STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

NORTHERN ILLINOIS GAS COMPANY d/b/a Nicor Gas Company	:	
	:	Docket No. 08-0363
Proposed general increase in rates, and revisions to other terms and conditions of service	:	

Rebuttal Testimony of

DARCY A. FABRIZIUS

On Behalf of

CONSTELLATION NEWENERGY – GAS DIVISION, LLC

October 23, 2008

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Rebuttal Testimony of Darcy A. Fabrizius

I. INTRODUCTION AND BACKGROUND

Q. PLEASE STATE YOUR NAME.

A. My name is Darcy A. Fabrizius.

Q. ARE YOU THE SAME DARCY A. FABRIZIUS WHO SUBMITTED PRE-FILED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes, I am appearing on behalf of Constellation NewEnergy – Gas Division, LLC ("CNE-Gas").

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. The purpose of my rebuttal testimony is to respond to the testimony of witnesses Gary R. Bartlett and Robert R. Mudra on behalf of Nicor Gas Company ("Nicor" or "Company").

Q. WHAT IS THE SUBJECT MATTER OF YOUR REBUTTAL TESTIMONY?

A. My rebuttal testimony specifically addresses:

- The proper allocation of storage capacity for Storage Banking Service ("SBS") and the associated SBS charge. This issue is discussed by Mr. Mudra on pages 35-44 of Nicor Gas Ex. 29.0 and by Mr. Bartlett on pages 11-14 of Nicor Gas Ex. 19.0;
- The proper method for determining storage withdrawal rights and the Storage Withdrawal Factor ("SWF"). This issue is discussed by Mr. Mudra on pages 45-47 of Nicor Gas Ex. 29.0; and
- Why the proposed Maximum Daily Nominations ("MDN") tariff revisions proposed by Nicor Gas should be rejected. This issue is discussed by Mr. Bartlett on pages 14-21 of Nicor Gas Ex. 19.0.

Q. DO YOU HAVE ANY EXHIBITS THAT YOU PLAN TO SUBMIT IN SUPPORT OF YOUR TESTIMONY?

A. Yes. In support of my rebuttal testimony, I offer the following exhibits:

CNE-Gas Exhibit 3.1	Nicor Gas Ex. 8.1 and 8.2, Docket No. 04-0779
CNE-Gas Exhibit 3.2	Nicor response to data request CNE 2.24
CNE-Gas Exhibit 3.3	Nicor response to data request CNE 2.01
CNE-Gas Exhibit 3.4	Nicor response to data request IIEC 2.02 (corrected)
CNE-Gas Exhibit 3.5	Nicor response to data request DAS 2.05 Ex. 3
CNE-Gas Exhibit 3.6	Nicor response to data request CNE 2.22 Ex. 1

CNE-Gas Exhibit 3.7	Nicor response to data request DAS 1.07
CNE-Gas Exhibit 3.8	*Gas Daily* Chicago City-gates Index Data for Greatest Price Exposure
CNE-Gas Exhibit 3.9	Nicor Gas Ex. 19.3 Analysis
CNE-Gas Exhibit 3.10	Historical NYMEX and Chicago City-gate Prices
Confidential CNE-Gas Exhibit 3.11	Storage Field Daily Injection/Withdrawal Extremes

II. THE COMMISSION SHOULD APPROVE A STORAGE CAPACITY ALLOCATION BASED UPON TOTAL STORAGE CAPACITY CONSISTENT WITH ITS PRIOR ORDER

Q. IN MR. MUDRA'S REBUTTAL TESTIMONY, HE STATES THAT THE 2004 RATE ORDER DETERMINED THAT THE SBS CHARGE SHOULD BE CALCULATED "CONSISTENT WITH THE [COMMISSION'S] DECISION ABOVE REGARDING 'STORAGE CAPACITY ALLOCATION'." (NICOR GAS EX. 29.0, LINES 801-813.) MR. MUDRA THEN DESCRIBES HOW NICOR CALCULATES THE SBS CHARGE IN THIS PROCEEDING. (NICOR GAS EX. 29.0, LINES 819-827.) IS NICOR'S CURRENT PROPOSAL CONSISTENT WITH THE 2004 RATE ORDER?

A. No. While disagreement remains over the amount of storage capacity to use in the denominators for the SBS charge and SWF calculation and in the numerator of the SBS storage capacity allocation (Nicor Gas Ex. 29.0, lines 828-831), I want to make it clear my disagreement with Nicor is broader than simply the denominator and numerator value. It goes to methodology used.

Q. WHAT DO YOU MEAN BY YOUR DISAGREEMENT IS BROADER THAN THE DENOMINATOR AND NUMERATOR VALUE?

A. In quoting the 2004 Nicor Rate Case Order, Mr. Mudra emphasizes the SBS charge should be "consistent with the decision above regarding 'Storage Capacity Allocation'."[1] Unfortunately, Mr. Mudra simply disregards the Commission's clear findings under "Storage Capacity Allocation," and instead invents his own definition of "Storage Capacity Allocation." (Nicor Gas Ex. 29.0, lines 819-827.)

Mr. Mudra states that the "Storage Capacity Allocation represents the equal number of peak days of on-system storage capacity which is available to all Nicor Gas' customers. It is computed by dividing the amount of available on-system storage capacity (134.6 Bcf) by the peak day demand (4.9 Bcf). It was also referred to as the 'SBS entitlement' calculation in the Final Order in the 2004 Rate Case." (Nicor Gas Ex. 29.0, lines 821-825.)

However, in reviewing what the Commission stated under "Storage Capacity Allocation," it is clear the Commission ordered that the SBS charge be "based upon the *entire* capacity of working gas in storage" and that the "SBS entitlement calculations *should utilize the entire capacity of the storage fields as the numerator*. That is, the *total capacity of working gas in storage* should be used as the numerator." *2004 Nicor Rate Case Order* at 120 (emphasis added). The

[1] Northern Illinois Gas Company d/b/a Nicor Gas Company, Docket No. 04-0779, Order at 105 and 138 (Sept. 20, 2005) ("*2004 Nicor Rate Case Order*").

Commission found that "non-coincident working gas in storage, 149.74 Bcf, is the amount of storage capacity that is being allocated." *Id.* The Commission further concluded that "[d]ue to customer diversity, Nicor's actual deliverability at any point in time, as well as its ability to meet deliverability requirements, should not determine the annual storage capacity entitlements of customer." *2004 Nicor Rate Case Order* at 120-121. This statement by the Commission suggests *available on-system storage capacity* is an inappropriate value for the numerator.

The Commission clearly established non-coincident working gas storage capacity as the numerator for allocating storage capacity; no where does the Commission suggest that the appropriate value to utilize is the available on-system storage capacity as Mr. Mudra suggests. Relying upon what was available or expected to be used would leave capacity at Nicor's discretion each year depending on what level it planned to achieve.

Q. PLEASE SUMMARIZE THE DIFFERENCE BETWEEN WHAT THE COMMISSION ORDERED IN THE 2004 RATE CASE AND WHAT NICOR PROPOSES IN THE CURRENT PROCEEDING.

