

STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

Northern Illinois Gas Company d/b/a NICOR)	
Gas Company)	
)	Docket No. 04-0779
Proposed general increase in natural gas rates.)	
(Tariffs filed on November 4, 2004.))	

BRIEF ON EXCEPTIONS
OF THE CITIZENS UTILITY BOARD AND THE
COOK COUNTY STATE'S ATTORNEY'S OFFICE

August 26, 2005

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Pursuant to Section 200.830 of the Illinois Commerce Commission’s (“Commission” or “ICC”) Rules of Practice, the Citizens Utility Board and the Cook County State’s Attorney’s Office (“CUB/CCSAO”) submit the following Brief on Exceptions to the Proposed Order in the above-captioned docket filed by Northern Illinois Gas Company d/b/a Nicor Gas Company (“Nicor” or “Nicor Gas”) for an increase in its natural gas rates. 83 Ill. Admin. Code 200.820. As required by the ALJs’ August 17, 2005 Ruling and Section 200.830 of the Commission’s Rules, substitute language is included in this Brief.

This case involves Nicor Gas’ request for a significant rate increase at a time when the company is under investigation in docket No. 02-0067 for fraudulent activity related to its PBR case. The Commission faces very complex issues in determining the ultimate rate Nicor customers will pay for gas. While the Proposed Order does an excellent job of analyzing the many issues briefed by the parties, CUB/CCSAO requests that the Commission review several issues discussed in detail below.

The most important issue the Commission must address is the LIFO gas issue. As the Proposed Order currently stands, Nicor’s base rates will increase \$25.9 million due to

the release of inexpensive LIFO gas under the GCPP at issue in Docket No. 02-0667. The Commission cannot allow Nicor to benefit from the increased carrying charges associated with the release of this inexpensive gas until Nicor meets its burden of proof that it acted properly in releasing that gas.

1. Gas in Storage

COMPUTATION OF GAS IN STORAGE

The question before the Commission is what is the most accurate way of calculating average storage inventory balance. The Proposed Order states “that a 13-month average is more representative of the average balance for a full year, whereas a 12-month average from January 31 to December 31 does not utilize data from the opening balance of the year.” Order at 18. CUB/CCSAO agrees that calculating a 12-month average as described in the Proposed Order excludes consideration of the opening balance of the year and that this would be improper. However, this description mischaracterizes CUB’s proposal, as Nicor has simply misrepresented Mr. Meirzwa’s proposal in a manner that confuses the issue. One does not need to incorporate an additional month (count December 31 twice) in order to include the beginning January balance in the calculation. Mr. Mierzwa’s calculation in fact includes the January 1 balance. Mierzwa Rebuttal at 10. Closer examination of this issue reveals that CUB/CCSAO’s methodology produces the more equitable result.

Both CUB/CCSAO and Nicor agree, as Nicor Witness Gorenz testifies, that for a particular month, “to compute an average, it is more accurate to use the average of the beginning and ending balance rather than an ending balance alone.” Nicor Gas Ex. 41.0

at 16. Mr. Gorenz testifies that the only way to do this is by using 13 months and double counting December. This is incorrect. The most accurate way to determine the average storage inventory balance for the entire year, consistent with Mr. Gorenz' recommendation, is to average each of the 12 individually calculated monthly inventory balances.

Examination of the record reveals the following. In his direct testimony, Mr. Mierzwa did in fact utilize the 12-month ended balances for the period January through December to calculate the average storage inventory balance. Nicor criticized that this approach ignored the beginning of the year balance. Mr. Mierzwa responded to this criticism in his rebuttal testimony by pointing out that under Nicor's forecast of storage activity, at the beginning of each year and end of each year, storage balances are the same. This is because the company projects that injections and withdrawals will be equal over the course of the year. Mr. Mierzwa further explained that his direct testimony calculation produced the same result obtained utilizing the approach Mr. Gorenz testifies is the most accurate. Simply put, the 12 month approach, where each month's beginning and ending inventory balance is averaged to determine the average balance for the entire month, does in fact count the beginning and ending balance for each month. In contrast, Mr. Gorenz' 13 month calculation counts December twice which distorts the balance.

Nowhere does Nicor or Staff justify this double counting of December, which is a very high balance month. While it may be that the Commission has accepted a 13 month calculation in past cases, it appears that no one has ever challenged this approach, thus the Commission has never actually scrutinized it. CUB/CCSAO however, has now

demonstrated the flaw in the 13-month calculation, and in this case it will result in an unjustified increase in rate base of \$11,469,000.

The Commission should adopt a 12-month average for purposes of computing the average balance of gas in storage inventory, and it should base each individual monthly balance used in the computation on an average of that month's beginning and ending balance. This is entirely consistent with Nicor's testimony, but produces a far different and more equitable result.

