contracts to the asset manager, effective December 1, 2001.

Summer 2002:

Because the company had been unable to contract for gas without a reservation fee, the practice had been to purchase spot gas during the summer months. During the summer of 2002, Mirant supplied all gas commodity through the asset management agreement.

Winter 2002-2003:

CG&E indicated that because some of the suppliers used in the past were either out of business or out of the gas sales business, the company sent RFPs to a variety of producers and marketers. By identical letters dated July 11 or 12 the company solicited bids for base and swing supply for the three Cinergy LDCs from the following 13 potential suppliers for the 2002-2003 winter:

- Anadarko Energy Services Company
- BP Energy Company
- Cinergy Marketing and Trade
- Conoco, Inc.
- Duke Energy
- Dynegy Marketing & Trade
- El Paso Energy Marketing
- Mirant Americas Energy Marketing LP
- Noble Gas Marketing, Inc.
- Occidental Energy Marketing, Inc.
- ProLiance Energy, LLC
- Unocal Global Trade
- Woodward Gas Marketing

Suppliers were required to indicate Reservation Fees for providing base and swing supply on each of the pipelines that served Cinergy, and individually for each of the three companies. The letters provided a comprehensive Sales Agreement in draft form and indicated that Cinergy had an asset management agreement with Mirant and that the gas supply contracts would be assigned to Mirant for the winter season. Delivery zones on the three upstream pipelines were indicated. Commodity price was specified at *Inside FERC* First of Month Index for Base and at the *Gas Daily* midpoint for Swing Gas.

Ten suppliers responded to the RFP, from which CG&E selected five, BP Energy, Cinergy Marketing and Trade, Conoco, Duke, and Mirant. Selection criteria included credit rating, level of reservation fees, proven dependability, and diversity of suppliers and supply points. The company developed a comparison matrix ("2002-03 Winter Supplier Comparison") to evaluate the bids. With the exception of Mirant, the selected suppliers had credit ratings of BBB+. Mirant's rating was BBB-. However, CG&E had already locked in some gas with Mirant as part of its hedging program. Contracts with the five suppliers were signed effective November 1, 2002.

Summer 2003:

By letters dated February 5, 2003, the Cinergy companies requested proposals from suppliers for firm base and swing deliveries for April through October 2003. Suppliers were to provide flowing gas and also gas for injection into storage. The RFP letters indicated that Cinergy had an asset management agreement with CM&T through October 31, 2003 and that all contracts were to be assigned to them, although Cinergy would retain the financial obligation to the supplier. Responses were required by February 21, 2003.

Delivery zones on the three upstream pipelines were specified. Base price was to be *Inside FERC's Gas Market Report "Prices of Spot Gas Delivered to Pipelines"* first of the month price in the first publication of the delivery month, and swing price was to be at the *Gas Daily Midpoint* price.

Bids were solicited from the following 10 suppliers:

- Anadarko Energy Services Company
- BP Energy Company
- Cinergy Marketing and Trading, Inc.
- Conoco, Inc.
- Constellation Power Source, Inc.
- Coral Energy Resources, L.P.
- Duke Energy
- Oneok Energy Marketing & Trading Co.
- ProLiance Energy LLC
- Virginia Power Energy Marketing

Responses were received from all of the suppliers; however all included reservation fees, and CG&E reverted to its past practice of month-to-month purchases. Subsequent to the bidding process, in April 2003 CM&T offered to provide firm supply for the remainder of the summer without a reservation fee. CG&E states that the other bidders were given an opportunity to refresh their bids, but all continued to require a reservation fee, and CM&T's offer was accepted.

2. Pipeline Capacity and Storage

Pipeline Capacity

During the Audit Period, CG&E held contracts on the following pipelines at the indicated FERC tariff rate classification:

Upstream pipelines:

- Columbia Gulf Transmission FTS-2
- Columbia Gulf Transmission FTS-1
- Tennessee FT-A (winter peaking)