A. In the 2004 Rate Case, the Commission ordered that the storage capacity allocation be determined as:

$$\frac{\text{Non-coincident working gas storage capacity}}{\text{Peak day sendout}} = \frac{149.74 \text{ Bcf}}{5.258 \text{ Bcf}} = 28$$

The Commission concluded that, based upon this calculation, the SBS entitlement was to be set at 28 times the customer's MDCQ. *2004 Nicor Rate Case Order* at 107, 120-121.

In the current proceeding, Nicor proposes that the storage capacity allocation be determined as:

$$\frac{\text{Available on-system storage capacity}}{\text{Peak day sendout}} = \frac{134.63 \text{ Bcf}}{4.9 \text{ Bcf}} = 28$$

Clearly the calculation Nicor performs here is not the same calculation as what was ordered by the Commission in the prior rate case. As much as Nicor may try to make it sound the same, non-coincident working gas storage capacity is not the same as available on-system storage capacity. It is incredible that Nicor would use a different numerator, both in value and definition, for storage capacity allocation and claim it is the same method as was used in the 2004 Rate Case. (Nicor Gas Ex. 29.0, lines 789-791; Nicor Gas Ex. 8.1 and 8.2, Docket No. 04-0779 attached as CNE-Gas Ex. 3.1.)

Since peak day sendout has declined, while non-coincident working gas in storage remains the same at 149.74 Bcf, it would be expected that the SBS entitlement would increase to 31 days (149.74 Bcf divided by 4.9 Bcf equals 30.56). (CNE-Gas Ex. 1.0, lines 327-354.) This is consistent with a decline in peak day sendout that should provide additional operational flexibility to Nicor.

Q. HAS THE NON-COINCIDENT WORKING GAS STORAGE CAPACITY CHANGED SINCE THE PRIOR NICOR RATE CASE?

A. Nicor did not address this in its testimony. However, in response to a data request, Nicor confirmed that the non-coincidental maximum working gas storage capacity remains 149.7 Bcf. (Nicor response to data request CNE 2.24 attached as CNE-Gas Exhibit 3.2.)

Nicor's own data supports actual storage capacity of 149.7 Bcf. In 2001 the non-coincident working gas in storage inventory was 156.3 Bcf. (Nicor's response to data requests DAS 5.12 Exhibit 1; CNE-Gas Ex. 3.6.) Adjusting for the 7.076 Bcf reclassification that occurred in 2004 (Nicor's response to data request DAS 2.05 Exhibit 3, page 1), indicates that Nicor was able to achieve an inventory level of 149.19 Bcf. The difference between this level and 149.74 Bcf is partially due to rounding and Btu content. This then is a physical capacity that Nicor did achieve at one time. Nicor's proposal to use a volume that is currently set at 134.6 Bcf, that could vary year to year based on Nicor's plan for cycling gas, has not been supported by physical evidence.

Q. WHAT VALUE DOES NICOR USE FOR STORAGE CAPACITY IN THIS PROCEEDING?

A. In this case, Nicor chose to use a value which it describes at least six different ways:

Value	Description	Citation or Source
134.6 Bcf	Available on-system storage capacity	Nicor Gas Ex. 29.0, lines 819-827
134.6 Bcf	Working gas targeted for the on-system storage fields	Nicor Gas Ex. 4.0, lines 125-128
	Targeted on-system storage inventory	Nicor Gas Ex. 4.0, lines 482-487
1,372,000,000 therms	Storage Banking Service capacity allocation	Nicor response to data request CNE 2.01 attached as CNE-Gas Ex. 3.3
1,346,333 therms	Storage Banking Service capacity allocation	Nicor response to data request IIEC 2.02 (corrected) attached as CNE-Gas Ex. 3.4
1,346,330,000 therms	Top gas inventory the Company expects to cycle from storage	Nicor Gas Ex. 14.0, lines 525-538
134.6 Bcf	Optimal level of storage inventory	Nicor Gas Ex. 4.0, lines 128-130

Perhaps what is most surprising is that in spite of the Commission's clear direction in the prior Order that it "would be inappropriate to base the SBS capacity charge on the volume of gas the Nicor expects to be drawn out of storage" (*2004 Nicor Rate Case Order* at 120), Nicor bases its SBS calculations on a value that represents the "amount of top gas inventory the Company *expects to cycle from storage*." (Nicor Gas Ex. 14.0, lines 532-534.) Yet, despite this direct conflict, Nicor clings to its position that it is using the same method that was approved in the 2004 Rate Case. (Nicor Gas Ex. 29.0, lines 789-791.)

Q. IS "CAPACITY" THE APPROPRIATE TERM TO DESCRIBE NICOR'S PROPOSED 134.6 BCF?

A. No, it isn't. Capacity is defined as the maximum amount that can be contained.[2] It is not the planned volume of gas to be cycled, or even the optimal inventory as Nicor proposes in this proceeding. The actual capacity of Nicor's fields has not changed. In fact, Nicor admits the capacity remains at the same level the Commission adopted in the 2004 Nicor Rate Case Order, 149.74 Bcf. (CNE-Gas Ex. 3.2.)

Nicor is instead proposing to use its planned cycled volume which will change year to year based upon a variety of factors such as weather, load forecasts, plans for use of leased storage and supply arrangements. Nicor confirms the volumes cycled vary each year. (Nicor response to data request IIEC 6.01.) The fact that planned cycled volumes vary from year to year is confirmed through Nicor's description of the Schedule F-8 changes in working gas from 2007 to 2008. Volumes were impacted by greater utilization of NSS leased storage service as an operating strategy and other changes. (Nicor Gas Ex. 19.0, lines 124-132; Nicor's confidential response to data request MEM 2.04.)

Q. WHAT DOES MR. BARTLETT SAY REGARDING THE CAPACITY VALUE TO BE USED IN THE SBS ENTITLEMENT CALCULATIONS?

A. Interestingly enough, Mr. Bartlett states that "Staff witness Sackett argues that the SBS charge is a capacity charge, and therefore it should use capacity in its calculation." (Nicor Gas Ex. 19.0, lines 265-267.) Mr. Sackett is in good company as it was the Commission who earlier stated "[t]he Commission believes

[2] Webster's New World Dictionary of the American Language, College Edition.

the SBS entitlement charge, by its very nature, is a capacity charge, not a usage or volumetric charge." *2004 Nicor Rate Case Order* at 120.

Mr. Bartlett then summarizes my position as "simply" advocating 149.74 Bcf because that was the number used in the last rate case. (Nicor Gas Ex. 19.0, lines 268-271.) I do support 149.74 Bcf as the current value of non-coincident working gas storage capacity (as does Nicor in its response to data request CNE 2.24). However, the pages I devote to this issue in my Direct Testimony more directly address the concern Nicor was ordered to use non-coincident working gas storage capacity for calculating SBS entitlements in the prior case, but did not use non-coincident working gas storage capacity in its calculations for this case. Had Nicor been forthright in its direct case by arguing that it believed the Commission erred in the 2004 Rate Order by using non-coincident working gas storage capacity as the measure of capacity for SBS entitlements, parties could have argued the case based upon the merits of using some other measure in these calculations. However, Nicor opted to portray the methodology as the same one which had been used in the prior case. Even after intervenors pointed out this discrepancy, Nicor continues to adhere to the claim that this is the same methodology. (Nicor Gas Ex. 29.0, lines 789-795.)