PROPOSED LANGUAGE

Computation of Gas in Storage

~~The Commission finds that Nicor Gas properly calculated the Gas in Storage addition to the rate base using a 13-month average, resulting in a figure of \$106,867,000. This method of computation is consistent with the Commission's last rate order relating to Nicor and other proceedings, which approved use of a 13-month average. Staff does not oppose the methodology used or the resulting figure. The Commission is not persuaded by the argument that a 13-month average is more representative of the average balance for a full year, whereas a 12-month average from January 31 to December 31 does not utilize data from the opening balance of the year. Also, the 12-month average is inappropriate in its exclusion of the opening balance of the year. The Commission does not find that the 13-month average gives inappropriate weight to one month, and does not find that any month is double-counted. Further, if a 12-month average were applied to the Gas in Storage issue, it should also be applied to other issues, to maintain consistency. CUB/CCSAO argue for a 12-month average for Gas in Storage but accepts a 13-month average in other areas. For these reasons, the 13-month average methodology is accepted, resulting in a figure of \$106,867,000. Proposed Order at 18.:~~

Substitute Language

Computation of Gas in Storage

The Commission finds that Nicor's calculation of storage inventory carrying charges is flawed for two reasons. First, Nicor's calculation fails to recognize the significant cash-flow advantage it receives. Second, the Company's calculation is based on an average of 13-month ended balances that gives an inappropriate weight to one month. CUB-CCSAO Ex. 2.0 at 11; CUB-CCSAO Ex. 4.0 at 8, 10. Nicor's storage inventory carrying charge calculations must be corrected for these deficiencies. These corrections are included in CUB-CCSAO's proposed \$25.9 million reduction to Nicor's requested \$61.7 rate increase.

2. LIFO

The Proposed Order grants Nicor's request to adjust the value of the gas in storage by \$95,308,248, thereby increasing rates significantly more than what CUB/CCSAO submit is appropriate. Nicor based its request for an increase on the change in value of the gas in storage that occurred when the Company released low cost gas (\$.30 per Dth) that had been in storage since the 1950s and 1960s, in order to beat the benchmark standard under the GCPP. When Nicor released the \$.30 per Dth gas it was forced to replace it with gas at the average price of \$5.81 per Dth. CUB/CCSAO challenged the propriety of the release of that gas in Docket No. 02-0067 and the Commission has not yet issued an Order in that proceeding. While the GCPP proceeding remains open, Nicor now requests a rate increase from the Commission that assumes the propriety of that action.

In Docket No. 02-0067 CUB/CCSAO specifically alleged that Nicor violated the Public Utilities Act and the Commission Order in Docket No 99-0127, when it released the low-cost LIFO gas. Beyond violating the Act, the Company acted fraudulently and in complete disregard for the long term effects that the release of the \$.30 gas would have

on consumers, knowing that the company would have to replace that low cost gas with more expensive gas.

In briefs CUB/CCSAO point out that if the Commission approves Nicor's request to increase the Gas in Storage, then once that rate is set, the rate cannot be changed until the next rate case. Thus, even if the Commission ultimately rules that the Company violated the Act and grants relief under the GCPP, the Company still reaps the benefits of its actions through higher rates.

The Proposed Order frames the issue properly, but reaches the wrong conclusion. It correctly refrains from trying to address the issue of the reasonableness of Nicor's release of the low-cost LIFO gas in this proceeding. However, rather than concluding that it cannot approve an increase in the carrying charges until that issue is resolved, it allows the increase to go into effect. The Proposed Order states:

The issue of whether it was reasonable for Nicor to liquidate certain low-cost Gas in Storage inventory while the GCPP was in effect is being separately litigated in Docket 02-0067. Because that issue will be given full consideration in Docket 02-0067, and because appropriate remedies are available in that case, that issue will not also be addressed in the present case. Further, if Nicor were penalized in the instant case for a result that remains uncertain at this point in Docket 02-0067, Nicor would have to wait until its next rate case to remedy the situation. It is more just to impose appropriate refunds to ratepayers in Docket 02-0067 should that case be decided against Nicor after all the evidence has been heard and considered.

Proposed Order at 18. This rationale here fails on several levels. First, Nicor is not "penalized" unfairly. The utility has a burden of proof and it fails to meet the burden.

