



# MONTANA-DAKOTA

UTILITIES CO.

A Division of MDU Resources Group, Inc.

400 North Fourth Street  
Bismarck, ND 58501  
(701) 222-7900

July 26, 2013

Ms. Kate Whitney, Administrator  
Utility Division  
Montana Public Service Commission  
1701 Prospect Avenue  
Helena, MT 59620

Re: General Gas Rate Application  
Docket No. D2012.9.100

Dear Ms. Whitney:

Enclosed please find Montana-Dakota Utilities Co.'s responses to the Montana Public Service Commission data requests dated July 10, 2013. Responses to the following requests are attached:

PSC-157	PSC-162
PSC-158	PSC-164
PSC-159	PSC-165
PSC-160	PSC-166
PSC-161	

This completes all outstanding data requests.

Sincerely,

Rita A. Mulkern  
Director of Regulatory Affairs

Attachments  
cc: Service List

Montana-Dakota Utilities Co.  
Docket No. D2012.9.100  
Service List

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**MONTANA-DAKOTA UTILITIES CO.  
MONTANA PUBLIC SERVICE COMMISSION  
PSC DATA REQUEST  
DATED JULY 10, 2013  
DOCKET NO. D2012.9.100**

**PSC-157**

**Regarding: Thermal oxidizer, pg. 4:10-11**

**Witness: Morman**

- a. Was the thermal oxidizer an obligation of the gas plant necessary for it to be permitted?**
- b. What are the fixed and variable costs of the oxidizer, and how much of the plant's annual revenue requirement does it represent?**

**Response:**

- a. A thermal oxidizer was not required, but, as noted in the Feasibility Report dated December 2007, and provided in Response No. PSC-055, Attachment A, was recommended due to safety concerns and noise.
- b. The requested information is not available as the costs of the oxidizer are not tracked separately.

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MONTANA PUBLIC SERVICE COMMISSION  
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**PSC-158**

**Regarding: Long-term gas price forecasts and development of plant  
Witness: Morman**

- a. Did MDU consult long-term gas price forecasts during the time before landfill was built?**
- b. Please identify and provide any gas forecast which MDU Consulted in the five year period before MDU made its decision to move forward with the landfill project.**
- c. On pg. 5:20, you argue that any comparison of the unit cost from the Billings landfill to open market purchases requires "some fairly heroic assumptions." Describe what you mean by the adjective "heroic" in the context of that sentence.**
- d. Provide a timeline showing the activities and market context associated with the planning and development of the Billings landfill project. Include in the timeline: 1) the decision milestones regarding the plant's development, 2) the amount of investment in the plant, as it accumulated over time, 3) the time at which the gas price forecasts in (b) were received and/or consulted by MDU.**

**Response:**

- a. Yes, long term gas costs were reviewed throughout the evaluation of the project.
- b. Montana-Dakota continuously monitors the commodity price of natural gas as part of gas procurement process. Throughout the year the Company negotiates gas prices for gas supply contracts with producers and marketer that have varying dates, and is therefore monitoring prices on a continual basis. Montana-Dakota also submits monthly gas cost tracking adjustments, and as part of the process, the Gas Supply department reviews the index prices for the Rocky Mountain and Mid continent regions for the next one to two years, monitoring the commodity price of natural gas on a continual basis for the short term. Montana-Dakota also reviews information energy publications which include the Energy Information Administration (EIA) Short Term Energy Outlook (STEO), Platt's Gas Daily and Bentek Energy.

Attachment A contains graphs of historical and projected gas prices that were prepared between 2006–2009, the time leading up to the investment in the Billings Landfill, which identify the historical and NYMEX future prices of natural

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Response No. PSC-158 (cont.)

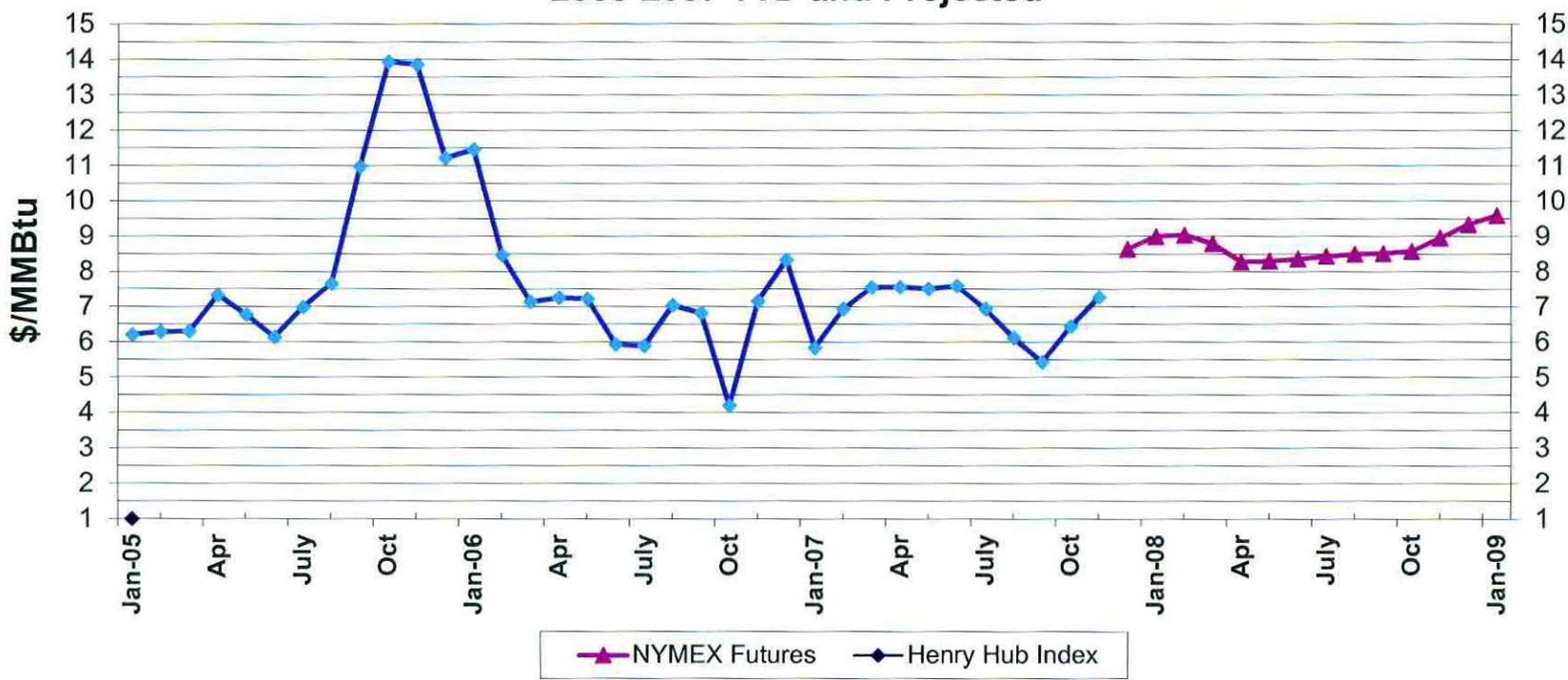
- gas. These forecasts are utilized to monitor future price estimates and as a guide during the decision making process.
- c. It is heroic in that any long term forecast of gas prices quickly defaults to the expected rate of inflation.
  - d. Please see Attachment B for the decision timeline and Attachment C for the expenditures by year and type of expenditure. The costs do not directly correlate with the timing of the milestones, as there is usually a delay between when a decision is made, the work is completed and the cost recorded on the Company's books.