Q. WHAT ARGUMENTS DOES MR. BARTLETT OFFER FOR REPLACING NON-COINCIDENT WORKING GAS STORAGE

CAPACITY AS THE MEASURE OF SBS CAPACITY WITH ANOTHER MEASURE?

A. First, it should be noted that Mr. Bartlett advocates using a value that does not represent the total capacity of the fields. Rather, he argues that capacity should be measured by an inventory target that is based upon the actual inventory reached during the past three years, a target that Nicor itself controls. (Nicor Gas Ex. 19.0, lines 278-280.)[3]

Based on Mr. Bartlett's rebuttal testimony, his argument for changing the SBS entitlement calculations to using operationally available capacity as the measure of SBS capacity is to improve reservoir performance. (Nicor Gas Ex. 19.0, lines 278-280.) Yet he provides no substantive evidence that supports 134.6 Bcf as a level that optimizes reservoir performance.

Q. DOES NICOR HAVE FLEXIBILITY TO MEET ITS STORAGE NEEDS?

A. Yes. Nicor operates eight company-owned storage fields which provide significant operational flexibility to inject and withdraw gas. This can be seen in the differences between Nicor's actual storage activities versus Nicor's plan. (Nicor's response to data request DAS 2.05 Exhibit 3 attached as CNE-Gas Ex.

[3] In rebuttal Mr. Bartlett introduces the concept of "operationally available capacity" or "operational capability" as it directly relates to SBS entitlements. In Direct Testimony, the term used was "optimal level of storage inventory." (Nicor Gas Ex. 4.0, lines 128-129.) In fact, Mr. Bartlett indirectly acknowledges that his Direct Testimony did not argue that operationally available capacity should be used instead of non-coincident working gas storage capacity as the measure of SBS capacity when he states that he explained this concept in data request responses. This should have rightfully been explained in Nicor's direct testimony. (Nicor Gas Ex. 19.0, lines 275-283.) Nicor should have offered evidence in its direct case to support changing the SBS entitlements from non-coincident working gas storage capacity to a measure of operationally available capacity.

3.5.) Deviation is especially noticeable in 2004-2005 and 2005-2006, where Nicor absorbed significant changes in load through the use of its company-owned storage.

Second, Nicor contracts for NSS and DSS storage services which provide additional flexibility, including no-notice services. (Nicor Schedule F-8.) In fact, Nicor has indicated it has extended the NSS storage agreements for an additional four years. (Nicor Gas Ex. 19.0, lines 148-156.)

Third, Nicor indicated it plans to make greater use of its contractual storage agreements "to provide Sales customers with an additional 2 Bcf of storage withdrawals (providing winter supply at summer prices)." (Nicor Gas Ex. 19.0, lines 124-130.) This operating strategy occurs at the same time Nicor plans to continue to operate its own storage fields at *reduced* levels of storage cycling. There is no explanation as to why Nicor is planning greater utilization of its contracted NSS storage while reducing use of its own storage fields when, on an incremental basis, the cost to operate Nicor's own storage fields is lower than purchasing leased storage services.

Finally, in addition to the flexibility afforded through the availability of multiple storage sources, Nicor has indicated its peak day has declined by 300 MMCF per day. This is a significant amount and should provide even greater flexibility in Nicor's operation.

Q. WHAT EVIDENCE DOES MR. BARTLETT OFFER TO SUBSTANTIATE USING OPERATIONALLY AVAILABLE CAPACITY INSTEAD OF WORKING GAS STORAGE CAPACITY TO ESTABLISH SBS ENTITLEMENTS?

A. He states actual cycled volumes have never reached the 149.74 Bcf level. (Nicor Gas Ex. 19.0, lines 297-305.) While reservoir operating limitations exist, the actual level of cycling is also limited by Nicor's own operating plans. Nicor's position contradicts the Commission's determination that the key for SBS entitlements was actual field capacity, not the amount of gas Nicor's expects to cycle or draw out of storage. *2004 Nicor Rate Case Order* at 120. A transportation customer pays a SBS charge based the amount of actual storage capacity that is available, not for the volume of inventory that the customer has in storage, nor for the amount of gas that is cycled in or out of that storage. Nicor's storage capacity should remain constant unless Nicor's storage fields experienced degradation, or Nicor sold or closed any of its fields. None of these events have occurred.

However, storage inventory is another matter; it will fluctuate based upon several factors. Nicor's storage inventory and the associated decisions regarding Nicor's management of that inventory are different than the total capacity of the storage assets. In fact, concern over storage inventory caused the Commission to approve

Nicor's proposal in the prior rate case to require transportation customers to have their inventory be 90% or greater of their storage capacity by November 1.

Mr. Bartlett claims that since the 2000-2001 cycle year, Nicor has improved storage field performance. (Nicor Gas Ex. 19.0, lines 297-308.) Evidently Nicor was able to accomplish this with the current SBS allocation methodology in place that utilizes non-coincident working gas storage capacity to measure capacity.

Notably absent from Mr. Bartlett's evidence is any engineering study that supports 134.6 Bcf as the appropriate value. While 149.7 Bcf is amply documented as the physical volume of the fields in the Fairchild and Wells Study (Nicor response to data request ENG 1.17) and in Nicor replies to data requests DRI 1.09 and CNE-Gas 2.22, for example, there are no similar analyses, reports or studies that support the 134.6 Bcf. Rather 134.6 Bcf is an arbitrary number that Nicor has come up with and asks the Commission to blindly endorse simply because Nicor says it is better. In fact, in Nicor's response to data request CNE-Gas 2.22 Exhibit 1, it shows that, based on the maximum level reached historically by each individual field, the non-coincident peak volume achieved is 156.675 Bcf. (Nicor response to data request CNE-Gas 2.22 Ex. 1 attached as CNE-Gas Ex. 3.6.)

Q. WHAT EVIDENCE DOES MR. MUDRA OFFER THAT "OPERATIONAL CAPABILITIES" SHOULD REPLACE NON-COINCIDENT WORKING GAS STORAGE CAPACITY AS THE MEASURE OF SBS CAPACITY?

A. Mr. Mudra's rebuttal testimony attempts to show that sales customers would be harmed by using non-coincident working gas storage capacity as was ordered by the Commission in the 2004 Rate Case. However, Mr. Mudra's analysis defies logic with its shifting definitions and doublespeak.

Q. THAT IS A HARSH ASSESSMENT. PLEASE EXPLAIN WHAT YOU MEAN BY SHIFTING DEFINITIONS AND DOUBLESPEAK.

A. In his rebuttal Mr. Mudra states that Nicor calculates the SBS charge by using the "amount of non-coincident working gas capacity" in the calculation. He then defines this as 134.6 Bcf. Yet, as shown in CNE-Gas Ex. 3.2, Nicor states that the non-coincident maximum working gas storage capacity totals 149.7 Bcf. Perhaps Mr. Mudra's distinction is that he does not use the maximum amount of non-coincident working gas capacity, but certainly that is both *inconsistent* with and *contradictory* to the prior case methodology in which the Commission determined the capacity charges should be based upon the entire capacity of working gas storage.