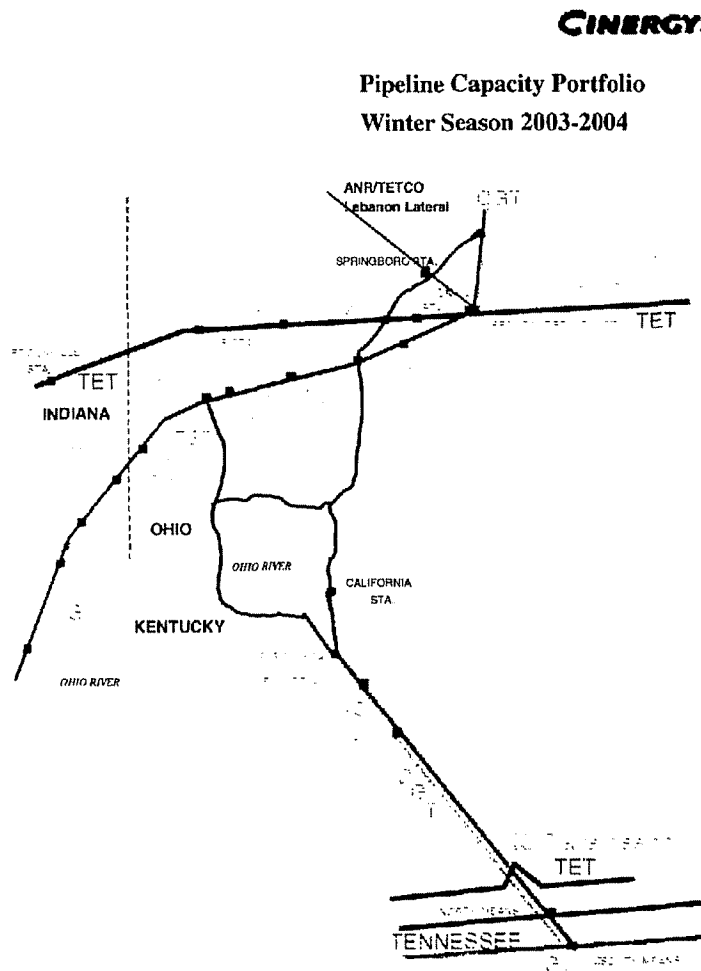
Storage to Citygate:

- Columbia Gulf Transmission SST
- Texas Gas Transmission NNS

Interconnection with upstream pipelines to citygate:

- Texas Gas FT
- Texas Gas STF (winter peaking, 2002-03 only)
- ANR Pipeline FTS-1 (winter peaking, 2001-02 only)
- KO Transmission¹

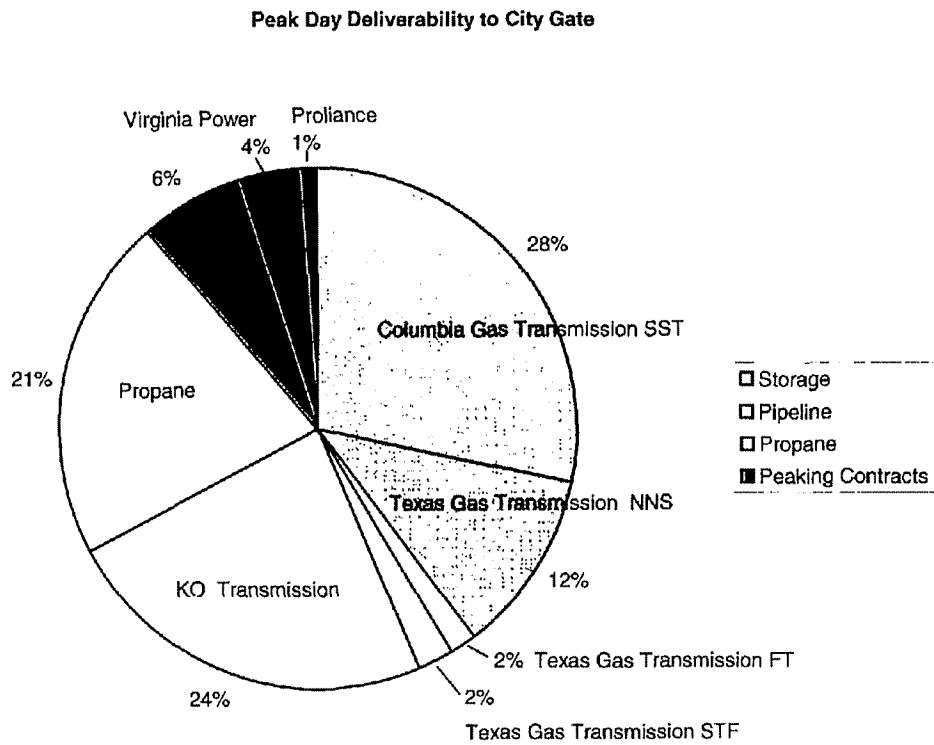
A schematic diagram of the Cinergy system and its pipeline feeds is shown below as Figure III.3. A brief description of the pipeline and storage contracts is included as Appendix 1 to this chapter.