**NATURAL GAS PRICE INDEX  
HENRY HUB - GULF COAST  
2004-2006 YTD and Projected**



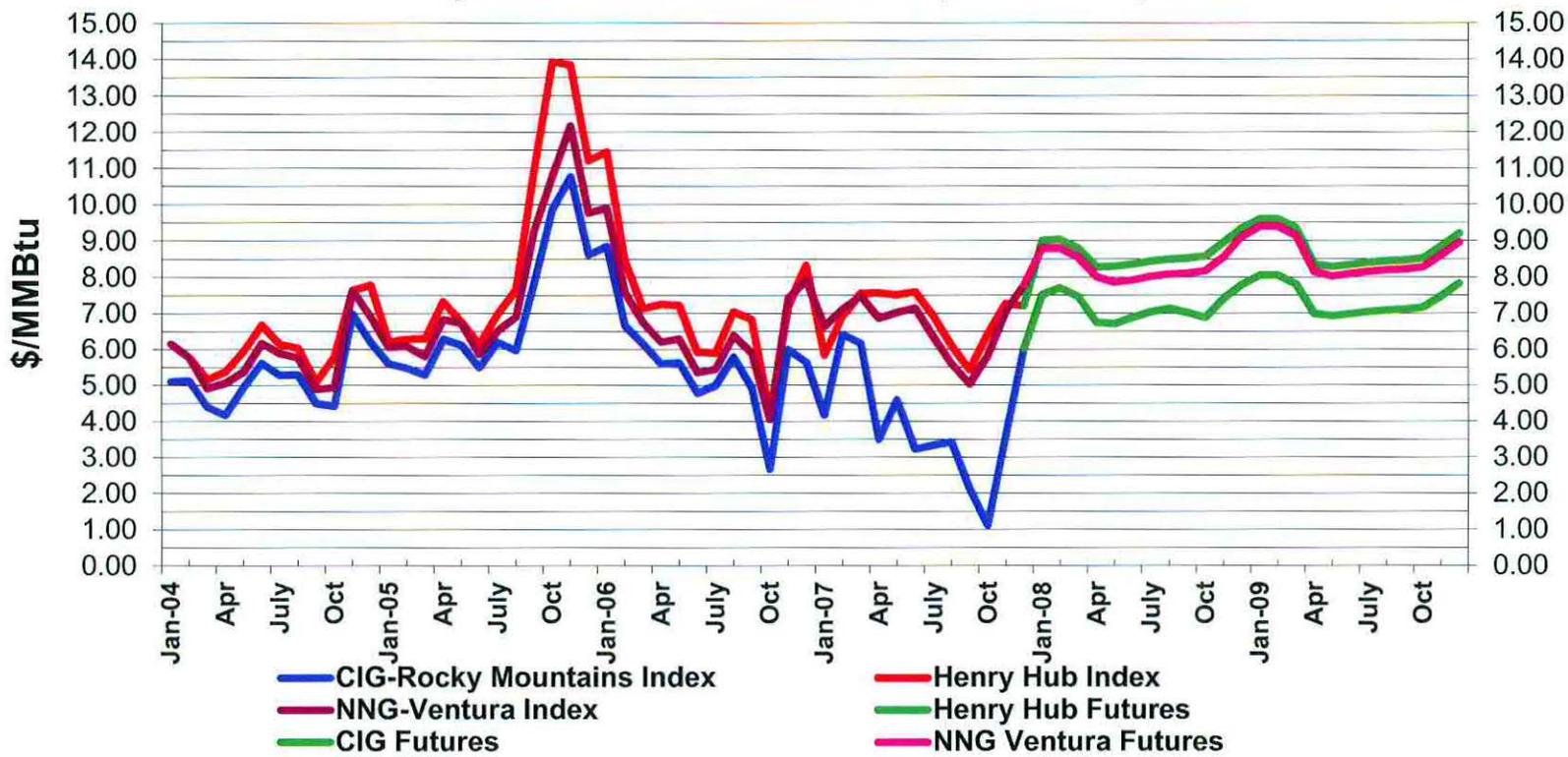
**October-06**

**NATURAL GAS PRICE INDEX  
HENRY HUB - GULF COAST  
2005-2007 YTD and Projected**



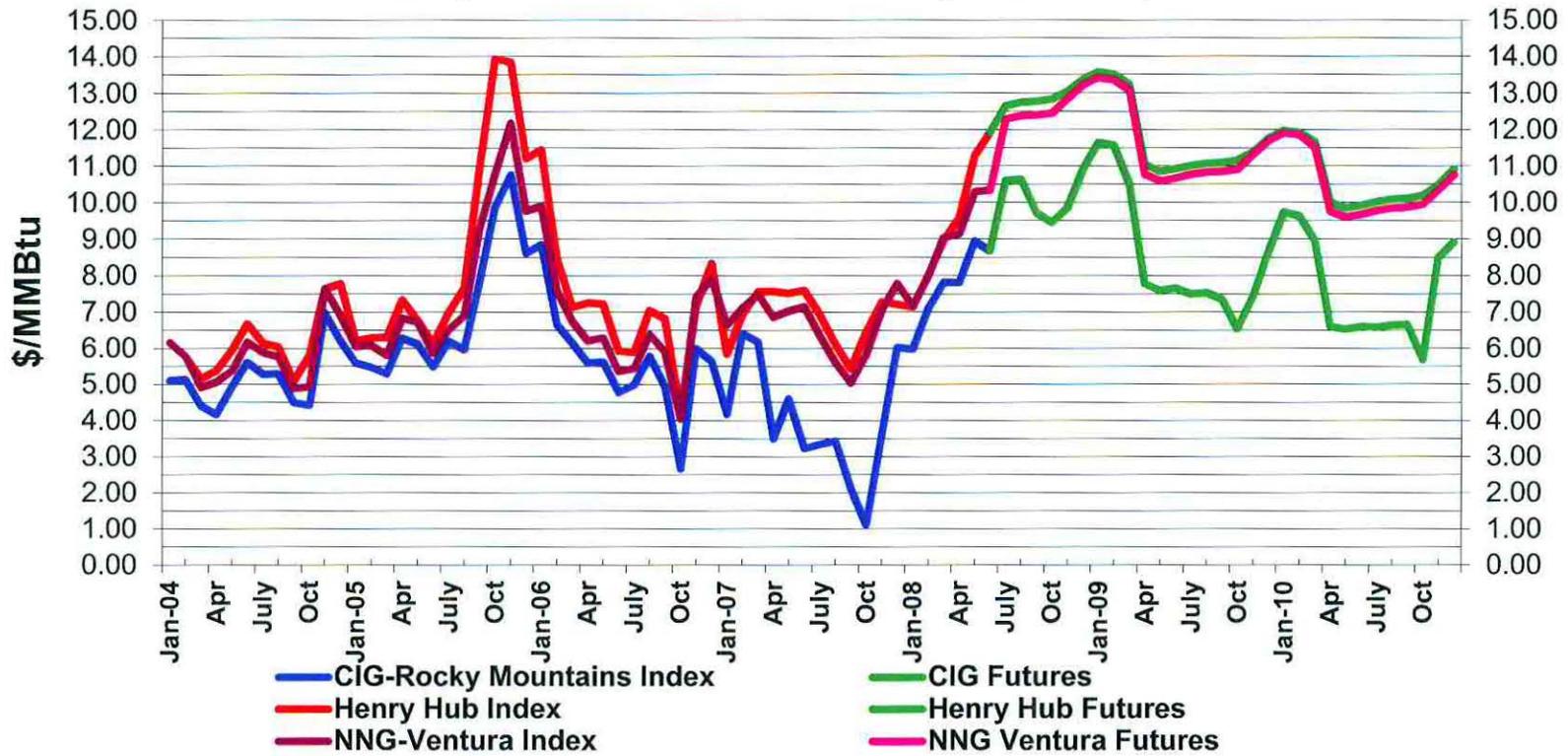
**December-07**

### CIG - Rocky Mountains, Henry Hub & NNG - Ventura (Midwest) Indices Monthly Gas Prices 2004-2007YTD plus future prices