The Proposed Order fails to recognize that regardless of how the Commission decides the issue on the merits in docket no. 02-0067, that docket is delayed. Nicor has unclean hands and should not be allowed to collect increased rates until the Commission rules on the merits of docket no. 02-0067. Nicor delayed docket no. 02-0067 by failing

to provide the Commission with an accurate record before the Nicor whistleblower came forward. Docket no. 02-0067 is currently on hold because EKT refuses to turn over tapes of conversations between EKT and Nicor employees. The proposed order incorrectly penalizes ratepayers by allowing Nicor's requested rate increase. Ratepayers have done nothing to cause this delay, and yet must bear the consequences.

Most importantly, the Proposed Order fails to explain how ratepayers can be adequately compensated at the conclusion of Docket No. 02-0067, but Nicor cannot be. The Proposed Order states, "appropriate remedies are available" in docket no. 02-0067. Proposed Order at 18. However, it fails to explain how rates can be adjusted without a new rate case. Ironically in the very next sentence, the Proposed Order notes, "if Nicor were penalized in the instant case for a result that remains uncertain at this point in Docket No. 02-0067, Nicor would have to wait until the next rate case to remedy the situation." Proposed Order at 18. The Proposed Order does not explain how rates can be reduced without a rate case if consumers prevail on the issue, yet they cannot be increased without a rate case if Nicor prevails. It is unacceptable to create a situation where the Commission would refund customers money under the GCPP, but Nicor's increased rates stemming from the improper release of LIFO gas would remain intact.

If in fact the Commission believes it can reduce rates without a new rate case after the conclusion of Docket No. 02-0067, it should explain in this Order how it will do so. Moreover, the Final Order should specify the process by which the Commission will adjust rates and provide consumers a refund.

PROPOSED LANGUAGE

~~The Commission finds that Nicor has presented sufficient evidence to support its Gas in Storage addition to the rate base. The issue of whether it was reasonable for Nicor to liquidate certain low cost Gas in Storage inventory while the GCPP was in effect is being separately litigated in Docket 02-0067. Because that issue will be given full consideration in Docket 02-0067, and because appropriate remedies are available in that case, that issue will not also be addressed in the present case. Further, if Nicor were penalized in the instant case for a result that remains uncertain at this point in Docket 02-0067, Nicor would have to wait until its next rate case to remedy the situation. It is more just to impose appropriate refunds to ratepayers in Docket 02-0067 should that case be decided against Nicor after all the evidence has been heard and considered. Requests for adjustments to Nicor's figures based on Nicor's alleged actions while under the GCPP are denied. As proposed by Staff, the Commission finds that prior to Nicor entering into any agreement with a third party for the management of leased storage which would reduce the volume of gas in inventory held by Nicor Gas, the Company must provide Staff with a copy of the analysis used by the Company establishing the benefits of entering into such an agreement. Proposed Order at 18.~~

Substitute Language

~~The Commission finds that Nicor's liquidation of low cost storage inventory is also before the Commission in another proceeding, Docket No. 02-0067. In the Commission's review of Nicor's Gas Cost Performance Program (GCPP), parties allege that Nicor improperly liquidated its storage inventory in order to exceed the benchmark and produce savings. The parties further argue that the depletion of its storage inventory forced the company to replace that gas at a much higher cost. In this proceeding Nicor is attempting to place the carrying charges associated with that higher cost gas into rates.~~

~~While Nicor is free to seek rate relief at any time, the Commission cannot allow the company to circumvent the investigation in the GCPP proceeding. Nicor's filing completely ignores this issue and its request assumes the Company has acted prudently in managing its storage inventory while this issue remains open in the other active docket. The Commission cannot find that Nicor has acted prudently regarding the liquidation of low cost storage inventory and the associated increase in carrying charges until it has ruled on that issue in Docket No. 02-0067. Therefore, Nicor's storage inventory balance addition to rate base should be reduced by \$95,308,248 as recommended by CUB/CCSAO As proposed by Staff, the Commission finds that prior to Nicor entering into any agreement with a third party for the management of leased storage which would reduce the volume of gas in inventory held by Nicor Gas, the Company must provide Staff with a copy of the analysis used by the Company establishing the benefits of entering into such an agreement.~~

3. VALUATION OF GAS IN STORAGE

Valuation of Gas in Storage – Nicor’s Cash Flow Advantage

The Proposed Order incorrectly failed to accept Mr. Mierzwa’s proposal to reduce the Gas in Storage addition to rate base by \$57,999,286 to account for the beneficial cash flow advantage Nicor receives from storage. Proposed Order at 19. This advantage accrues to Nicor because, as set forth in CUB/CCSAO’s Initial and Reply Briefs, Nicor charges ratepayers \$5.90 per Dth for gas withdrawn from storage when the cost of that gas is \$0.30 per Dth. The Company argued that it paid \$5.90 per Dth for the gas injected into storage and incurs carrying charges on the \$5.90 per Dth gas, not \$0.30 per Dth gas as Mr. Mierzwa claims. Nicor’s claims are wrong and misleading, because its claims are based on a storage inventory accounting method that it does not utilize.