**Schematic Diagram of the Cinergy System
Figure III.3**

¹ KO Pipeline is an affiliated pipeline owned by Cinergy and regulated by FERC.

Figure III.4 below depicts the peak day deliverability² to the CG&E citygate for the second year of the Audit Period.



**Peak Day Deliverability to City Gate
Figure III.4**

Storage

CG&E maintains storage contracts with Columbia Gas Transmission Corp. (TCO) for Firm Storage Service (FSS) and with Texas Gas Transmission Corp. (TGT) for No Notice Service (NNS). Both contracts are for “virtual storage,” in that TCO and TGT operate numerous storage fields around the country, and their tariffed services do not link the contracted storage with particular storage fields.

Under the terms of the TCO FSS contract, the maximum withdrawal rate is 220, 514 dth/day, with maximum injections varying over the year from a low of 16, 693 dth/day (November) to a high of 75,329 dth/day (May - August). Below 30% full, maximum withdrawal rates decrease according to a table specified in the contract.

² In addition to citygate pipeline capacity, the chart includes storage, peaking contract and propane deliverabilities, discussed in the following section.

Under the terms of the TGT NNS contract, the winter withdrawal rate is 25,000 dth/day and the summer maximum injection rate is 10,982 dth/day. Injection capability is actually higher but is limited by the level of capacity the company contracts for during the summer. Below 25% full, the maximum withdrawal rate decreases according to a table specified in the contract.

3. Peaking Facilities (Propane)

CG&E owns and maintains three propane peaking plants, Dick's Creek (northern part of the system), Eastern Avenue (downtown), and Erlanger (northern Kentucky, and shared 64%/36% respectively, between CG&E and UHL&P) and the Todhunter storage cavern, less than a mile from the Dick's Creek plant. The Todhunter cavern, which can hold approximately 7 million gallons, is filled via Texas Eastern Products Pipeline Company (TEPPCO) product pipeline and is also connected via pipeline to Dicks Creek. Propane is trucked from Dick's Creek to the other two plants, where it is stored in underground caverns on site. In the aggregate, the plants are capable of producing a maximum daily quantity of 165,800 dth/day and a maximum seasonal quantity of approximately 960,000 dekatherms.

Because of their locations on the system, Eastern Avenue/Downtown is run most often and Dick's Creek is run the least. During the last 5 years, excluding test runs, the plants operated for some period of hours during the number of days shown in Figure III.5.

Year	Dick's Creek (# days)	Eastern Avenue (# days)	Erlanger (# days)	Total Days of Operation	Production (equivalent mcf)
1999	3	14	5	22	38,696
2000	4	16	9	29	116,513
2001	0	6	1	7	10,757
2002	0	1	0	1	3,808
2003	9	39	25	73	417,023

**Propane Production
Figure III.5**

4. Peaking Contracts

During the Audit Period, CG&E held 5 contracts for peaking services. During the first year, the company held contracts with Mirant for 30,000 dth/day and with Dynegy for 13,100 dth/day. The contracts provided for deliverability of those amounts to the northern citygate on any 25 days selected by CG&E between December 1, 2001 and February 28, 2002.

During the second year of the Audit Period, CG&E held contracts for 50,000 dth/day with Duke Energy Trading and Marketing, L.L.C., 13,100 dth/day with Virginia Power Energy Marketing,

Inc. and 9,400 dth/day with ProLiance Energy LLC, all providing for deliverability to the northern citygate on any 25 days selected by CG&E between December 1, 2001 and February 28, 2002.

5. Asset Management Agreements

Initial Contract with Mirant

In late summer 2001, both CM&T and Mirant offered unsolicited proposals to provide asset management services to the company. Those proposals were not accepted, and by identical letters dated October 22, 2001, with responses due October 31, 2001, CG&E and UHL&P requested bids from 12 firms for asset management services for the periods December 1, 2001 through October 31, 2002, the 12 month period beginning November 1, 2002 and the 12 month period beginning November 1 2003. RFPs were sent to the following 12 firms:

- Aquila Energy Marketing Company
- BP Energy Coral Energy
- Cinergy Marketing & Trading
- Coral Energy
- Duke Energy
- Dynegy Marketing and Trade
- El Paso Merchant Energy Group
- Enron North America
- Mirant Americas Energy Marketing L.P.
- Reliant Energy Services Inc.
- Sempra Energy Trading
- Williams Energy Marketing & Trading Co.