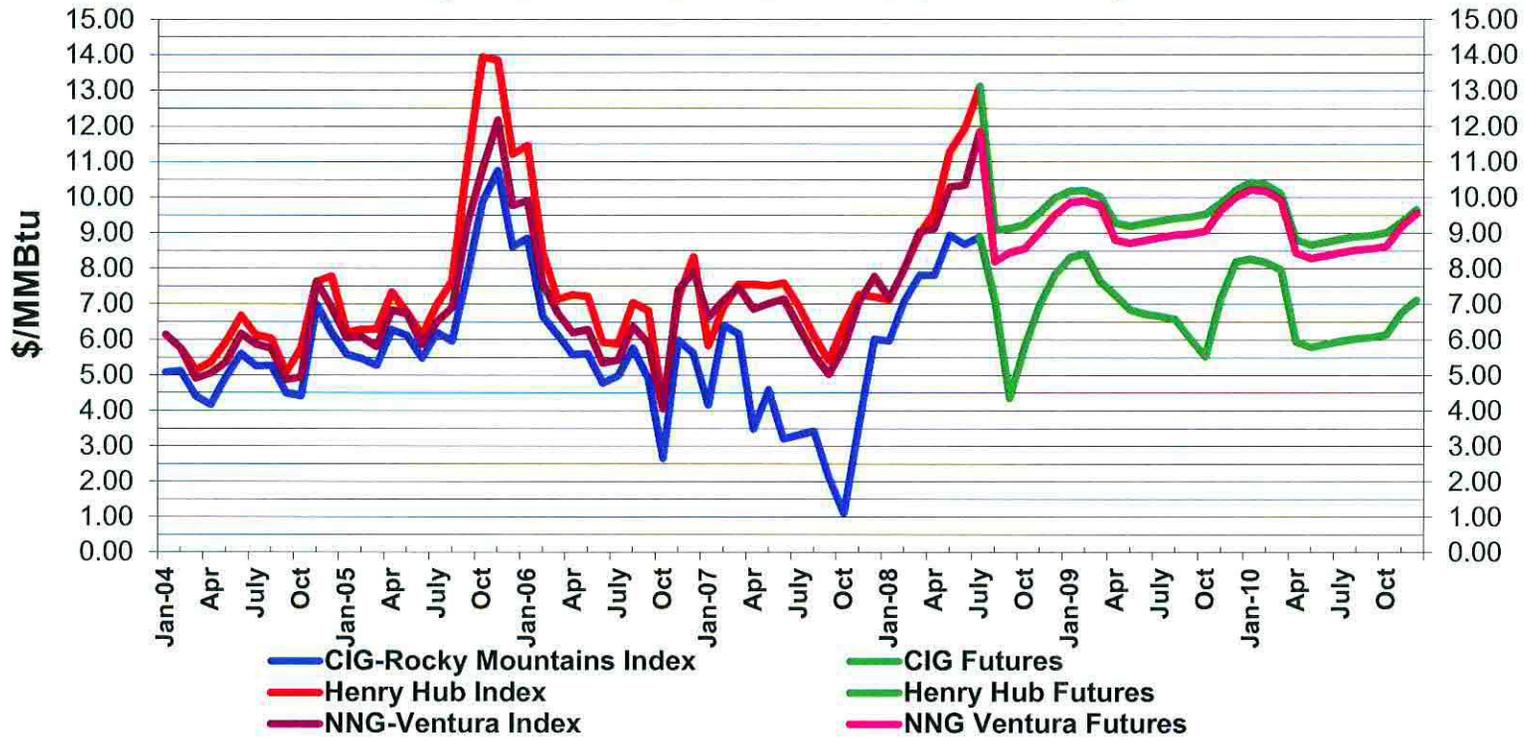
January-08

### CIG - Rocky Mountains, Henry Hub & NNG - Ventura (Midwest) Indices Monthly Gas Prices 2004-2008YTD plus future prices



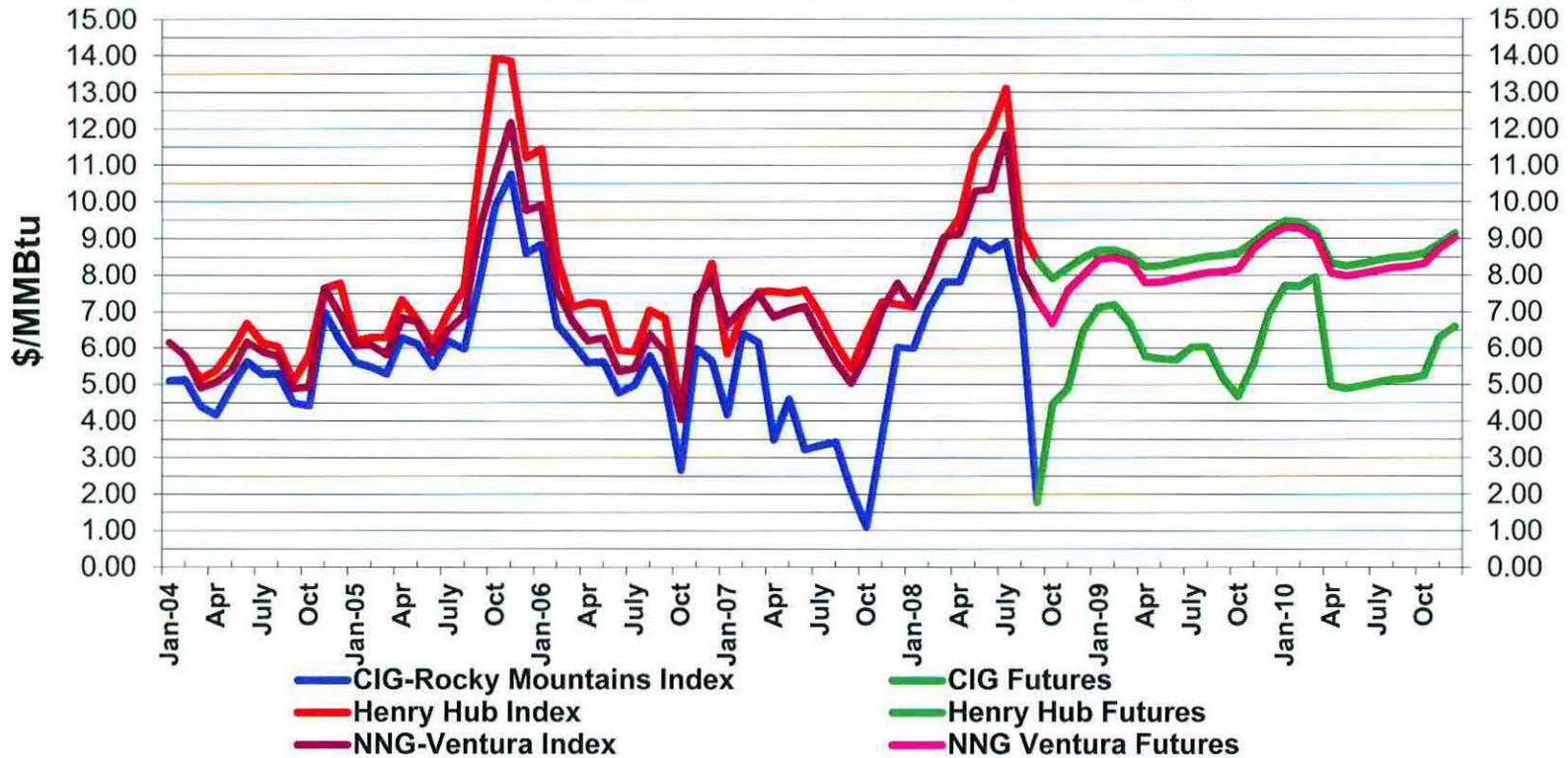
June-08

### CIG - Rocky Mountains, Henry Hub & NNG - Ventura (Midwest) Indices Monthly Gas Prices 2004-2008YTD plus future prices