There are two common methods used by gas utilities to price gas in storage – the weighted average cost approach and the LIFO method. Under the weighted average cost approach, gas in storage is priced at the weighted average price paid for all gas injected into storage, regardless of when that gas was injected into storage. If Nicor utilized this approach to pricing its storage inventory, the price paid by Nicor for gas withdrawn from storage would reflect the price of the gas Nicor purchased during the prior summer that was injected into storage. However, Nicor does not utilize the weighted average cost approach to pricing gas in storage inventory. Nicor utilizes the LIFO method to price gas in storage inventory. CUB-CCSAO Ex. 4.0 at 6-7.

Under the LIFO method, gas in storage is assumed to exist in layers, each with a different price. Each LIFO layer price reflects the average cost of gas purchased by Nicor during the year in which the LIFO layer was established. It is important to note that under the

LIFO method, the cost of the gas injected into storage during the summer is completely recovered from ratepayers during the year the gas was injected into storage through the PGA. CUB-CCSAO Ex. 4.0 at 7. Thus, Nicor does not incur carrying charges based on the price it paid for gas the previous summer because it has already recovered the cost of the gas. CUB-CCSAO concedes that the LIFO approach to storage inventory accounting is not intuitive like the weighted average cost approach; however, it is the method that Nicor has adopted.

A significant quantity of the gas in Nicor's storage inventory exists in LIFO layers valued at \$0.30 per Dth. These layers are established when storage injections exceed withdrawals during a calendar year. During the period January-April 2005, much of the gas Nicor is projecting to withdraw from storage will come from LIFO layers that are priced at \$0.30 per Dth. That is, this gas will have cost Nicor \$0.30 per Dth. Nicor witness Gorenz acknowledged that the gas in storage was priced between \$0.27 and \$0.30 per Dth. Tr. at 338-339. For 2005, Nicor is projecting that its annual LIFO rate, or its weighted average cost of gas for the year, will be \$5.90 per Dth. This \$5.90 per Dth rate is the price ratepayers will be charged for gas withdrawn from storage during 2005. Thus, in terms of cash flow, Nicor will benefit by \$5.60 per Dth. As such, the revenues Nicor receives will exceed its storage inventory investment. Nicor's storage inventory carrying charge calculation ignores this significant benefit. CUB-CCSAO Ex. 2.0 at 11-12. Witness Mierzwa has corrected this deficiency in his storage inventory carrying charge recommendation.

In Nicor's GCPP, which is currently under investigation in Docket No. 02-0067, gas withdrawn from storage was priced utilizing the LIFO method and reflected the price

Nicor paid for the gas. This included gas from low-cost LIFO layers valued at \$0.30 per Dth. Under the GCPP, Nicor is attempting to realize a reward reflecting 50 percent of the difference between the price it paid for gas withdrawn from low-cost LIFO layers and the market price of gas. During the term of the GCPP, the market price of gas significantly exceeded \$0.30 per Dth, resulting in significant “alleged” savings. The price assigned to gas withdrawn from storage in this docket for purposes of determining storage inventory carrying charges should be consistent with that utilized under the GCPP and recognize that the gas is coming from low-cost \$0.30 per Dth LIFO layers. CUB-CCSAO Ex. 4.0 at 7-8.

In summary, CUB-CCSAO witness Mierzwa is proposing to recognize that the amount collected from ratepayers for the gas withdrawn from storage is more than the amount previously paid by Nicor. In other words, ratepayers are paying the annual LIFO rate of \$5.90 for all gas withdrawn during the period January through April. They pay this rate because it is the expected replacement cost of the gas that will be injected into storage during the following summer. Nicor’s claim for storage inventory carrying charges should be based on the price Nicor paid for the gas withdrawn from storage, much of which is priced at \$0.30 per Dth, not the expected replacement cost of that gas. CUB-CCSAO Ex. 4.0 at 6.

PROPOSED LANGUAGE

Valuation of Gas in Storage

~~The Commission rejects CUB/CCSAO’s proposed adjustment of \$57,999,286 to Nicor’s computation of Gas in Storage. While the parties do not dispute that Nicor purchased gas in the first-in LIFO layers at lower prices, they do dispute the cost of carrying charges to Nicor. Nicor claims that its last-in first-out method and charging customers for gas at current annual LIFO prices is fair given the carrying costs Nicor has to endure because of~~

~~the gas storage it provides. The Commission does not find that there is a significant cash flow advantage accruing to Nicor by selling gas to ratepayers at the current year's LIFO prices, given the storage charges borne by Nicor. Proposed Order at 19.~~