Mr. Mudra then suggests that this value of 134.6 Bcf "is different than the level of storage the Company expects to cycle." (Nicor Gas Ex. 29.0, lines 841-846.) This statement is inconsistent with, and is flatly contradicted by, his earlier

testimony in which he states "1,346,330,000 therms, which is the amount of top gas inventory the Company expects to cycle from storage." (Nicor Gas Ex. 14.0, lines 533-534.) Further, in his Direct Testimony, Mr. Bartlett claims the 134.6 Bcf is the non-coincidental inventory level that has been targeted. (Nicor Gas Ex. 4.0, lines 130-132.) Certainly inventory levels are not synonymous with capacity.

The contradictions are magnified if you compare Mr. Mudra's statement that 134.6 Bcf is different than the level of storage the Company expects to cycle, with what Nicor told its shareholders in its most recent annual report. On page 3 of the 2007 Annual Report it states "Nicor Gas owns and operates eight underground natural gas storage facilities. This storage system is one of the largest in the gas distribution industry. The storage reservoirs provide a total inventory capacity of about 150 Bcf, approximately 135 Bcf of which can be cycled on an annual basis." It is unclear how 134.6 Bcf is different than the level of storage the Company expects to cycle, when 135 Bcf is what the Company tells shareholders it can cycle on an annual basis.

The lack of consistency between witnesses, and even between explanations from the same witness, is cause for concern.

Q. BUT ISN'T THIS SIMPLY AN ISSUE OF ARGUING OVER WHICH NUMBER TO USE?

A. No, as I mentioned earlier it goes beyond the value and speaks to the methodology used, such as whether you base the calculations on actual capacity or Nicor's inventory level goal. Much focus has been placed on the storage capacity allocation numerator; however, the denominator of peak day demand also impacts the result. In the case of peak day demand, Nicor uses the same definition of this denominator as that ordered in the prior rate case. However, it's noteworthy that Nicor has proposed a new value for its peak day demand, or sendout. As I noted in my Direct Testimony, Nicor indicates that the peak day sendout has declined since the last rate case from 5.2 Bcf to 4.9 Bcf. (CNE-Gas Exhibit. 1.0, lines 327-336.) Even though this is a change in the data input, in this regard Nicor does not change the definition of the numerator.

Q. BUT DOESN'T THE CHANGE IN PEAK DAY SENDOUT IMPACT THE SBS ENTITLEMENT CALCULATIONS?

A. Yes, but as I indicated in my Direct Testimony I will leave to others the analysis of whether it is correct to adjust the total system design day demand from 5.2 Bcf, as it was in the 2004 Rate Case, to 4.9 Bcf, as Nicor proposes in this proceeding. (CNE-Gas Ex. 1.0, lines 327-336.) However, the lower peak day demand indicates that it would be reasonable to anticipate that Nicor now has greater flexibility in its operations than that which existed four years ago, as Nicor's storage facilities have not materially changed since the last rate case.

Nicor now requires lower peak day deliverability. Given the relatively high cost of gas, it would not be unreasonable to expect a continued decline in peak day sendout to occur. If peak day volumes continue to decline, this suggests possible further reductions in cycling from Nicor's storage fields or perhaps a reduction in the volume of leased storage service contracts required.

Q. PLEASE ADDRESS MR. MUDRA'S ANALYSIS CLAIMING SALES CUSTOMERS WOULD SUFFER IF THE SAME METHODOLOGY WAS USED TO DETERMINE SBS ENTITLEMENTS. (NICOR GAS EX. 29.0, LINES 854-924.)

A. Mr. Mudra's analysis relies upon one prevailing and definitive assumption; namely that the maximum capacity of the storage fields is equivalent to Nicor's inventory target level. As noted in my testimony, this is an assumption with which I strongly disagree. Nicor's own data clearly shows that historically it has achieved non-coincident maximum storage capacity as high as 156.675 Bcf. (CNE-Gas Ex. 3.6; CNE-Gas Ex. 1.0, Table 2.)

If you reject this assumption, and instead run Mr. Mudra's analysis based upon the 149.7 Bcf capacity of the fields adopted in the 2004 Nicor Rate Case Order, it is apparent that Nicor's proposal results in approximately 15 Bcf of storage capacity that Nicor would prohibit transportation customer from using; thus allowing Nicor to potentially provide to either its sales customers or its hub. Based upon Mr. Mudra's assumptions of economic value of $0.10 to $0.15 per

therm (Nicor Gas Ex. 29.0, lines 882-888), the result is transportation customers losing the opportunity for $15 to $23 million per year of gas costs savings.

Q. HOW DOES YOUR ANALYSIS RELATE TO MR. MUDRA'S ANALYSIS OF THE SBS CHARGE?

A. Mr. Mudra claims transportation customers would receive an additional 3.75 Bcf of storage capacity for free. (Nicor Gas Ex. 29.0, lines 893-895.) However, under Mr. Mudra's proposal, Nicor requires that transportation customers pay for storage to which they have no access. In other words, under Nicor's proposal there are 151,070,000 therms (15.1 Bcf) of inaccessible storage (i.e., 1,497,400,000 therms (149.7 Bcf) total capacity minus 1,346,330,000 therms (134.6 Bcf) of capacity planned for use). In order to cover the costs associated with the total capacity of Nicor's storage fields, but only allow use of 134.6 Bcf of that total capacity, Nicor divides the total revenue requirement of $67,873,000 by the 134.6 Bcf. This in effect results in a $0.0004 per therm surcharge to the SBS charge each month simply for Nicor to cover the costs of this additional 15.1 Bcf of capacity to which it will not allow transportation customers access. Rather than getting storage for free, as Mr. Mudra suggests, transportation customers are actually paying for storage capacity that exists, but to which Nicor chooses to deny them access. Under Nicor's proposal, transportation customers alone would be subsidizing the cost of this inaccessible storage in the amount of $1,680,000

per year.[4] Simply put, this means transportation customers would pay Nicor this amount each year for the cost associated with storage they are not allowed to use. This is an addition to the lost opportunity for $15 to $23 million per year in gas costs savings due to the economic value of the storage.

Q. IN SUMMARY, WHAT IS THE OUTCOME IF THE COMMISSION USES A VOLUME OF STORAGE CAPACITY THAT IS LOWER THAN THE ACTUAL STORAGE CAPACITY?

A. If the Commission were to approve a storage capacity allocation of only 134.6 Bcf, when the actual field capacity is 149.7 Bcf, there would be several negative side effects:

1) transportation customers would pay for the cost associated with storage capacity to which they have no access;

2) transportation customers would lose the opportunity for $15 to $23 million per year in gas costs savings based upon Mr. Mudra's economic analysis;

3) the Commission would establish a precedent in which storage capacity is based upon a subjective number provided by the utility with no documentation to support, rather than a value substantiated by physical evidence and previously approved the this Commission; and

4) the 151,070,000 therms (15.1 Bcf) of storage inaccessible to transportation customers remains in existence for Nicor to use for sales customers or the hub.

[4] The 350,000,000 therm transportation allocation from Table 5 (Nicor Gas Ex. 29.0, line 2.) times the $0.0004 per therm SBS surcharge per month from Table 6 (Nicor Gas Ex. 29.0, line 4: $0.0042 minus $0.0038).

Mr. Mudra raises the concern that "Sales customers will not receive an equal share of the 'storage pie' (MDCQ days)." (Nicor Gas Ex. 29.0, lines 918-919.) However, it is impossible to slice the pie into equitable slices when a major portion of the pie is carved out and hidden even before the pie is sliced.