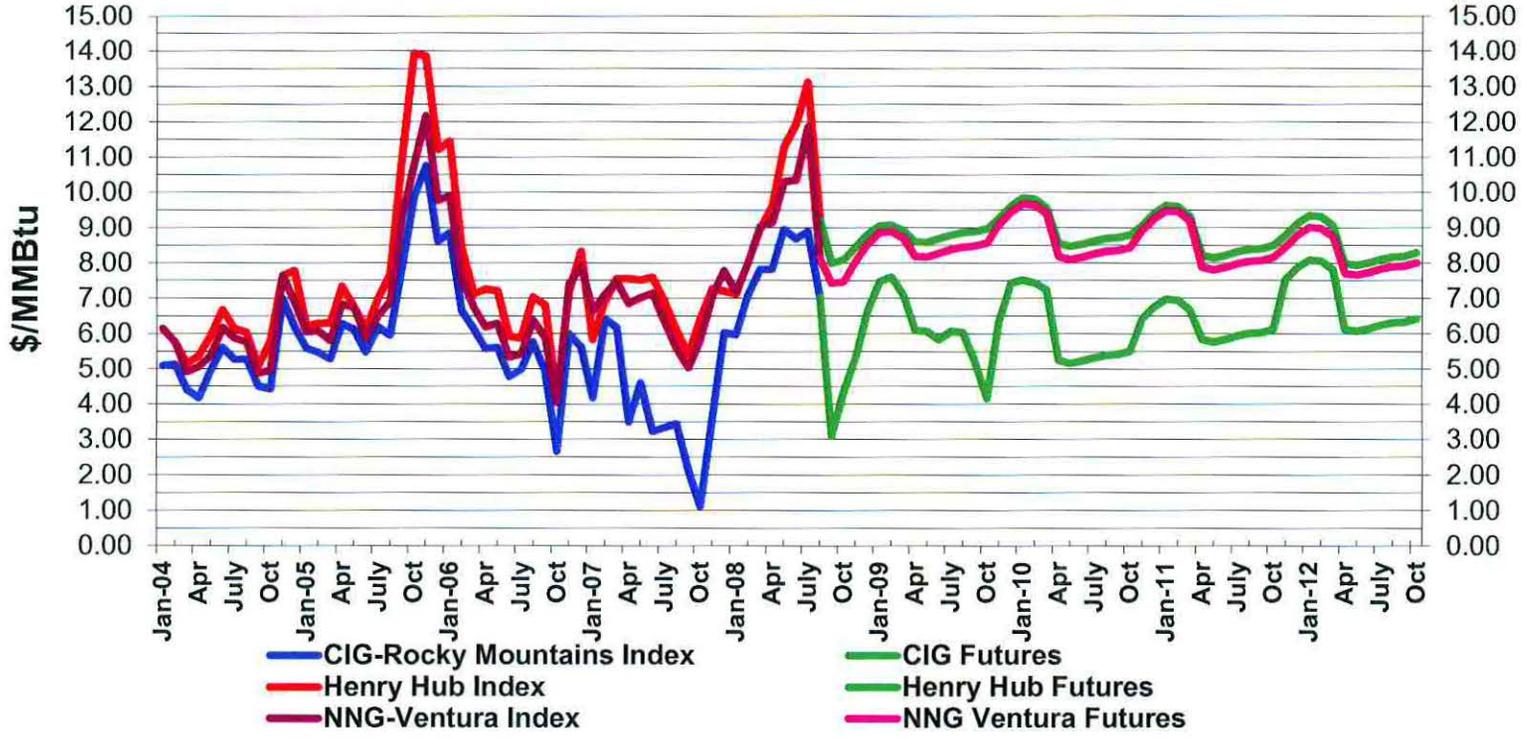
July-08

### CIG - Rocky Mountains, Henry Hub & NNG - Ventura (Midwest) Indices Monthly Gas Prices 2004-2008YTD plus future prices (Sept 18, 2008)



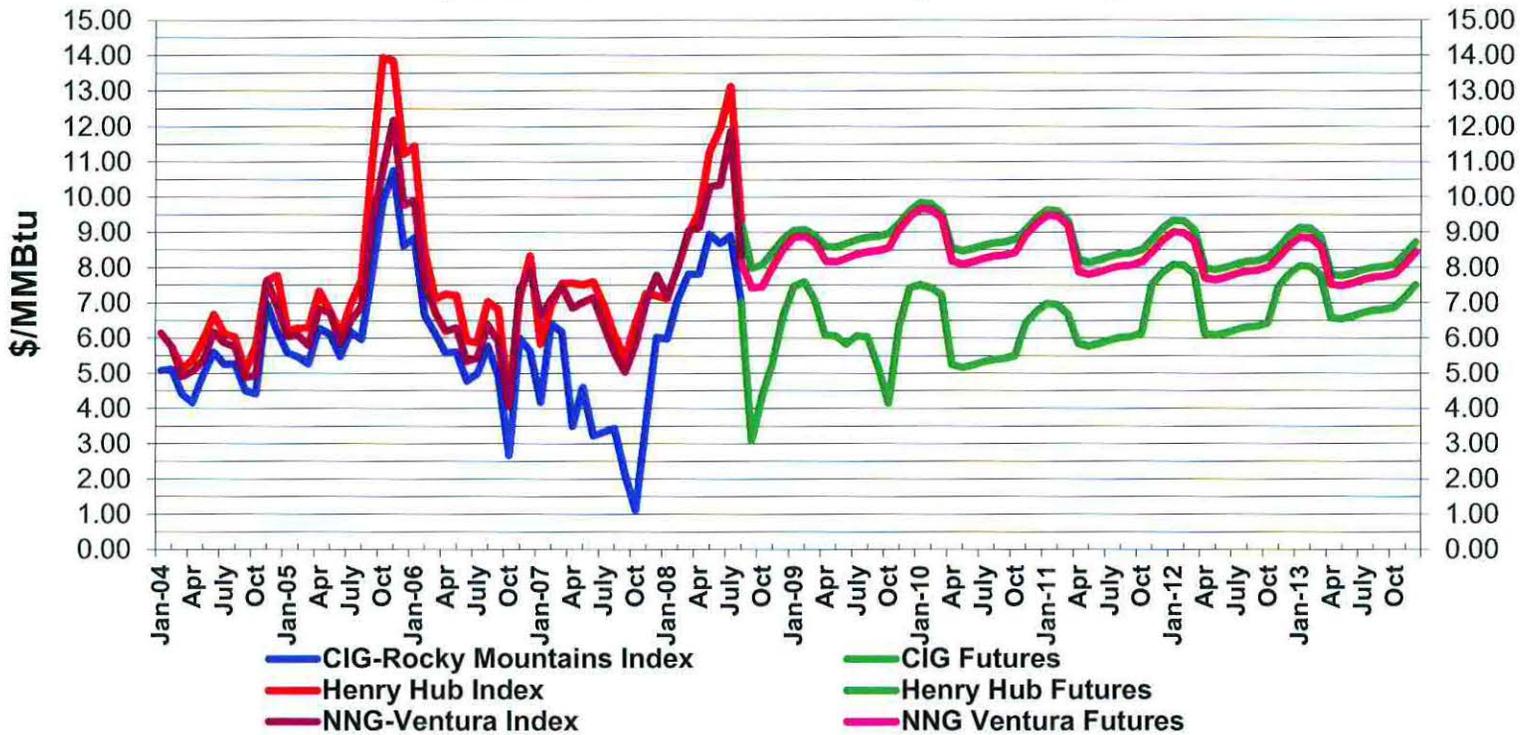
August-08

### CIG - Rocky Mountains, Henry Hub & NNG - Ventura (Midwest) Indices Monthly Gas Prices 2004-2008YTD plus future prices



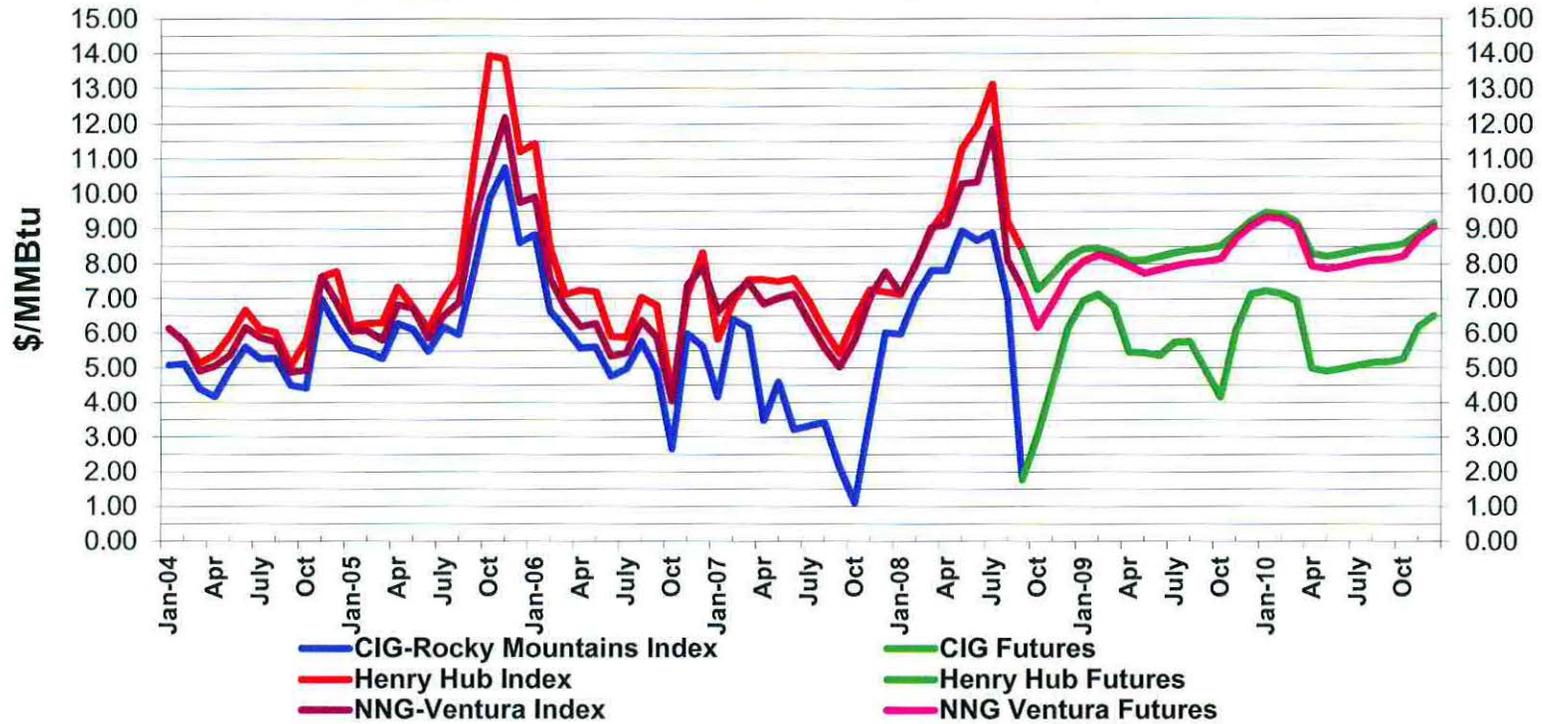
August-08

### CIG - Rocky Mountains, Henry Hub & NNG - Ventura (Midwest) Indices Monthly Gas Prices 2004-2008YTD plus future prices