Substitute Language
Valuation of Gas in Storage

~~The Commission accepts Mr. Mierzwa's proposal to reduce the Gas in Storage addition to rate base by \$57,999,286 to account for the beneficial cash flow advantage Nicor receives from storage. This advantage accrues to Nicor because Nicor charges ratepayers \$5.90 per Dth for gas withdrawn from storage when the cost of that gas is \$0.30 per Dth. Ratepayers are paying the annual LIFO rate of \$5.90 for all gas withdrawn during the period January through April. They pay this rate because it is the expected replacement cost of the gas that will be injected into storage during the following summer. Nicor's claim for storage inventory carrying charges should be based on the price Nicor paid for the gas withdrawn from storage, much of which is priced at \$0.30 per Dth, not the expected replacement cost of that gas. CUB-CCSAO Ex. 4.0 at 6.~~

4. RATE OF RETURN

a. CAPITAL STRUCTURE

Inclusion of Short Term Debt

Nicor originally proposed to establish capital costs based upon a rate structure composed of long-term debt and equity. Staff testified that the short-term debt that Nicor actually uses to finance its operations should be included in Nicor's capital structure. CUB/CCSAO agreed with Staff and urged the Commission to incorporate short-term debt. The Proposed Order issued by the ALJs does not include short-term in the capital structure for ratemaking purposes. CUB/CCSAO respectfully disagrees with the decision to exclude short-term debt from Nicor's ratemaking capital structure. As CUB/CCSAO argues in its Initial Brief, "[t]he failure to include short-term debt in Nicor's capital structure for ratemaking purposes results in an unreasonable capital structure," and "will allow Nicor to earn a higher rate of return than the actual cost that Nicor incurs in

financing its rate base.” CUB/CCSAO Initial Br. at 21. Allowing Nicor to earn a rate of return higher than its cost of capital is both unreasonable and unnecessary.

The ALJs finding is based on the argument that Nicor limits allocation of short-term debt to non-rate base purchases. While on its face this may seem logical, an examination of the evidence reveals that it is incorrect. Capital is fungible, or not traceable, meaning that when Nicor borrows short-term debt it is impossible to say that it is used for any specific purpose. The only way that Nicor could conceivably demonstrate that short-term debt does not finance rate base assets is if the company presented evidence that there was a separate account maintained to specifically track short-term debt issuances and dispersals. Nicor has presented no such evidence.

The Proposed Order states that Nicor has “presented persuasive evidence that short-term debt is used intermittently throughout the year,” and that “Nicor further distinguished its use of short-term debt from capital that finances long-term assets by explaining that short-term debt is the last source of financing for Nicor since it seeks to exhaust all other sources first.” Proposed Order at 71. However, these two statements do not support a conclusion that Nicor does not use short-term debt to finance rate base assets. In fact, the evidence shows otherwise.

Specifically, Staff has demonstrated that Nicor’s short-term debt balances closely track the variability in the Company’s single most variable rate base asset, gas in storage. Staff Initial Br. at 67. Nicor has only a limited amount of cash available every month. During the summer months, when Nicor’s revenue is at its lowest levels, the company has to pay its employees, purchase gas to supply its customers, and place gas in storage in anticipation of the coming winter. During the summer Nicor’s expenses increase to a

level that is greater than the revenue the company is receiving from its customers. Once the company depletes its cash on hand, Nicor has several options it can use to meet its financial obligations: management can issue new long-term debt, equity, or short-term debt. Prudent financial management would minimize the cost of any additional borrowing. Consistent with that premise, Nicor chooses to use a significant amount of short-term debt when it is cheaper than other sources of financing. Currently, the record shows that the average balance of short-term debt is expected to be \$177,608,285 during the test year. Staff Ex. 5.2. This represents more than 13% of Nicor's total capitalization. CUB/CCSAO Ex. 3.0 line 322.

CUB/CCSAO witness Christopher Thomas testified that using short-term debt is a prudent decision by management to lower costs that has allowed Nicor to operate efficiently for years. CUB/CCSAO Ex. 3.0 lines 94-95, 105-06; Nicor Gas Ex. 20A.0 lines 258-60. This fact is undisputed. Nicor has wisely chosen to use short-term debt, rather than issue new debt or equity instruments to manage short-term cash flow needs that arise due to the variability of gas in storage. CUB/CCSAO Ex. 3.0 lines 105-106 However, if short-term debt became more expensive than issuing new debt or equity, or if short-term debt were, for some reason, unavailable to the company, Nicor would be required to issue new long-term debt or equity to cover its seasonal obligations. CUB/CCSAO Ex. 3.0 at 6. Under the Proposed Order, Nicor would be allowed to include any new debt or equity in its capital structure to determine an appropriate rate of return. However, short-term debt serves exactly the same purpose but is excluded from the capital structure because it is outstanding for only part of the year. The simple fact that short-term debt is used for only part of the year does not change Nicor's capital

costs. Capital is fungible and it is impossible to demonstrate that short-term debt, borrowed because of variable rate base assets, does not support rate base assets.