The RFPs included term sheets and summaries of CG&E's pipeline contract portfolio. Significant terms included the following:

- CG&E would release its pipeline and storage contracts to the Asset Manager, with 24 hour notice recall rights for operational purposes, for the term of the agreement;
- CG&E would assign its commodity supply contracts to the Asset Manager;
- If the Asset Manager failed to fulfill the terms of the Agreement, it was required to return all contracts to CG&E immediately upon notice;
- The Asset Manager would not change the primary receipt points;
- The Asset Manager would be required to meet CG&E customers' hourly and daily requirements up to the contract limits, and would supply any additional amounts on a best-efforts basis at market prices. CG&E would provide daily load forecasts;
- All pipeline refunds were to be forwarded to CG&E;
- The Asset Manager would manage the storage inventories, and;
- Price-hedging activities would be determined by CG&E and executed and documented by the Asset Manager.

The RFP also included an attachment describing CG&E's operational requirements with respect to system flow limitations, storage limitations and refill requirements, pipeline nominations, and peak hourly rates.

Five firms, BP, Coral, Duke, El Paso, and Reliant declined to bid. The responses from the remaining firms ranged from a high of \$4.7 million (for CG&E and UHL&P in total) for the first year to an offering to perform the services for a fee. One firm offered a "profit-sharing" approach, with no fixed fee, and CM&T resubmitted its earlier unsolicited offer and requested an opportunity to match the highest bid. That request does not appear to have been granted.

CG&E prepared a summary comparison of all offers, including a narrative and an evaluation matrix. The bid from Mirant of \$4.7 million for the first 11-month period exceeded the second highest bid by \$1.2 million, and Mirant's bid for the 2 or 3 year term was similarly superior. The summary recommendation noted that Mirant had an "investment grade" credit rating (BBB-), which was lower than that of any of the other firms. The recommendation also noted that the Cinergy companies had developed a good working relationship with Mirant over the last eight years and that Mirant had provided 5 references, more than any other firm, and that a check with several of those references had provided positive feedback.

Subsequently, by letter dated November 20, 2001, CG&E notified Mirant that it had been selected, and on December 1, 2001, a contract was executed for the 23-month period December 1, 2001 through October 31, 2003. Mirant would pay a monthly "management fee" to CG&E in the form of a bill credit on Mirant's monthly invoices to CG&E for supply costs. The contract also provided for adjustments to the management fee, according to set schedules, should CG&E change its asset portfolio.

To address the differences between the way CG&E would manage the portfolio for the benefit of CG&E customers, and the way Mirant might manage it to optimize CG&E's portfolio along with non-CG&E assets, the contract provides for "Virtual Dispatching³." CG&E would continue to identify daily quantities of gas, transportation paths, storage activities, and gas supply to determine the citygate delivered cost of gas. CG&E's cost of gas would be based on the Virtual Dispatch, and Mirant would then be free to dispatch the system as it saw fit, within operational parameters and contract terms.

Mirant Withdrawal and CM&T Entry

In September 2002, with Enron in bankruptcy and other gas management companies in the field, including Mirant, experiencing severe financial stress, Mirant approached CG&E to sell the Asset Management contract. CG&E was eager to make a change because, while it had recall rights to the pipeline capacity and storage, the title to its physical gas in storage was held by Mirant without recall-type provisions. Mirant held discussions with several firms, and only CM&T expressed interest. At that point, CM&T offered to pay \$500,000 per year, less than its original bid of approximately \$1 million.

³ Virtual Dispatching is described in Chapter VI of this report.

Effective November 1, 2002, the contract between Mirant and CG&E was assigned to CM&T and CM&T was to begin performing as Asset Manager for CG&E. However, due to difficulties in completing transition activities in time, CG&E performed all scheduling and dispatching for itself during November 2002, and the contract with CM&T was amended to take effect on December 1, 2002.

The Second Asset Management RFP

In June 2003, Gas Commercial Operations began the process of selecting an Asset Manager for the one-year period beginning November 1, 2003, and this time also including Lawrenceburg Gas in addition to CG&E and UHL&P. A one-year period was selected because most of the pipeline contracts were expiring in 2004, and the new portfolio was expected to be somewhat different.