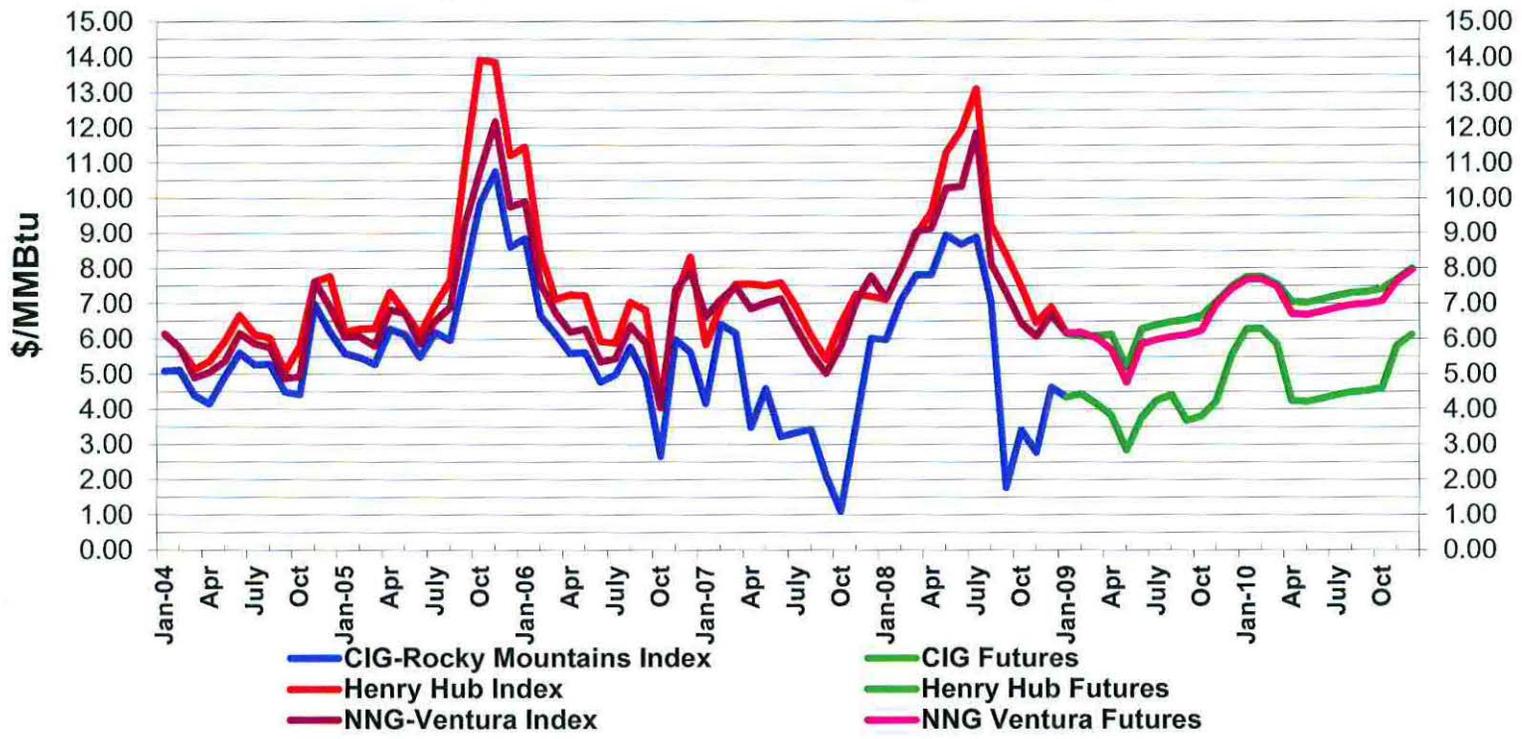
August-08

**CIG - Rocky Mountains, Henry Hub & NNG - Ventura (Midwest) Indices  
Monthly Gas Prices 2004-2008YTD plus future prices**



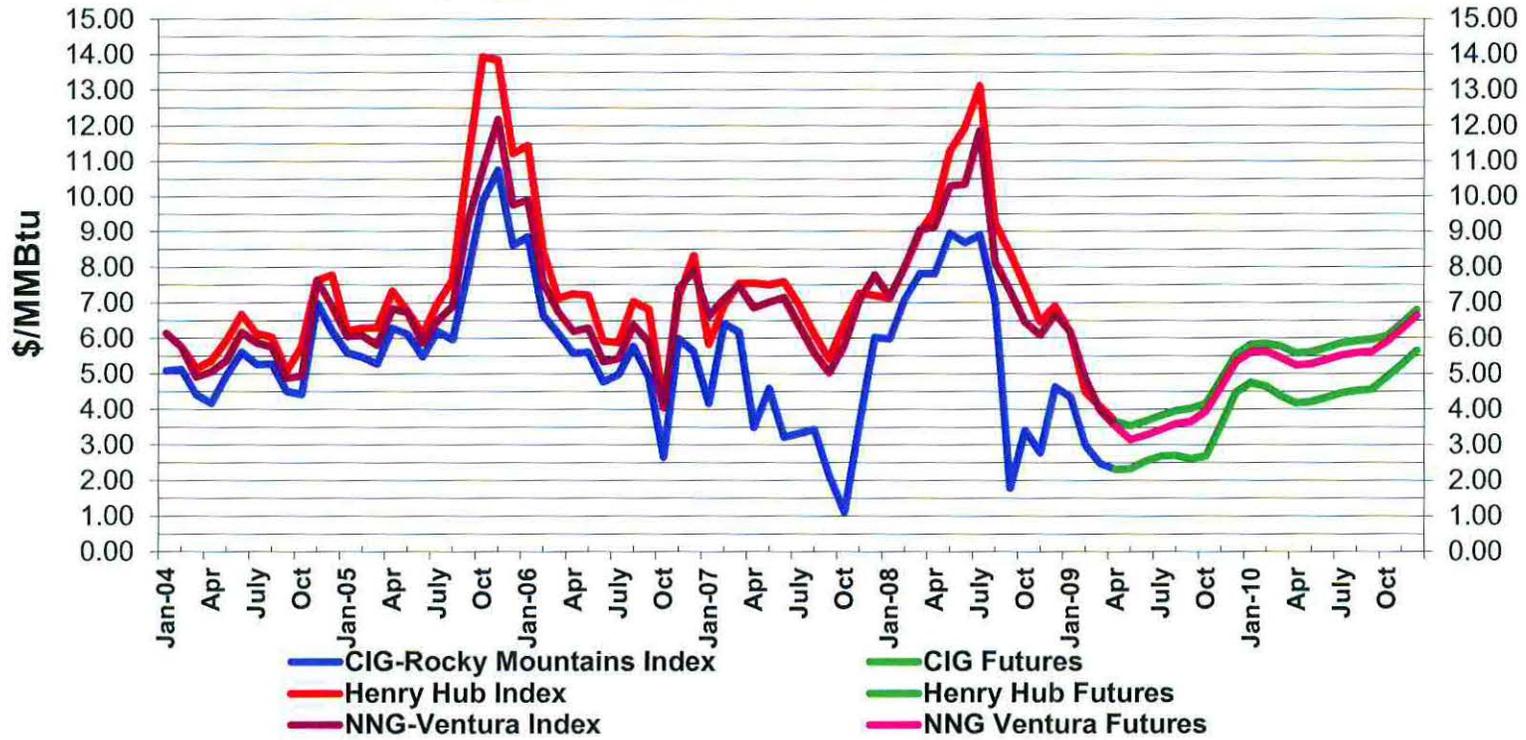
September-08

**CIG - Rocky Mountains, Henry Hub & NNG - Ventura (Midwest) Indices  
Monthly Gas Prices 2004-2009YTD plus future prices**