III. THE COMMISSION SHOULD APPROVE STORAGE WITHDRAWAL RIGHTS FOR TRANSPORTATION CUSTOMERS THAT ARE CONSISTENT WITH ITS STORAGE ALLOCATION DECISION

Q. MR. MUDRA DISAGREES THAT NICOR IS USING A DIFFERENT METHODOLOGY FOR CALCULATING THE STORAGE WITHDRAWAL FACTOR ("SWF") THAN THE METHODOLOGY THE COMMISSION APPROVED IN THE LAST RATE CASE. (NICOR GAS EX. 29.0, LINES 938-942.) IS HE CORRECT?

A. No. As I explained in my Direct Testimony, the calculation of storage capacity, based on the Commission decision to use non-coincident working gas in storage as the measure of capacity, results in an SBS entitlement of 31 days. (CNE-Gas Ex. 3.0, lines 129-132.) In the prior rate case, the numerator in the storage capacity allocation became the denominator in the SWF calculation. Thus, once the Commission determined 149.7 Bcf was the appropriate measure of capacity, 149.7 was used in both calculations. (Nicor Gas Ex. 8.1 and 8.2, Docket No. 04-0779 attached as CNE-Gas Ex. 3.1.) As Nicor does not use non-coincident working gas storage capacity in either calculation, Nicor's proposal is inconsistent with the Commission's prior determination. The issue of whether 149.7 Bcf is the

appropriate measure of capacity has been discussed at length and I will not repeat those arguments here.

In his rebuttal testimony (Nicor Gas Ex. 29.0, lines 950-954), Mr. Mudra states that the SWF in the 2004 Rate Case was calculated as:

$$\text{Factor} = \frac{\text{2.5 Bcf peak day storage capability}}{\text{(28 days X 5.2580 Bcf peak day)}} = 0.017 \text{ or } 1.7\%$$

However, 28 days times 5.2580 Bcf results in only 147.224 Bcf. When instead you use the methodology shown in CNE-Gas Ex. 3.1 substituting the 149.74 Bcf that the Commission determined was the correct value for capacity, the calculation becomes:

$$\text{Factor} = \frac{\text{2.5 Bcf}}{\text{149.74 Bcf}} = .0166, \text{ or } 1.7\% \quad \text{(2004 Nicor Rate Order at 121)}$$

Q. ISN'T THIS JUST AN ISSUE OF ROUNDING?

A. No. While the results are similar, the more important issue is the appropriate methodology to employ. Is the SWF based upon peak day sendout divided by total storage capacity, as the Commission approved in the prior rate order, or is the calculation derived from peak day sendout divided by MDCQ days times peak day as Nicor now proposes?

In this proceeding, if one were to accept all of proposed Nicor's values, the two methodologies lead to slightly different results.[5] For example, taking 2.5 Bcf divided by Nicor's proposed storage capacity of 134.6 Bcf results in 0.01857, which would round to 1.9%. This was the methodology applied by Nicor in the 2004 Rate Case. (CNE-Gas Ex. 3.1.) In comparison, when using the method shown in Mr. Mudra's rebuttal in this proceeding, the SWF is derived by 2.5 Bcf divided by 28 days times 4.9 Bcf, which equals 0.01822, which rounds to 1.8%. (Nicor Gas response to CNE-Gas data request 2.01 attached as CNE-Gas Exhibit 3.3.) The method from the 2004 Nicor Rate Case is less affected by rounding in the calculation than is the method now proposed by Mr. Mudra.

Q. WHAT DO YOU RECOMMEND THAT THE COMMISSION DO?

A. The Commission should base the SWF on the formula of peak day send-out (amount of gas withdrawn from storage on a peak day) divided by the peak non-coincident work gas capacity. This results in a value that is less affected by rounding and more directly correlated with the SBS capacity allocation than the method of peak day send-out divided by the number of MDCQ days allocated times the estimated peak day as described in Mr. Mudra's rebuttal testimony. (Nicor Gas Ex. 29.0, lines 938-970.) It is also more consistent with the Commission's decision in the 2004 Rate Case.

[5] CNE-Gas does not support either the number of days MDCQ or the storage capacity value of 134.6 Bcf used by Nicor in this example; the data was used only to show the different results that may be obtained from these different methods.

Q. MR. MUDRA CRITICIZES DR. ROSENBERG'S PROPOSAL THAT A CUSTOMER'S MAXIMUM INVENTORY BALANCE BE DETERMINED BETWEEN OCTOBER 15 AND NOVEMBER 15 RATHER THAN EXACTLY ON NOVEMBER 1. (NICOR GAS EX. 29.0, LINES 971-986.) DO MR. MUDRA'S ARGUMENTS INVALIDATE THIS PROPOSAL?

A. No, because the tariff could be modified to require Nicor Gas to notify customers of their new SWF by December 1. The new SWF would be in effect from December 1 of that year through November 30 of the following year. If a Critical Day is called before December 1, the SWF in effect at that time (through November 30 of that year) would be used; if Nicor calls a Critical Day on or after December 1, the new SWF would be used. Since a Critical Day can be called any time between November 1 and April 30, this would assure that a SWF was specified for any date when a Critical Day is called, while still using current data but offering transportation customers similar flexibility to that provided to Nicor. (Northern Illinois Gas Company d/b/a Nicor Gas Company, Ill.C.C. No. 16- GAS, 7th Revised Sheet No. 48.) Further, Nicor has confirmed in discovery that is has not declared a Critical Day in November for at least five years. (Nicor response to data request DRI 1.30.)

Mr. Bartlett further comments on Dr. Rosenberg's proposal in his rebuttal testimony. (Nicor Gas Ex. 19.0, lines 475-485.) He criticizes Dr. Rosenberg's proposal, simply because it represents just "one tariff provision from NGPL's DSS tariff." Yet, virtually all of Nicor's storage assets have greater flexibility

than requiring maximum storage inventory be achieved on a single specified date each year. Certainly the Natural Gas Pipeline Company of America ("NGPL") DSS tariffs do; but Nicor's storage fields should not be neglected in this discussion since there is no precise rule that requires all eight fields to be more than 90% full on exactly November 1. Based upon Nicor's own Schedule F-8 filing, over 90% of Nicor's storage assets enjoy this level of flexibility. Nicor's eight storage fields have reached peak capacity at different times between September to January. Nicor's own fields do not all reach their maximum fill in the same month, much less on the same single day (CNE-Gas Ex. 3.6), yet Nicor forces that restrictive regime on transportation customers. Dr. Rosenberg's proposal is certainly valid insomuch as Nicor avails itself to similar procedures.

IV. THE COMMISSION SHOULD REJECT NICOR'S PROPOSED MODIFICATIONS TO THE STORAGE INJECTION LIMITS FOR TRANSPORTATION CUSTOMERS

Q. IN HIS REBUTTAL TESTIMONY, MR. BARTLETT ATTEMPTS TO DISPUTE THE ARGUMENTS MADE IN SUPPORT OF REJECTING NICOR'S PROPOSED MAXIMUM DAILY NOMINATIONS ("MDN") TARIFF REVISIONS. (NICOR GAS EX. 19.0, LINES 316-485.) DO YOU AGREE WITH MR. BARTLETT'S ARGUMENTS?