The Proposed Order as it's written allows the benefits of lower cost financing through short term debt to benefit only Nicor's shareholders while Nicor's ratepayers are forced to pay costs in excess of Nicor's actual capital costs. CUB/CCSAO Initial Br. at 21. Ratepayers are forced to pay a premium over Nicor's actual capital costs, while the company's shareholders enjoy a \$10,670,000 windfall.

Cost of Short-Term Debt

Including short-term debt in Nicor's ratemaking capital structure necessitates quantifying the cost of that short-term debt. The Company estimates that the cost of short-term debt is 4.12%. Nicor Gas Ex. 36.0, line 378. The Company's estimate reflects a forecasted interest rate plus commitment fees. Staff estimates the Company's cost of short-term debt is 2.58%. Staff Ex. 5.0, lines 248-57. Staff's estimate is based on the current interest rate on commercial paper and does not reflect commitment fees. Nicor has not demonstrated that commitment fees are necessary and accordingly Nicor should not recover commitment fees through its base rates. Staff Ex. 14.0, lines 117-31. The Commission should adopt the 2.58% cost of short-term debt advocated by Staff and should set rates accordingly. If the Commission does otherwise, it will allow Nicor to over-earn by approximately \$5.1 million. CUB-CCSAO Initial Br. at 24

Adjustments to Capital Structure Balances

Staff recommends adjusting all the components in the capital structure to reflect the Commission's previously accepted methodology for calculating the allowance for

funds used during construction (“AFUDC”), which assumes that short-term debt is the first source of funds financing construction-work-in-progress (“CWIP”). Staff Ex. 5.0, lines 106-26. The Company argues that such an adjustment is not necessary if short-term debt is excluded from the capital structure, and that this adjustment does not change the final rate of return. Nicor Gas Ex. 36.0 lines 465-66. CUB/CCSAO concurs and believes that, for the sake of consistency, if the Commission concludes that it is appropriate to include short-term debt in Nicor’s ratemaking capital structure, it should adjust the capital structure consistent with the parties positions.

Cost of Equity

As an initial matter, the Proposed Order contains two inaccurate statements in reference to CUB/CCSAO’s positions on cost of equity issues. The Proposed Order suggests in two separate places, on pages 82 and 83, that Dr. Makhholm and Mr. Thomas disagree on sample selection criteria. This is incorrect. In fact, Mr. Thomas utilized the sample of comparable companies proposed by Nicor witness Dr. Makhholm.

One of the most important, and often most confusing, issues for the commission to decide in a rate case is the cost of the shareholder equity that a company uses to finance its operations. Typically, equity is a significant portion of a company’s capital structure that costs significantly more than debt. Accordingly seemingly small changes in the cost of, sometimes referred to as an allowable rate of return on, equity can have significant impacts on the company’s bottom line. The Proposed Order adequately addresses two significant issues relating to Nicor’s cost of equity by appropriately addressing the disputes concerning sample selection criteria and Staff’s proposed 23-basis point downward risk adjustment. However, the Proposed Order fails to adequately

address one very critical area of disagreement that the Commission must resolve in order to determine an appropriate rate of return in this proceeding, the appropriate growth rate estimates used to determine Nicor's Cost of Equity.

The Proposed Order only briefly mentions the respective DCF and CAPM analyses presented by the parties before adopting the analysis performed by Nicor witness Dr. Makholm. Proposed Order at 85. Both Staff and CUB/CCSAO have demonstrated the fundamentally flawed nature of the growth rates that Dr. Makholm used in his calculations. CUB/CCSAO Reply Br. At 21; Staff Initial Br. at 78. Dr. Makholm's analysis improperly utilizes data from different time periods that are not properly matched. Evidence in the record demonstrates that Dr. Makholm selectively chose mismatched time periods to produce the highest overall ROE. CUB/CCSAO Initial Brief at 26; Staff Initial Br. at 80. This is inappropriate as it allows Nicor a return on equity higher than the actual cost of that equity. As an example, in estimating Valueline growth rates, Dr. Makholm chose to use the geometric average from 2003 because it resulted in the highest overall ROE. Staff Ex. 5.0 lines 732-34. Staff witness McNally testified that because of this, "the average growth rate for the entire sample, upon which Dr. Makholm's cost of equity estimate relies, is inflated." *Id.* at lines 739-41.