Cinergy's Supply Chain organization (purchasing group) supported the use of a web-based system, known as RFX developed by Pantellos Group Limited Partnership⁴ ("Pantellos") of Woodlands, Texas. The Supply Chain organization is also responsible for administering the RFX system.

The RFX System is a procurement tool which establishes an on-line bidding system with a document room, and which tracks all transactions, inquiries, and responses. RFX allows buyers to issue RFPs and invite bidder responses. Bidders accept or decline online and then download bid documentation. The system incorporates a question and answer feature, which simplifies communication between buyers and bidders.

Based on input from Gas Commercial Operations and Cinergy Enterprise & Credit Risk Group, the company developed the following list of 10 potential bidders:

- Anadarko Energy Services Company
- BP Energy
- ChevronTexaco Natural Gas
- Cinergy Marketing & Trading
- ConocoPhillips Company
- Coral Energy Resources L.P.
- Noble Energy
- Occidental Energy Marketing
- Oneok Energy Marketing & Trading Company
- ProLiance Energy LLC

⁴ Pantellos was formed as a temporary consortium in the spring of 2000 by 15 large North America's utilities. They hired a group of consultants to determine how utilities could work together to use the "digital economy" to improve their supply chain operations. On June 1, 2000, the original consortium of 15, along with six additional utilities, provided \$100 million in financing to create Pantellos. Pantellos provides various services including supply management, on-line exchanges, and supply chain consulting services. Founders include American Electric Power, Cinergy, Consolidated Edison, Inc., Dominion Resources, DTE Energy, Duke Energy, Edison International, El Paso Energy, Entergy, Exelon, FirstEnergy Corp., FPL Group, Ontario Power Generation; PG&E Corp., Progress Energy, Public Service Enterprise Group, Reliant Resources, Inc., Sempra Energy, Southern Company, and TXU.

On July 23, 2003, a cover letter was sent via e-mail to the bidders list inviting them to participate through the RFX System. A follow-up hard copy letter was sent on July 28, 2003. The bid documents, available through RFX, included instructions to bidders, load profiles, descriptions of supply and pipeline contracts, maps, and other information.

The entire process was conducted on the RFX System, and bidding closed on August 12, 2003. Seven of the firms accessed the system, and three submitted bids for CG&E, UHL&P and Lawrenceburg. CG&E stated that all three bids were essentially the same, except for price, and were thus ranked in that order.

Working together, the three Cinergy departments of Gas Commercial Operations, Legal, and Enterprise & Credit Risk developed levels of secured and unsecured credit they would require from bidders, related to the estimated dollar value of storage gas at November 1. The credit was to be provided through a parental guarantee or irrevocable letter of credit.

A series of discussions between Cinergy and ProLiance were held as to the required level of security. Cinergy requested a Letter of Credit or parental guarantee equal to the total value of gas in storage, amounting to approximately \$76 million. ProLiance responded that it could not provide such guarantees but proposed, in the alternative, to guarantee \$10 million for the term of the agreement, subject to an upward adjustment if the difference between the virtual and actual storages exceed that amount. CG&E rejected that alternative.

Under its interpretation of FERC's "shipper must have title" rule, CG&E believed that if it retained the title to the gas and granted an Asset Manager an agency agreement, the Asset Manager would then only be able to ship the gas to CG&E. This would impose a significant handicap on the Asset Manager's ability to leverage the storage asset and diminish the value. Therefore, CG&E planned to assign title to the gas commodity to the Asset Manager.

CM&T provided a parental guarantee for an amount not to exceed \$69 million and the contract was signed October 6, 2003 for the period November 1, 2003 through October 31, 2004. Under the terms of the contract, CM&T pays a management fee, in equal monthly payments, which is reflected in the form of a bill credit on CM&T's monthly invoice.

The Virtual Dispatching methodology was carried over into this contract as well. CG&E would continue to be billed according to the Virtual Dispatch, while CM&T would be free to perform actual dispatch as it saw fit, so long as it met CG&E's citygate requirements. As in previous contracts, CG&E released its pipeline and storage capacity and assigned the commodity contracts to CM&T for the term of the Asset Management Agreement. CG&E continues to be entitled to all pipeline refunds or credits.