A. No. In his rebuttal testimony, Mr. Bartlett offers two arguments for approving Nicor's proposed MDN changes: it makes *sense* to do so and it would allegedly reduce costs to sales customers. (Nicor Gas Ex. 19.0, lines 324-333.) While I do not doubt that from Mr. Bartlett's perspective these proposed MDN changes make sense, they do not make similar sense from a transportation customer viewpoint.

While Nicor would very likely want to control the storage of transportation customers, transportation customers actually pay for storage in order to have access to and control of their own storage. Part of the value of storage comes from the ability to inject and withdraw gas according to the transportation customer needs and plans; not simply having the use of storage dictated by Nicor's operational plan.

The Commission recognized the challenge of balancing competing interests between the utility and transportation customers in the *2004 Nicor Rate Case Order*. In regards to cycling, the Commission determined that "[w]hile requiring Transportation [Customers] to have their storage capacity filled to 90% by November 1 may diminish the flexibility of Transportation customers to utilize storage, in light of the importance of storage in the winter season, it is reasonable. . . . Imposing the additional requirement that Transportation customers nearly empty storage capacity by April 1, however, is not warranted." *2004 Nicor Rate Case Order* at 146. The Peoples Gas and North Shore Gas Order further acknowledged the difficult necessity of balancing utility operational needs against transportation flexibility:

> The Utilities generally assert that "the storage and standby rights of each Utility's transportation customers need to be shaped to be consistent with each Utility's individual gas supply portfolio, and each Utility needs to have an annual mechanism to adjust those rights as its individual gas supply portfolio changes." That is not enough to outweigh the considerable difficulties the seasonal cycling requirements will present for transportation customers..... While we are willing to subordinate those difficulties to the Utilities' operational needs during the heating season, the balance tips in the transportation customers' favor in the spring." North Shore Gas Company and The Peoples Gas Light and Coke

Company, Docket Nos. 07-0241 and 07-0242 (cons.), Order at 276 (Feb. 5, 2008) *("2008 Peoples Rate Case Order").*

Q. BUT AREN'T NICOR'S PROPOSED MDN TARIFF REVISIONS DIFFERENT THAN THE SPRING CYCLING TARGET THAT THE COMMISSION REJECTED IN THE PRIOR NICOR RATE CASE?

A. As I noted in my Direct Testimony, while Nicor does not propose a percent empty seasonal target or call its proposal cycling *per se*, the proposed revisions to MDN, if approved, would result in an outcome similar to a spring cycling target.[6] So while the mechanics differ, the proposals essentially accomplish the same thing. Nicor's current MDN proposal is simply an attempt to circumvent the Commission's decision in the *2004 Nicor Rate Case Order*, which was upheld in the most recent Peoples Gas and North Shore Order, in an attempt to push spring cycling for transportation customers. *2008 Peoples Rate Case Order* at 276.

Q. WHAT ANALYSIS IS UNDERTAKEN IN NICOR GAS EXHIBIT 19.3?

A. In his Direct Testimony, Mr. Bartlett suggested that economic decisions by third-party storage customers can impact Nicor's plans to fill and empty its storage fields. (Nicor Gas Ex. 4.0, Lines 423-435.) However, as I noted in my Direct Testimony, Nicor did not support this claim with any evidence. (CNE-Gas Ex. 1.0, lines 589-591.) In response to a data request seeking any studies documenting the need for Nicor's proposed MDN changes, Nicor stated that there "appears" to be an economic relationship; however, Nicor offered no study to

[6] See CNE-Gas Ex. 1.0, lines 462-499 for a detailed explanation of how the current proposal results in an outcome similar to a spring cycling target.

corroborate this relationship. Further, Nicor concluded that daily cash and futures prices have "some influence" on transportation customer storage utilization, but provided no quantification of any such correlation. The data provided by Nicor was simply its "best estimates." (Nicor response to data request DAS 1.07 attached as CNE-Gas Ex. 3.7.) In that response, Mr. Bartlett observed "When cash prices fall relative to futures prices, injections tend to increase or withdrawals tend to decrease in response to such price relationships. When cash prices rise relative to futures prices, injections tend to decrease or withdrawals tend to increase in response to such price relationships." (CNE-Gas Ex. 3.7.)

While Mr. Bartlett did qualify his observations as mere tendencies, more in-depth review of the data indicates there are also months when the data does not support, and even disputes, these tendencies identified by Mr. Bartlett. For example, during the first half of March 2007, the Chicago cash prices are relatively flat compared to NYMEX futures prices. Yet, during this period there is one week of sizable transportation customer withdrawals from storage and the following week there were sizable injections. In contrast, data for January 2007 shows transportation customer withdrawals from storage through the entire month. Yet, during this month Chicago cash prices swing from well above to well below NYMEX futures prices. (CNE-Gas Ex. 3.7.) As Chicago cash prices trade in the early morning, while NYMEX futures prices settle later in the afternoon, there is often little, if any, correlation between the spread of cash and futures prices as they are marked at different times of the day. In addition, the Chicago cash price

represents a city gate delivered price, while the NYMEX price is purely a financial instrument measured at the Henry Hub.

Subsequent data request DAS 2.04 then sought the underlying data upon which the analysis in DAS 1.07 was built. The data from DAS 2.04 was then used in the development of Nicor Gas Ex. 19.3, specifically in an attempt to after-the-fact calculate an estimate of the financial impact on sales customers (Columns E and F of the exhibit) to backfill unsupported assertions in Mr. Bartlett's Direct Testimony. (Nicor Gas Ex. 4.0, 432-437.)

Q. BUT DOESN'T MR. BARTLETT'S ANALYSIS IN NICOR GAS EXHIBIT 19.3 SHOWING AN ADVERSE IMPACT OF $12 MILLION ON SALES CUSTOMERS SUPPORT THE NEED TO MAKE THE PROPOSED MDN CHANGES?

A. No. There are numerous incurable flaws in this analysis, which, for all intents and purposes, make Mr. Bartlett's analysis meaningless. To begin with there is a mathematical error in the analysis. In looking at page 13 of the Exhibit, the calculations for the period 11/1/07 through 11/7/07 are reversed in sign. When corrected, this would actually show an estimated Potential Impact on Sales Customers of $14, not $12 million.

Q. WHY WOULD YOU POINT THIS OUT WHEN IT HARMS YOUR POSITION BY AN ADDITIONAL $2 MILLION?

A. Because once you review the underlying assumptions of Mr. Bartlett's analysis, it is apparent his comparisons are improper and his analysis is simply incorrect. The same incurable flaws exist whether the result is $12 million, or the math is corrected to produce $14 million.

Q. WHY DO YOU BELIEVE THE FLAWS INHERENT IN MR. BARTLETT'S ANALYSIS ARE INCURABLE?

A. There are several reasons for this, which I will describe in detail. In addition, I will provide a brief analysis that will show that sales customers likely benefit from what Nicor's data in Exhibit 19.3 shows to be a tendency for transportation customers to under inject in summers and under withdraw in winters.