The DCF analysis undertaken by Mr. Thomas is superior in that it utilizes corrected and updated growth rate forecasts from a diverse group of sources. CUB/CCSAO Ex. 1.0 lines 208-11. Mr. Thomas' analysis utilizes growth rate forecasts from Valueline, Zack's, and Reuters along with a retention growth estimate. CUB/CCSAO Ex. 1.0 line 262-63. CUB/CCSAO's proposed 9.86% return on equity presents an accurate picture of what investors expect the growth potential of each

individual security to be by reflecting the variety of information that is available to investors in the marketplace. *Id.* at lines 263-68. This is consistent with the approach espoused by Dr. Makhholm that “a credible analysis should use all of the credible sources available.” Nicor Ex. 21.0 at 13. The Proposed Order imposes \$5,742,000 in unnecessarily high equity costs on Nicor’s ratepayers.

PROPOSED LANGUAGE

V. RATE OF RETURN

Status of Short-Term Debt in Nicor’s Capital Structure

Commission Analysis and Conclusion

The core issue being contested in the determination of Nicor’s capital structure is whether short-term debt should be included in the Company’s capital structure for ratemaking purposes. The Commission concludes that Nicor’s short-term debt is properly ~~excluded from included in~~ its capital structure for ratemaking purposes.

Short-term debt is a loan for which the scheduled repayment and the anticipated use for the money is expected to be a year or less. Working capital lines of credit and short maturity commercial loans are considered short term debt financing. The Commission in the past has treated short-term debt in various ways, depending on the specifics of the record in each case. *MidAmerican Energy Company*, 2000 Ill. PUC Lexis 563, *29-30 (Order, Docket 99-0534, July 11, 2000); *In Re Northern Illinois Gas Co.*, Docket 87-0032, 1988 Ill. PUC Lexis 37 at *11 (Order Jan. 20, 1988); *Illinois American Water Company*, 1995 Ill. PUC Lexis 887, 103-104 (Order, Docket 95-0076, December 20, 1995); *In re Northern Illinois Gas Co.*, Docket 95-0219, 1996 Ill. PUC Lexis 204 at *82 – 83 (Order April 3, 1996). The Commission believes that it is appropriate to exclude short-term debt from a utility’s capital structure for ratemaking purposes if the utility clearly establishes by a preponderance of the evidence that it is not using short-term debt to finance rate base items.

~~In Nicor’s most recent rate case in 1995, Staff did not oppose the Company in its request to have its short-term debt excluded from the test year capital structure. In the same way as Staff and CUB/CCSAO do here, in that particular proceeding, the IIEC argued that the Company’s short term debt should be included in the test year capital structure since, according to IIEC this short term debt appeared to be a major component of NI Gas’ capitalization. The Commission held as follows:~~

~~Both the Company and Staff oppose this proposal and contend that the Company’s short-term debt should be excluded because the Company does not use its short-term debt to finance long-term investments, but instead uses it to meet seasonal cash~~

~~requirements. (NI Gas Ex. 9 at 3). They note that the Commission typically excludes this type of short-term debt from capital structure. The Commission finds that the capital structure as recommended by the Staff, and concurred in by the Company, is reasonable and appropriate. We do not find Mr. Selecky's argument regarding short-term debt to be convincing or consistent with prior Commission decisions and we, therefore, reject his argument on that issue.~~

~~(Docket 95-0219 at 37).~~

As an initial matter, we need to determine whether there have been any material changes in circumstances since Nicor's last rate case that would lead to the inclusion of short-term debt this time around. One relevant change in law involves the revision of 83 Ill. Adm. Code Part 285 in Docket 02-0509. According to Staff, short-term debt is currently required to be included in the capital structure with certain exceptions under Part 285. Staff attempts to distinguish the Commission's exclusion of Nicor's short-term debt from its capital structure in the Company's last rate case (Docket No. 95-0219) by arguing that the subsequent revision to Part 285 mandates a different result in this proceeding. Staff now argues that the revised rule, which became effective August 1, 2003, places the presumption that short term debt shall be included in a utility's capital structure.

The Code provision at issue states:

The utility shall provide a summary calculation of the weighted average cost of capital on a total company and jurisdictional basis; however, jurisdictional data is not required if the weights and costs of the components of the capital structure do not differ from total company data. *Short-term debt shall be included in the capital structure unless the utility demonstrates that short-term debt is entirely financing assets, such as CWIP or seasonal working capital, that are not included in the utility's rate base.* For all classes shown, the amount, percentage of total, percentage cost, and weighted cost shall be provided. A summary shall be provided for each year from and including the last completed calendar or fiscal year through the capital structure measurement period. If the cost of capital shown on Schedule D-1 is not the same as that shown on Schedule A-2 required by Section 285.1005(a)(4), the utility shall provide an explanation for the difference.