In the event of a default by CM&T, CM&T is required to transfer the gas in storage back to CG&E upon 24 hours notice.

6. FERC Intervention Policies and Actions

FERC Monitoring

CG&E monitors FERC activities and pipeline matters before FERC in several different ways. It uses outside counsel, in-house attorneys (it recently hired two new FERC attorneys in the legal department), and a point person in Gas Commercial Operations, all of whom follow items of interest. CG&E receives a daily listing of FERC activities and orders, and maintain a list of items and cases it is following.

Company filings, including forming of LDC customer groups for intervention, are handled by the attorneys. In the past, CG&E and 6 or 7 other LDCs show shared similar positions in proceedings have intervened collectively in pipeline rate cases on rate design and cost-of-service issues.

With respect to pipeline proceedings, CG&E formerly had a policy of intervening in every proceeding involving Columbia Gas Transmission Corp., Columbian Gulf Transmission Corp., and Texas Gas Transmission Corp., its three major supplying pipelines, in part because that was the only way, under FERC procedures, to be able to access the case docket and materials. That is no longer necessary as all such information as filings are now electronically posted, and CG&E can be more selective in its interventions.

During the Audit Period, CG&E submitted comments on two industry-wide gas proceedings, one involving standards of conduct for transmission providers, and the other quarterly and annual reports. The company also intervened in some 20 proceedings, some of which began prior to the Audit Period, involving items such as new rate schedules, new services, tariff revisions, fuel retainage percentages, and compliance filings. None of the company's serving pipelines filed major rate cases during the Audit Period.

FERC-Mandated Pipeline Refunds

Under FERC rules, pipeline requests for rate increases typically go into effect subject to refund. Since the pipelines frequently do not get all they asked for, refunds are a common occurrence. However, since there is no specific statutory or regulatory period during which the case must be decided, and since it may be a case which is settled or goes through the entire litigation process, the timing of the refunds is unpredictable. Thus, CG&E receives refund checks from time to time.

C. Conclusions

1. **CG&E has had a practice of securing supply from a diversity of suppliers through a bidding process to try to achieve lowest prices.**

CG&E's procedures, although unwritten, included a signed and dated supply portfolio recommendation sheet indicating that the proposed plan for suppliers and contracted volumes

was approved by “upper management.” While “upper management” was not defined, the sheets during the audit period were signed by the Vice President of Gas Operations.

CG&E’s process has improved over the Audit Period. Prompted by changes in the supplier market, the company issued an RFP to a broader range of suppliers. The practice of staying with last year’s suppliers precluded the opportunity for other bidders which may have provided more attractive bids, and the unsolicited bid from Noble Gas Marketing indicated that there was such interest in the supply market.

The company also improved and clarified its RFP documents and refined its analysis and selection process to more objectively evaluate the supplier attributes.

2. CG&E does not have written procedures for important gas procurement functions.
(Recommendation #1)

While CG&E’s commodity purchasing practices and performance have been reasonable, it does not have formal, written procedures for the function. Such procedures are particularly important when staff changes are made. Further, options to be considered and decision points should be explicitly identified in the procedures. The company’s decision to include only the suppliers it was comfortable with on the bidders list for commodity supply during the first year of the Audit Period is an example of a decision that should receive more attention and be better documented.

3. CG&E’s hedging procedures are weak and the hedging program⁵ has locked it into suppliers which may not have been selected through the bidding process.
(Recommendation #2)

CG&E’s hedging procedures are quite general in nature and essentially provide a broad overview of hedging. They do not provide specific guidance as to how to implement a hedging program.

In particular, for the 2002-2003 winter, Mirant, with a credit rating of BBB-, was the only one of the suppliers below a BBB+ rating. The evaluation process for awarding hedging contracts is conducted separately from the regular evaluation process for commodity supply. Evaluation of hedging proposals appears to be less rigorous, and is conducted outside of the regular commodity supply screening process. The company’s current practice of using only physical hedges contributes to the continuation of this weakness.

4. CG&E will be extending its use of the RFX System to commodity procurement.

The company has indicated it will be transitioning to the RFX System, described in the Asset Management section of this report, for commodity procurement in the future. This should improve the efficiency of the process, standardize the information flow (which may vary across bidders due to use of telephone and fax discussions) and provide a better audit trail.

⁵ The company’s hedging activities are described in Chapter IV.