January-09

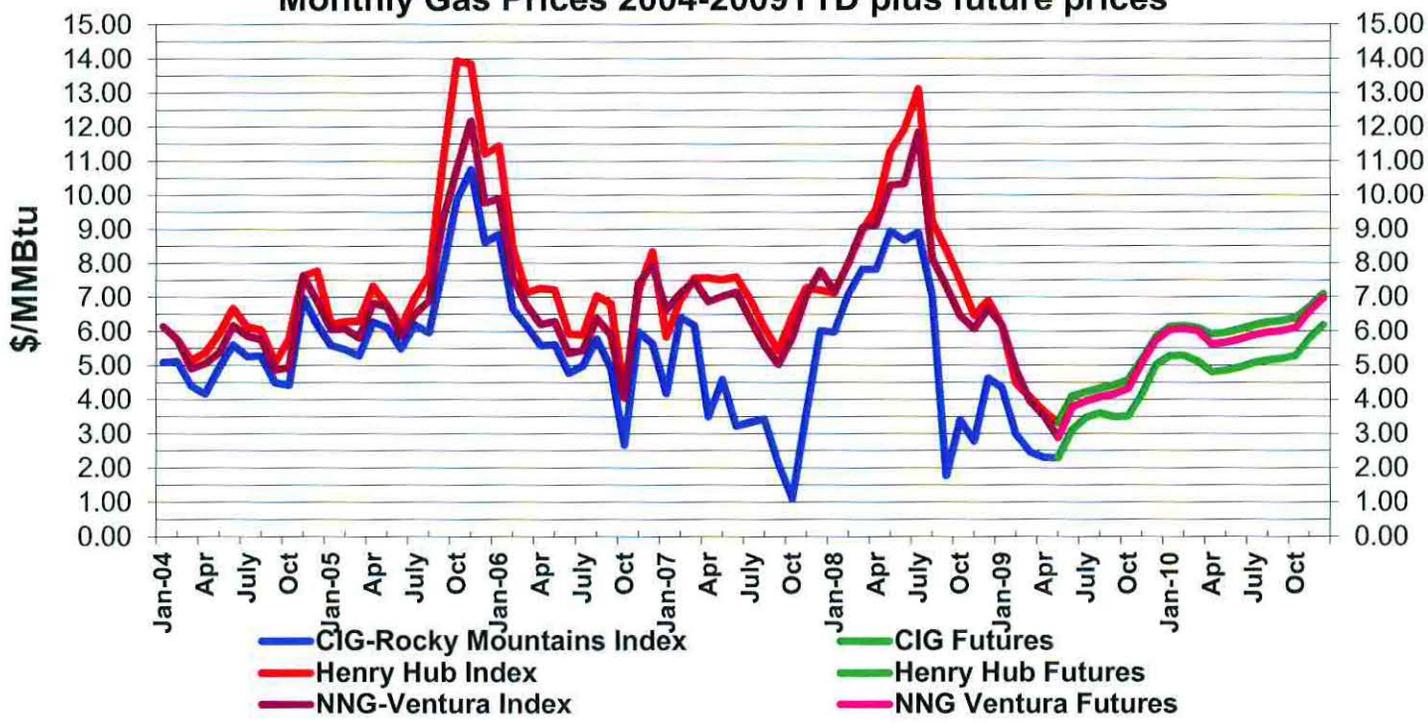
### CIG - Rocky Mountains, Henry Hub & NNG - Ventura (Midwest) Indices Monthly Gas Prices 2004-2009YTD plus future prices



April-09

## CIG - Rocky Mountains, Henry Hub & NNG - Ventura (Midwest) Indices

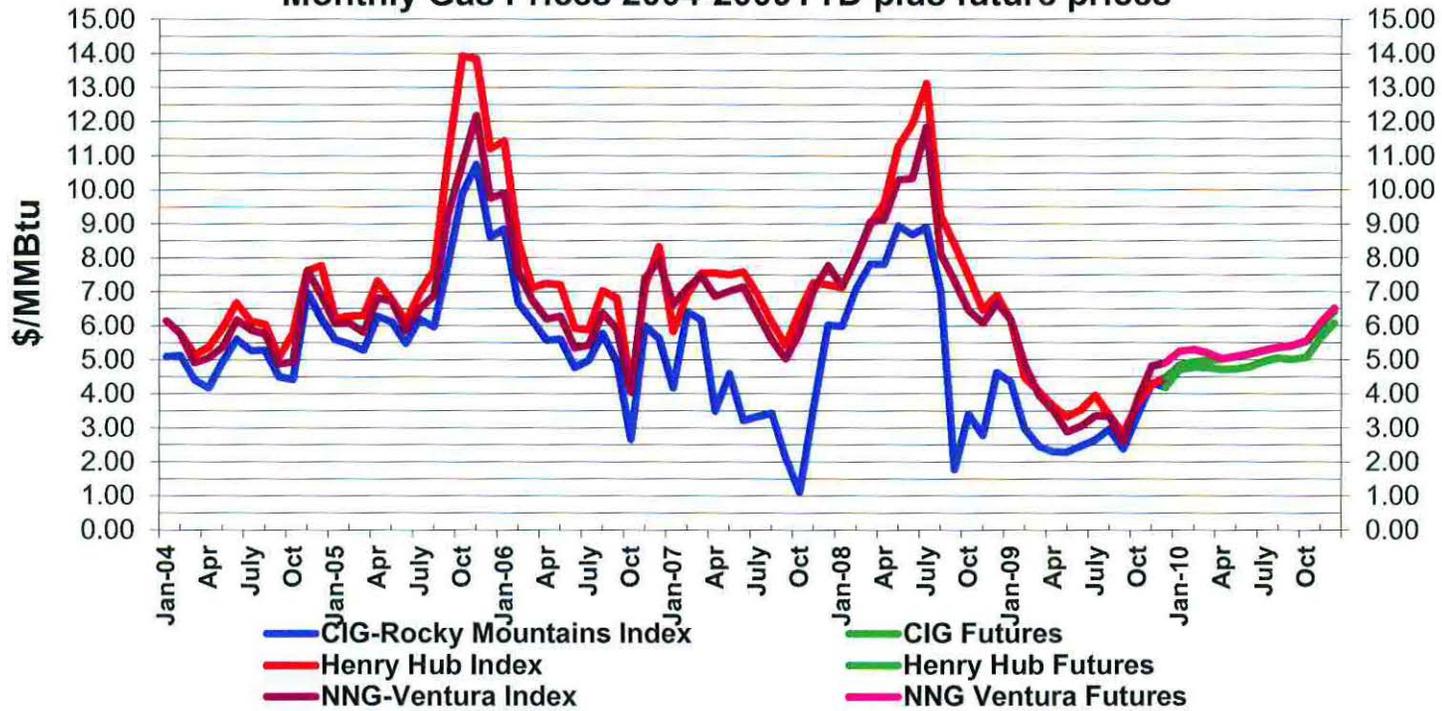
### Monthly Gas Prices 2004-2009YTD plus future prices



May-09

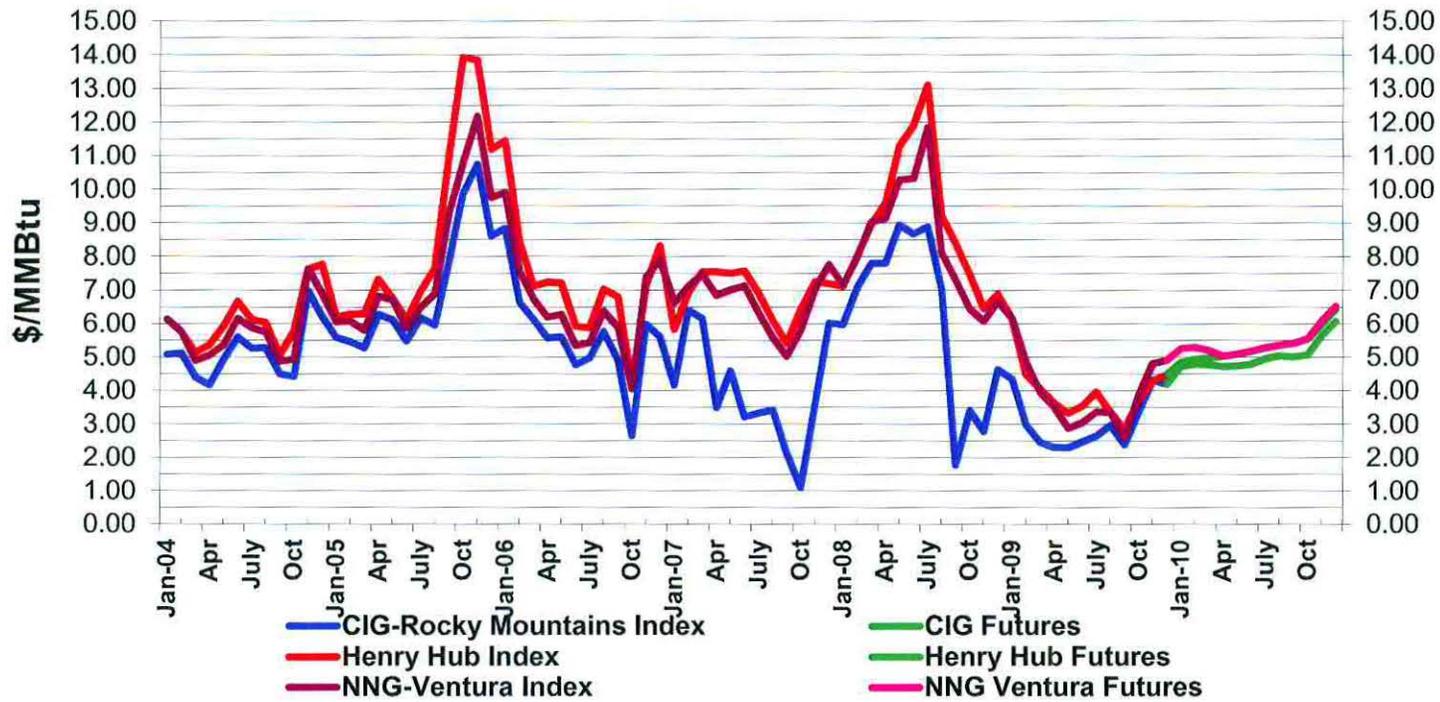
**CIG - Rocky Mountains, Henry Hub & NNG - Ventura (Midwest)  
Indices**