But first, let's review the assumptions and data contained in Nicor Gas Ex. 19.3. Let me begin by looking at Columns E and F of the exhibit which provide the potential financial impact on sales customers based upon Nicor's response to DAS 2.04. According to Mr. Bartlett, the economic value in Column E is derived by comparing the "difference between the cash price for Chicago and the settle of the Nymex futures contract for the prompt month for each day." (Nicor Gas Ex. 19.0, lines 347-349.) There are several problems with this comparison. First, the Chicago GDD[7] is a cash market price where the actual physical commodity is traded at a city-gate delivered price for delivery into Chicago, Illinois. By comparison, the NYMEX futures contract for the prompt month is generally used as a financial risk management tool rather than for physical supply purposes based

[7] Price reporting of the Chicago GDD is published as Platts *Gas Daily* Chicago City-gates.

upon delivery at the Henry Hub in Louisiana. These differences are referred to as "basis." Basis is defined by the New York Mercantile Exchange as "the differential that exists at any time between the cash, or spot, price of a given commodity and the price of the nearest futures contract for the same or a related commodity. Basis may reflect different time periods, product forms, qualities, or locations. Cash minus futures equals basis." (New York Mercantile Exchange Glossary of Terms.) Mr. Bartlett ignores basis in his analysis, resulting in a meaningless exercise, by attempting to compare a price for gas delivered at a Chicago city-gate to a NYMEX price which represents gas delivered at the Henry Hub in Louisiana.

Q. WHY DO YOU SAY THE CALCULATION IS MEANINGLESS?

A. Unfortunately for Mr. Bartlett's analysis, the value of basis simply due to the different locations can be larger than the amount of the alleged price exposure. Thus, since basis is ignored in his analysis, his results are meaningless. For instance, during the twelve month period covered in Nicor Gas Ex. 19.3, according to the *Gas Daily* Chicago city-gate ICE Forward curve basis, Chicago city-gate basis averaged approximately negative $0.104/dekatherm.[8] If an average value for basis had been included in Mr. Bartlett's analysis to correct for just this error alone, it could have reduced Nicor's potential cost impact to Sales customers by over $4.5 million.

[8] Negative basis reflects that the cost to deliver to the city-gate of the specific location is less than the cost to the Henry Hub delivery point used in financial contracts.

Q. HOW DID YOU DETERMINE THIS WOULD HAVE REDUCED NICOR'S POTENTIAL IMPACT TO SALES CUSTOMERS BY OVER $4.5 MILLION?

A. In Nicor Gas Ex. 19.3, Nicor's average "cost" per dekatherm was $0.317[9], resulting in a total Potential Impact on Sales Customers of $13.99 million.[10] After applying an adjustment for Chicago basis, thus reducing Nicor's average "cost" per dekatherm by the average Chicago basis of minus $0.104, the average "cost" per dekatherm for the 12 months period was $0.211[11] per dekatherm. Applying this downward cost per dekatherm adjustment to Nicor's corrected total price exposure of $13.99 million, would reduce this estimate to $9.31 million, a decrease of $4.68 million. In fact, during the twelve month period in the exhibit, Chicago city-gate basis ranged from negative $0.75/dekatherm to a positive $0.47/dekatherm, a swing of $1.22 per dekatherm. Due to the variation in basis, application of a standard adjustment relative to the Henry Hub does not take into account ongoing fluctuations. Taking basis into account throughout the entire time period, rather than simply factoring an average basis value into the analysis, could lead to even greater deviation in the results.

Q. IS THERE ANY OTHER REASON WHY NICOR GAS EX. 19.3 IS MEANINGLESS?

[9] The average daily price exposure from Column E of Nicor Gas Exhibit 19.3, as shown in CNE-Gas Exhibit 3.9, Schedule 1, Column E.
[10] The total from Column F of Nicor Gas Exhibit 19.3, corrected for the November sign error as shown in CNE-Gas Ex. 3.9, Schedule 1, Column G.
[11] From CNE-Gas Ex. 3.9, Column M.

A. Yes. Mr. Bartlett takes the "daily settle of the Nymex futures contract for the prompt month" and compares that to the "average daily cash price for Chicago as report in Platts' [sic] Gas Daily publication." (Nicor response to data request DAS 2.04.) The daily settle price for NYMEX futures contracts refers to the prices that occur immediately before the daily close, which for natural gas occurs at 1:30 PM central time. In contrast, the trading for Chicago GDD occurs primarily in the morning, typically between 7:30 AM and 10 AM. Consequently, the time periods of the two prices that Mr. Bartlett uses to establish the price exposure value are markedly different. Anyone who monitors the market actively recognizes that the price at 9 AM may strikingly differ from the price at 1:30 PM.

Q. WHY DOES TRADING FOR THE CHICAGO GDD OCCUR PRIMARILY IN THE MORNING?

A. As I mentioned earlier, the Chicago GDD is a cash market for the actual physical commodity at the Chicago city-gate. In order to move this gas according to utility timelines, the sale must be negotiated well in advance of Nicor's timely nomination deadline of 11:30 AM. Entering into transactions after the utility deadline has occurred is futile in the Nicor service territory as Nicor does not accept intraday nominations and you would have no place to send the physical gas you purchased. (Northern Illinois Gas Company d/b/a Nicor Gas Company, Ill.C.C. No. 16- GAS, 5th Revised Sheet No. 49.) The NAESB deadline for Timely pipeline nominations is also at 11:30 AM, so most daily cash city-gate

trading is done during the morning in order to have the trade complete prior to the nomination deadline.

Q. DID YOU OBSERVE ANYTHING ELSE IN YOUR REVIEW OF THE ESTIMATED POTENTIAL IMPACT TO SALES CUSTOMERS?

A. Yes. I also looked at the days which, according to the exhibit, resulted in the greatest potential financial impact to sales customers. The result of this comparison is found in CNE-Gas Exhibit 3.8.

Q. WAS CNE-GAS EXHIBIT 3.8 PREPARED UNDER YOUR DIRECTION?

A. Yes.

Q. WHAT DO THE RESULTS OF THAT COMPARISON REVEAL?

A. It is first interesting to note that three of the four periods in which there was the largest Daily Gain or Cost from Nicor Gas Ex. 19.3 were over weekends. For the weekend, gas is traded on Friday for gas that flows on Saturday, Sunday and Monday. The nomination for gas that flows on Nicor's system on Saturday, Sunday and Monday is due to Nicor before 11:30 AM on Friday. For weekends, natural gas is sold in equal daily delivery volumes for the entire weekend period. However, for transportation customers the weekend also typically represents the period of greatest daily fluctuation. Often daily usage reaches a low on Saturday, with greater use on Sunday when operations begin to again ramp up. This is why

transportation customer storage injections and withdrawals often show greater variation on weekends.

Q. IN REVIEWING NICOR EXHIBIT 19.3, DID YOU NOTICE ANY SHORTCOMINGS IN NICOR'S STORAGE PLAN?

A. Yes, CNE-Gas Exhibit 3.9 illustrates that Nicor's storage plan fails to take into account the reality that flat volumes are delivered onto Nicor's system, during the three day Saturday through Monday period, per industry standard.