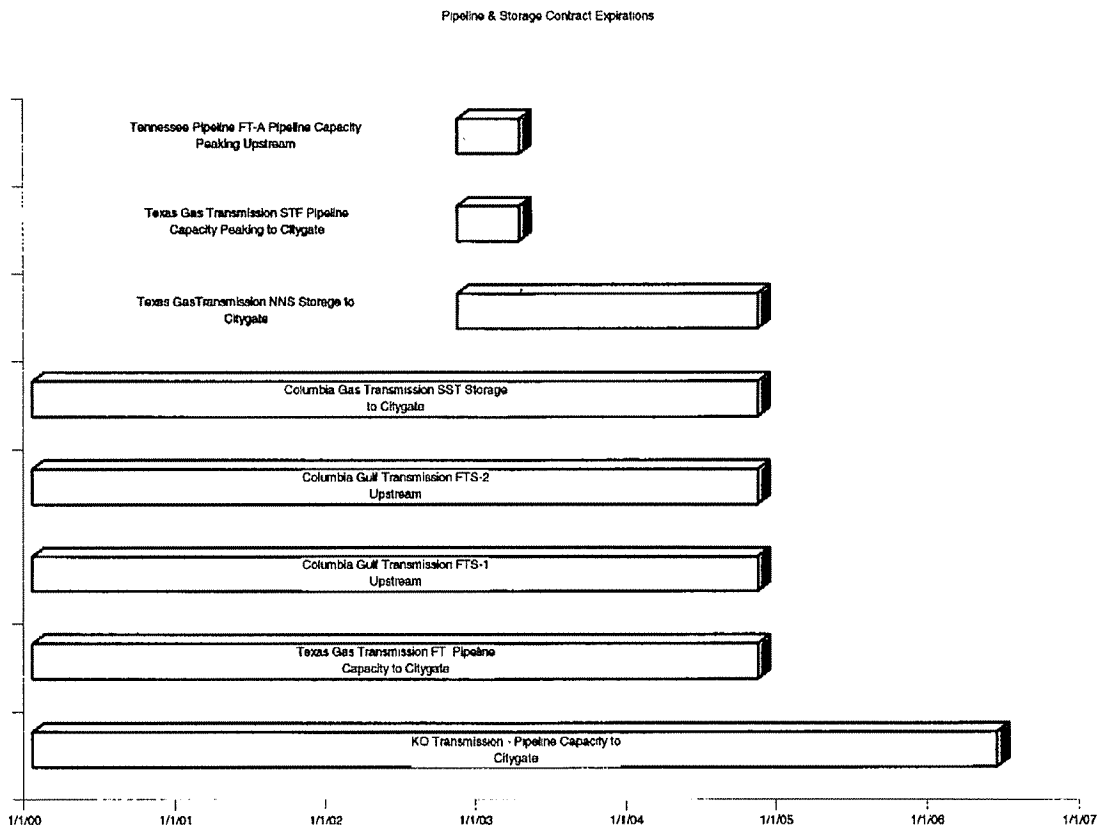
5. CG&E has a diversified capacity and storage portfolio but is heavily dependent on the Columbia system to meet its supply needs.

A legacy of the former Columbia ownership of this and other regional companies is that their physical configurations are intertwined with the Columbia pipeline system. This means that on peak day, CG&E has been dependent upon Columbia for approximately 55% of its deliveries.

The new C-314 line segment, a recently completed loop in the heart of the CG&E system, helps to bring additional supply from other pipelines and has tended to drive the peak day dependency on Columbia toward 50%.

6. The timing of the expiration dates of the pipeline contracts, coupled with other changes in the natural gas business, have put CG&E in an advantageous position in negotiating new or extended contract terms.

Figure III.6 below depicts the expiration dates of all of CG&E’s pipeline and storage contracts.



**Pipeline and Storage Contract Expirations
Figure III.6**

As is readily evident, with the exception of the KO Pipeline, all of CG&E's annual pipeline and storage contracts expire on October 31, 2004, and its winter peaking contracts expired on March 31, 2003. The company states that this was the intent when the contracts were initially negotiated or extended, in order to give it greater leverage with the pipeline companies.

A common feature of pipeline contracts is that they "roll over for some period of time (one year and five year rollovers are common) absent notification by either party of the intent to terminate, typically a year in advance of the termination date. All of CG&E's contracts contain such provisions, and the company served notice of its intent to terminate and renegotiate. The company is protected against the potential of the pipelines to sell the capacity to another party, however, because the contracts contain "Right of First Refusal (ROFR)" clause which gives the LDC the right to match any offer by another party in the event that the pipeline has an opportunity to sell the capacity to another customer. This arrangement, typical of such contracts, allows both sides to shop for better deals but protects the LDC from being left without delivery capability upon contract termination.