**Monthly Gas Prices 2004-2009YTD plus future prices**



October-09

**CIG - Rocky Mountains, Henry Hub & NNG - Ventura (Midwest) Indices  
Monthly Gas Prices 2004-2009YTD plus future prices**



December-09

## Timeline for Billings Landfill

2007	April	Letter initiating study
	May	Preliminary study - Wenck
	December	Study completed
2008	September	Confirmation Study - Wenck
2009	January	Confirmation Study completed
	April	Wenck Task Order Executed- Design & Permitting
	May	Wenck Task Order Executed- Construction Plans
	November	LFG Agreement for Process Swing Adsorption
	November	LFG Agreement for Compressor, Tanks, etc.
	December	Wenck Task Order Executed - Gas eqpt. Procurement, construction management and oversight
2010	January	Begin construction
	January	Terra Engineering & Constr. - install gas wells
	March	COP Construction- piping to gas wells
	May	Hardy Construction - general contractor
	May - December	Construction and installment of all related facilities
	December	Placed in service

**MONTANA-DAKOTA UTILITIES CO.  
BILLINGS LANDFILL COSTS  
2008-2011**

<u>Cost by Year</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>Total</u>
Montana-Dakota payroll & benefits	\$252	\$0	\$199,163	\$10,936	\$210,351
Contract labor	25,018	224,200	4,346,100	295,284	4,890,602
Consulting Fees	85,000	64,000	79,885	14,250	243,135
Materials	1,119	1,150,857	3,480,910	99,744	4,732,630
AFUDC	182	31,563	489,152	0	520,897
All other	13,118	125,796	(82,143)	123,781	180,552
Total	<u>\$124,689</u>	<u>\$1,596,416</u>	<u>\$8,513,067</u>	<u>\$543,995</u>	<u>\$10,778,167</u>

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MONTANA PUBLIC SERVICE COMMISSION  
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**PSC-159**

**Regarding: Analysis of landfill gas project**

**Witness: Morman**

- a. Provide "the Wenck studies" referred on pg 6:21.
- b. Provide "the analysis" referred to on pg 6:1.
- c. With respect to the underperformance of wells in Phase 1, was any evaluation made of landfill contents and areas where particular types of waste were located?
- d. How were locations of test wells determined?

**Response:**

- a. Please see Response No. PSC-055.
- b. Please see Response No. PSC-055.
- c. The content of the landfill contents were evaluated at the time the test wells were drilled. Please see Response No. PSC-55, Attachment C, Section 2,0.
- d. The wells were placed in areas with both older waste and newer waste in order to get a good representation of the waste type and composition. Please see Response No. PSC-55, Attachment C, Section 2,0.

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MONTANA PUBLIC SERVICE COMMISSION  
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**PSC-160**

**Regarding: Phase I vs Phase II production  
Witness: Morman**

- a. How much gas production was projected from Phase I, and how much is being produced?**
- b. How much gas production was projected from Phase II, and how much is being produced?**
- c. What is the cost in rate base of each phase?**

**Response:**

a-b. The projected flow was based on flow results from the three test wells and further modeling using the test results (Please see Response No. PSC-55, Attachment C, Section 3.0). The projected flow was not identified by phases.

Montana-Dakota does not have a master meter on each phase of the Billings Landfill. The estimated production from each well within each production phase is determined by taking an instantaneous flow reading from an individual well and comparing that to the total volume of landfill methane being collected at the inlet of the plant. Using this method Montana-Dakota estimates that the current production of landfill methane is 15 percent from Phase I, 65 percent from Phase II and 20 percent from Phase 3.

- c. The requested information is not available as the components of the gathering and processing facilities are not recorded separately.

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**PSC-161**

**Regarding: Preliminary studies**

**Witness: Morman**

- a. Were the services provided by Wenck, including their analysis and the drilling of test wells, part of the rate base of this project?**
- b. If so, please identify the amount that preliminary investigation accounts for.**

**Response:**

- a. The costs of the initial study of \$15,800 were not included in rate base. All other costs of the services provided by Wenck are included in rate base.
- b. The costs associated with the preliminary investigation contained in the January 2009 Confirmation report were \$138,000.

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**PSC-162**

**Regarding: Method of filling landfill**

**Witness: Morman**

**Did the City of Billings report to MDU the impetus of the change of the method of filling the landfill described on pg 11:3-17 and, if so, what was the impetus for the change?**

**Response:**

The primary reason for the change was to begin flat packing garbage at the landfill instead of slope packing garbage. With flat packing garbage, the landfill was able to increase the density from 514 pounds of garbage per cubic yard of air space to around 1,000 pounds per cubic yard of air space, with a goal of 1,300 pounds per cubic yard of air space. The garbage to dirt ratio has increased from 2:1 to 3:1 with a goal of 5:1. The result is that the landfill will be able to extend the life of the landfill and create more methane. Additionally, the landfill is adding water with the alternate daily cover.

In order to achieve the density goals, a larger area is needed for flat packing, and the phases will be filled simultaneously, rather than phase by phase. Horizontal pipe can be laid to collect the methane as the phases are filled. In order to use vertical pipe, a wait of 5-7 years would be required until the phases would be filled to the height required for a vertical well.

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**PSC-164**

**Regarding: Sarbanes-Oxley  
Witness: Gardner**

- a. Please provide the portion of the Sarbanes-Oxley Act that MDU references in the rebuttal testimony of Michael J. Gardner, page 2.**
- b. With respect to the Sarbanes-Oxley Act why would MDU have been out of compliance with the referenced section of the Sarbanes-Oxley Act?**

**Response:**

- a. The Sarbanes-Oxley act of 2002 (SOX) purpose is to protect investors by improving the accuracy and reliability of corporate disclosures made pursuant to the securities laws, and for other purposes. It is a United States federal law that set new or enhanced standards for all U.S. public company boards, management and public accounting firms. Section 302 under Title III (Corporate Responsibility) speaks about corporate responsibility for financial reports. Section 404 of the Act is listed under Title IV of the act (Enhanced Financial Disclosures), and pertains to Management Assessment of Internal Controls. These requirements of Sarbanes-Oxley include internal controls for assuring the accuracy of financial reports and disclosures, and mandates both audits and reports on those controls. It also requires timely reporting of material changes in financial condition and specific enhanced reviews by the SEC or its agents of corporate reports. SOX mandates that senior executives take individual responsibility for the accuracy and completeness of corporate financial reports. It defines the interaction of external auditors and corporate audit committees, and specifies the responsibility of corporate officers for the accuracy and validity of corporate financial reports. Please see Attachment A for the referenced sections of SOX.
- b. The new Customer Information System (CC&B) is utilized to calculate the amount to bill each customer each month based upon the customer's monthly gas or electric consumption and reporting the sales revenue from these calculations on the Company's financial statements. SOX mandates documenting the process, identifying risks and setting up an internal control environment to mitigate the risks. SOX also mandates annual assessment and management attestation as to the effectiveness of these controls. While the CC&B processes were tested prior to the system going live and being placed into service, there is always a risk that something unanticipated could transpire once the new system goes live. Should the new system miscalculate or omit bills and as a result, misstate revenue on the financial statements, it could affect the ability of the Company to create timely and

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Response No. PSC-164 (cont.)

accurate financial reports. The risk of error from the implementation of a new system is greatest during the fourth quarter, where there may not be adequate time prior to year end to fully identify the problems, remedy the issues, and retest the system to ensure accurate and complete financial reporting prior to year end. Such an error could also indicate a material weakness in the Company's system of internal controls which would impact the officer's ability to attest to the accuracy and completeness of the financial information and require additional disclosure in the Company's 10K. With a February implementation there is time to make any necessary corrections to problems encountered after the go live date.