Q. WHAT DOES CNE-GAS EXHIBIT 3.9 REPRESENT?

A. CNE-Gas Exhibit 3.9 is my modified version of Nicor Gas Ex. 19.3,

Q. WAS CNE-GAS EXHIBIT 3.9 PREPARED UNDER YOUR DIRECTION?

A. Yes.

Q. HOW DOES CNE-GAS EXHIBIT 3.9 ILLUSTRATE THAT NICOR'S STORAGE PLAN IS DEFECTIVE?

A. In looking at CNE-Gas Ex. 3.9, which is my modified version of Nicor Gas Ex. 19.3, Schedule 2 shows that 52% of the volumes that Nicor calculates for its Estimate of Transportation Customer's Long or Short positions occurred on Saturdays and Sundays. Over 66% of these volumes occurred on the three day Saturday through Monday period when flat volumes are delivered per industry standard practice against fluctuating transportation customer daily usage. Nicor's

storage plan and allocation of it to transportation customers fails to take this reality into consideration.

Q. DID YOU NOTICE ANYTHING ELSE IN YOUR REVIEW OF NICOR EXHIBIT 19.3?

A. Yes, in looking for the prices from past issues of *Gas Daily,* I also noted these four periods of time with the largest Daily Gain or Cost were also associated with weather conditions that could predictably result in geographic pricing differences for the Chicago market. These are summarized below:

February 3-6, 2007 (Sat thru Tues)	Cash markets reacted Friday to frigid weekend weather forecasts across the nation's northern tier...Chicago-area prices spiking to $14...Surging utility demand and restrictions on local pipeline systems helped boost prices in and around the Windy City.	*Gas Daily* Feb. 5, 2007
February 13-15, 2007 (Tues thru Thurs)	Strong utility demand and packed pipelines caused prices to rally in the upper Midwest. With snow, ice and daytime temperatures in the teens expected through Thursday in the Windy City, the Chicago city-gates gained more than 50 cents.	*Gas Daily* Feb. 14, 2007
April 28-30, 2007 (Sat thru Mon)	In the upper Midwest, prices were suppressed by typically light end-of-month and Friday trading, coupled with moderate weather...	*Gas Daily* April 30, 2007
November 10-13, 2007 (Sat thru Tues)	Prices took a similar hit in the upper Midwest with parts of the region expecting temperatures 10 degrees above normal Sunday and Monday. The Chicago city-gates fill about 50 cents....	*Gas Daily* November 12, 2007

Based on the data in Nicor Gas Ex. 19.3, the three days during which the largest daily price exposure occurred were February 3-5, 2007, due to the differential between the Chicago GDD and NYMEX prompt month settlement. The Daily

Price exposure in Column E for those days was $2.48. However, it's noteworthy that from February 3 through 6, Nicor Gas declared a Critical Day. (Nicor response to data request DRI 1.30.) On a Nicor Critical Day, a transportation customer is limited to storage withdrawals of no more than 1.7% of its SBS capacity times the number of days of storage. (Northern Illinois Gas Company d/b/a Nicor Gas Company, Ill.C.C. No. 16- GAS, 5th Revised Sheet No. 50.) Since storage access is severely limited, and in order to avoid costly unauthorized use of gas penalties, a transportation customer must deliver more gas than its expected usage minus any available storage. (Northern Illinois Gas Company d/b/a Nicor Gas Company, Ill.C.C. No. 16- GAS, 4th Revised Sheet No. 20.) As the unauthorized use penalties are $6.00 per therm plus gas costs, the actions of transportation customers are directed towards eliminating any potential under delivery of gas volumes in order to avoid these penalties; this physical reality dwarfs consideration of future market pricing. Yet, Nicor includes a $2.48 price exposure in its analysis when Nicor's own actions limit storage withdrawals and stimulate delivery of excess gas supply to Nicor gates and were the cause of transportation customer's under withdrawal compared to Nicor's Storage Plan. Based on this alone, nearly $1 million of the Potential Impact on Sales Customers is a direct result of Nicor's actions. Yet, it is included in Nicor's analysis as a cost resulting from transportation customer actions.

Q. WHAT IF ANY OTHER ISSUES DO YOU HAVE WITH THE ANALYSIS SHOWN BY NICOR IN EXHIBIT 19.3?

A. Nicor assumes that they actually could have incurred a "cost" for the difference between the price at which the transportation customers may have bought or sold gas at (*Gas Daily* Chicago City-gates Average) and some potential "replacement cost" that Nicor may or may not have incurred to buy or sell any overage or shortfall caused by transportation customers actions. Even if Nicor did buy or sell volumes at the NYMEX prompt month settle price utilized in Nicor Gas Exhibit 19.3 (and nowhere in any of Nicor's responses did they claim to have actually incurred any costs), they certainly did not "incur" the *Gas Daily* Chicago City-gates Cost. Thus, the comparison itself is meaningless.

Q. BASED ON THESE OBSERVATIONS, WHAT DID YOU CONCLUDE ABOUT THE ANALYSIS IN NICOR GAS EX. 19.3?

A. With all the varied and assorted problems associated with the analysis, it is incorrect to draw any conclusions whatsoever, let alone that the Potential Impact to Sales Customers is $12 to $14 million. Furthermore, while $12 to $14 million is a large number, it is less than one percent of Nicor's total purchased gas costs. (ICC Staff Ex. 7.04, page 6.) Based on the errors, the inappropriate comparisons of prices at different times of the day and at different delivery points, as well as including the impacts forced on transportation customers by Nicor (such as Critical Days called) and simply the basic comparison assumption being meaningless, the analysis and conclusions drawn from Nicor Gas Ex. 19.3 must be rejected.

Q. WERE YOU ABLE TO DO ANY FURTHER ANALYSIS BASED ON NICOR GAS EX. 19.3?

A. Yes. I utilized the data Nicor provided in Exhibit 19.3, and for the purposes of this analysis, accepted Nicor's calculation of the net long or short volumes each day based upon Nicor's transportation customer "allocation" of its Storage Plan injection and withdrawals.[12] CNE-Gas Exhibit 3.9, Schedule 1 shows net under injections of 15,455,869 dekatherms in the summer and net under withdrawals of 16,455,181 dekatherms in the winter. Thus, if Nicor wished to "cover" any overages or shortfalls to the Storage Plan purportedly caused by transportation customer's actions, they would have been selling the winter under withdrawal amount of 16.5 million dekatherms and buying the summer under injection amount of 15.5 million dekatherms. Utilizing the NYMEX prompt month settle prices used in Nicor Gas Exhibit 19.3, the "winter" average NYMEX price was $7.60[13] and the "summer" average NYMEX price was $6.48[14], a difference of $1.12. One could simply apply this $1.12 difference to the summer under injection volume to calculate a potential ***benefit*** to the sales customers of $17.4[15] million. While Nicor only provided one year's worth of volumetric shortfalls, it would seem to be a very safe assumption to assume that in general, transportation customers under inject in the summer and under withdraw in the winter compared to Nicor's Storage Plan, since Nicor tried in the both last rate case and again in

[12] While I do not accept this section of Mr. Bartlett's analysis, for the purpose of showing how invalid the financial portion of his analysis is, I used the same numbers that Nicor provided in Columns A-D of Exhibit 19.3.
[13] CNE-Gas Exhibit 3.9, Schedule 1, Column J.
[14] CNE-Gas Exhibit 3.9, Schedule 1, Column K.
[15] By buying 15.5 million dekatherms in the summer at $6.48/dekatherm and then selling a like volume in the winter at $7.60/dekeatherm.