Given the situation of excess pipeline capacity in the region and recent changes in FERC regulations which have tended to exert downward pressure on pipeline rates, Liberty believes CG&E's strategy and actions have been reasonable and appropriate and will produce longer term benefits for ratepayers. Negotiations with pipelines have been proceeding during the conduct of this audit and were identified by the company as a high profile activity receiving significant staff attention.

7. The CG&E gas organization may be short on executive and management-level gas expertise at a critical time for the gas business.

Recognizing the importance of the contract negotiations, and the recent replacement of the Vice President of Gas Operations with someone with minimal experience on the gas side of the business, the temporary assignment of the Manager of Gas Commercial Operations to another important, high profile CG&E project (the CIN10 project) appears to be ill-advised. As noted in Chapter I, Organization, Staffing and Controls, gas business knowledge and experience in the direct chain of command at the officer level of the company, above the manager level, is thin. While Liberty has not noted particular harm from this situation, the activity of gas contract negotiations is important enough to deserve the full attention of the staff in Gas Commercial Operations. Further, while Liberty respects the expertise and experience of the existing staff, it would have been appropriate to bring in some higher-level expertise, either from other senior levels within Cinergy, or from outside, to provide additional perspective and to advise the company during the current contract negotiations, since such expertise appears to have been unavailable in the direct chain of command. This general subject is discussed further in Chapter I, Organization, Staffing and Controls.

8. The propane units are a relatively cheap and reliable needle peaking resource.

As discussed in Chapter VI, Operational Issues, the company believes the propane plants are in excellent operating condition and relies on them as a critical peaking resource. They have been upgraded and modified to reduce the labor force necessary to maintain and operate them, and some associated equipment has been maintained and upgraded. In Liberty's experience, such

plants are a long-lived asset so long as they are well maintained; they should operate successfully for years to come.

9. There is an opportunity to further optimize propane plant dispatch, which could result in a cost savings or increased revenue. (Recommendation #3)

Historically, CG&E used the propane plants only when weather conditions required additional peaking supplies. Beginning in the 2002-2003 winter, CG&E began to dispatch the plants on an economic basis as well when excess propane supplies were available. In that winter the plants were dispatched more frequently, and more for economic reasons than for peaking supply reasons. Liberty believes this is a good practice so long as sufficient propane supplies are available and the plants are dispatched in such a manner that adequate peaking supplies are available.

As discussed in the following section, all of the supply assets are dispatched as directed by the Asset Manager, with the exception of the propane plants. The company's logic for this approach is that the plants are utility assets behind the citygate. Liberty does not believe that is sufficient justification to exclude them from dispatch along with the other assets.

While CG&E does need to ensure that propane reserves are maintained at an adequate level, including the allocation to FT customers, if these plants were to be dispatched by the Asset Manager, company personnel would in fact, still physically operate the plants and CG&E would have final control over its dispatch. That would be no different from handling of storage, which is also a critical peaking resource. CG&E turns over the dispatch of its storage facilities to the Asset Manager and then monitors the storage levels to ensure adequate reserves. From that perspective, there is no difference between the two.

There may be a further opportunity to optimize the use of the plants through judicious management of propane shipments on the TEPPCO pipeline. Unlike natural gas pipelines, the product pipeline capacity is prioritized based upon availability and prior year usage, and there may be opportunities to optimize those deliveries.

10. The decision to pursue an asset management arrangement and to issue an RFP was a reasonable approach.

During the mid to late 1990s, asset management became an attractive option for LDCs to maximize revenues from underutilized assets. In that respect, CG&E was a little behind the curve in seeking such assistance. CM&T and Mirant apparently recognized the opportunity and submitted unsolicited proposals. While those firms cannot be faulted for sending unsolicited proposals, and may have provided the impetus for the RFP, CG&E subsequently acted properly in issuing an RFP for asset management services.

11. The selection process for the initial Asset Manager appears to have been fairly structured and administered.

CG&E evaluated and ranked the bids by value and noted other significant terms and parameters. While many of the bidders are now in bankruptcy, experiencing financial difficulty, or out of the