PUBLIC LAW 107-204—JULY 30, 2002

116 STAT. 777

“(A) to the registered public accounting firm employed by the issuer for the purpose of rendering or issuing an audit report; and

“(B) to any advisers employed by the audit committee under paragraph (5).”

**SEC. 302. CORPORATE RESPONSIBILITY FOR FINANCIAL REPORTS.**

15 USC 7241.

(a) REGULATIONS REQUIRED.—The Commission shall, by rule, require, for each company filing periodic reports under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m, 78o(d)), that the principal executive officer or officers and the principal financial officer or officers, or persons performing similar functions, certify in each annual or quarterly report filed or submitted under either such section of such Act that—

(1) the signing officer has reviewed the report;

(2) based on the officer's knowledge, the report does not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements made, in light of the circumstances under which such statements were made, not misleading;

(3) based on such officer's knowledge, the financial statements, and other financial information included in the report, fairly present in all material respects the financial condition and results of operations of the issuer as of, and for, the periods presented in the report;

(4) the signing officers—

(A) are responsible for establishing and maintaining internal controls;

(B) have designed such internal controls to ensure that material information relating to the issuer and its consolidated subsidiaries is made known to such officers by others within those entities, particularly during the period in which the periodic reports are being prepared;

(C) have evaluated the effectiveness of the issuer's internal controls as of a date within 90 days prior to the report; and

(D) have presented in the report their conclusions about the effectiveness of their internal controls based on their evaluation as of that date;

(5) the signing officers have disclosed to the issuer's auditors and the audit committee of the board of directors (or persons fulfilling the equivalent function)—

(A) all significant deficiencies in the design or operation of internal controls which could adversely affect the issuer's ability to record, process, summarize, and report financial data and have identified for the issuer's auditors any material weaknesses in internal controls; and

(B) any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal controls; and

(6) the signing officers have indicated in the report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of their evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

116 STAT. 778

PUBLIC LAW 107-204—JULY 30, 2002

(b) **FOREIGN REINCORPORATIONS HAVE NO EFFECT.**—Nothing in this section 302 shall be interpreted or applied in any way to allow any issuer to lessen the legal force of the statement required under this section 302, by an issuer having reincorporated or having engaged in any other transaction that resulted in the transfer of the corporate domicile or offices of the issuer from inside the United States to outside of the United States.

(c) **DEADLINE.**—The rules required by subsection (a) shall be effective not later than 30 days after the date of enactment of this Act.

15 USC 7242.

**SEC. 303. IMPROPER INFLUENCE ON CONDUCT OF AUDITS.**

(a) **RULES TO PROHIBIT.**—It shall be unlawful, in contravention of such rules or regulations as the Commission shall prescribe as necessary and appropriate in the public interest or for the protection of investors, for any officer or director of an issuer, or any other person acting under the direction thereof, to take any action to fraudulently influence, coerce, manipulate, or mislead any independent public or certified accountant engaged in the performance of an audit of the financial statements of that issuer for the purpose of rendering such financial statements materially misleading.

(b) **ENFORCEMENT.**—In any civil proceeding, the Commission shall have exclusive authority to enforce this section and any rule or regulation issued under this section.

(c) **NO PREEMPTION OF OTHER LAW.**—The provisions of subsection (a) shall be in addition to, and shall not supersede or preempt, any other provision of law or any rule or regulation issued thereunder.

(d) **DEADLINE FOR RULEMAKING.**—The Commission shall—

(1) propose the rules or regulations required by this section, not later than 90 days after the date of enactment of this Act; and

(2) issue final rules or regulations required by this section, not later than 270 days after that date of enactment.

15 USC 7243.

**SEC. 304. FORFEITURE OF CERTAIN BONUSES AND PROFITS.**

(a) **ADDITIONAL COMPENSATION PRIOR TO NONCOMPLIANCE WITH COMMISSION FINANCIAL REPORTING REQUIREMENTS.**—If an issuer is required to prepare an accounting restatement due to the material noncompliance of the issuer, as a result of misconduct, with any financial reporting requirement under the securities laws, the chief executive officer and chief financial officer of the issuer shall reimburse the issuer for—

(1) any bonus or other incentive-based or equity-based compensation received by that person from the issuer during the 12-month period following the first public issuance or filing with the Commission (whichever first occurs) of the financial document embodying such financial reporting requirement; and

(2) any profits realized from the sale of securities of the issuer during that 12-month period.

(b) **COMMISSION EXEMPTION AUTHORITY.**—The Commission may exempt any person from the application of subsection (a), as it deems necessary and appropriate.

**SEC. 305. OFFICER AND DIRECTOR BARS AND PENALTIES.**

(a) **UNFITNESS STANDARD.**—

PUBLIC LAW 107-204—JULY 30, 2002

116 STAT. 789

“(C) the issuer (if the issuer maintains a corporate website) shall provide that statement on that corporate website, not later than the end of the business day following that filing.”

Deadline.

(b) **EFFECTIVE DATE.**—The amendment made by this section shall be effective 30 days after the date of the enactment of this Act.

15 USC 78p note.

**SEC. 404. MANAGEMENT ASSESSMENT OF INTERNAL CONTROLS.**

15 USC 7262.

(a) **RULES REQUIRED.**—The Commission shall prescribe rules requiring each annual report required by section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)) to contain an internal control report, which shall—

(1) state the responsibility of management for establishing and maintaining an adequate internal control structure and procedures for financial reporting; and

(2) contain an assessment, as of the end of the most recent fiscal year of the issuer, of the effectiveness of the internal control structure and procedures of the issuer for financial reporting.

(b) **INTERNAL CONTROL EVALUATION AND REPORTING.**—With respect to the internal control assessment required by subsection (a), each registered public accounting firm that prepares or issues the audit report for the issuer shall attest to, and report on, the assessment made by the management of the issuer. An attestation made under this subsection shall be made in accordance with standards for attestation engagements issued or adopted by the Board. Any such attestation shall not be the subject of a separate engagement.

**SEC. 405. EXEMPTION.**

15 USC 7263.

Nothing in section 401, 402, or 404, the amendments made by those sections, or the rules of the Commission under those sections shall apply to any investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).

**SEC. 406. CODE OF ETHICS FOR SENIOR FINANCIAL OFFICERS.**

15 USC 7264.

(a) **CODE OF ETHICS DISCLOSURE.**—The Commission shall issue rules to require each issuer, together with periodic reports required pursuant to section 13(a) or 15(d) of the Securities Exchange Act of 1934, to disclose whether or not, and if not, the reason therefor, such issuer has adopted a code of ethics for senior financial officers, applicable to its principal financial officer and comptroller or principal accounting officer, or persons performing similar functions.

Regulations.

(b) **CHANGES IN CODES OF ETHICS.**—The Commission shall revise its regulations concerning matters requiring prompt disclosure on Form 8-K (or any successor thereto) to require the immediate disclosure, by means of the filing of such form, dissemination by the Internet or by other electronic means, by any issuer of any change in or waiver of the code of ethics for senior financial officers.

Regulations.

(c) **DEFINITION.**—In this section, the term “code of ethics” means such standards as are reasonably necessary to promote—

(1) honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships;

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**PSC-165**

**Regarding: Billings Landfill Project  
Witness: Morman**

**Please provide the life cycle analysis referenced in the rebuttal testimony of Robert C. Morman, page 5.**

**Response:**

The life cycle analysis is provided in Response No. PSC-055.

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MONTANA PUBLIC SERVICE COMMISSION  
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**PSC-166**

**Regarding: Billings Landfill Project  
Witness: Morman**

- a. Does MDU expect any of the vertically drilled wells to produce the previously estimated amount of gas? If so, when?**
- b. Of the gas being produced from the Billings Landfill, how efficient is the gathering system as a whole at capturing the methane?**

**Response:**

- a. Without further enhancement or stimulation, Montana-Dakota does not believe Phase 1 will provide the previously estimated amount of gas. As noted on page 8 of Mr. Morman's rebuttal testimony, Montana-Dakota is considering injecting leachate into the wells in Phase 1 to attempt to increase methane production.
- b. The gathering system is performing as designed.