83 Ill. Adm. Code § 285.4010(a) (emphasis added).

Part 285 sets out informational requirements a utility must provide at the time it files its rate case. Section 285.110 clearly sets forth the purpose of Part 285 in its entirety. Section 285.110(a) provides: "These standard information requirements are designed to assist the Staff of the Illinois Commerce Commission (Commission, ICC, or ILCC) to review filings for tariffed rate increases under Sections 9-201 and 16-108 of the Public Utilities Act (Act) [220 ILCS 5/9 -201 and 16-108]." 83 Ill. Adm. Code § 285.110(a). More importantly, Section 285.110(b) clearly states that "These standard information requirements *do not bind the Commission to a decision based solely on data provided*

pursuant to this Part, and parties and Commission Staff may seek additional information through discovery.” 83 Ill. Admin. Code § 285.110(b)(emphasis added).

Part 285 is better characterized as procedural and administrative in nature, as opposed to a substantive law that binds us when deciding the issue of whether or not short-term debt should be included in Nicor’s capital structure. Indeed, Staff’s own witness conceded on the record that Part 285 is intended to establish filing requirements and does not preclude parties from using different or additional data or adjustments for ratemaking purposes. (Griffin, Tr. 1097:22 – 1098:20).

Assuming *arguendo*, that the revised Part 285 was construed as a substantive legal provision that bound the Commission, its language clearly affords the utility the right to demonstrate through the evidentiary record that “short-term debt” is entirely financing assets, such as CWIP or seasonal working capital, that are not included in the utility’s rate base.” 83 Ill. Adm. Code § 285.4010(a). The key determination on whether short-term debt is included or excluded from the capital structure is the *purpose* of the short-term debt. If the utility sufficiently demonstrates that its short-term debt is not being utilized to finance long-term rate base assets, then the Commission can properly exclude it from the utility’s capital structure.

With that in mind, we now turn to the record evidence to determine whether Nicor has sufficiently made that requisite showing. We find that it has not. ~~Nicor explained that this debt is not used to provide a source of capital for long term assets.~~ No party has disputed that Nicor’s business, natural gas distribution, is seasonal in nature. The Company’s expenses rise in the summer, the same time its revenue is at its lowest levels. During this time period, Nicor, like all businesses, has financial obligations it must meet. Nicor’s management has a variety of option available in order to meet these temporary and short-term cash flow requirements, the record indicates that Nicor turns to its utilization of short-term debt. However, if short-term debt became, for some reason, more expensive than new long-term debt or additional equity the Commission believes that Nicor’s management would prudently use the cheapest source of additional capital available.

Nicor argues that because the company ~~also presented persuasive evidence demonstrating that short term debt is used intermittently throughout the year.~~ Nicor typically does not carry short-term debt balances year round. ~~Nicor will be out of short term debt for several months throughout the test year. The record further shows that Nicor Gas has not had any commercial paper outstanding for, on average, 58 days per year over the last six years, and in three of those years, it did not issue any short term debt for 99 days or more. The record also indicates that in 2005 specifically, Nicor Gas reached a zero short term debt balance on March 10, 2005, is not currently expected to issue short term debt until the third quarter of 2005, more than four months later, and as of May 13, 2005, had not used any short term debt for 64 days. Nicor further distinguished its use of short term debt from capital that finances long term assets by explaining and that short-term debt is the last source of financing for that Nicor turns to since it seeks to after it exhausts all other sources first, short-term debt cannot be shown to finance any rate base asset. However, Staff has demonstrated argues that Nicor mischaracterizes its rate base as being comprised solely of “long term” assets funded with capital that is compensated at long-term rates. Staff points to gas-in-storage, particularly Nicor’s “working gas” which is forecast to vary by \$331 million during 2005, and reasons that the variable portion of that~~

~~asset~~ must have a variable source of financing. ~~Staff~~ **The Commission** concludes that the variable source of financing is Nicor's short-term debt and that it must be included in the Company's capital structure.

~~Staff's argument that the Commission, in its Order in Docket 95-0076 has previously ruled that "permanency" in the sense of continual, positive balances, is not a prerequisite for including short term debt in the capital structure is not entirely accurate. While true that the Commission included short term debt in IAWC's capital structure, that was due to the fact that IAWC indicated it would have short term debt outstanding most of the year. Moreover, that case is further distinguishable in that the short term debt in that proceeding was specifically earmarked to support construction activities throughout the year until long term financing was approved. Illinois American Water Company, 1995 Ill. PUC Lexis 887, 103-104 (Order, Docket 95-0076, December 20, 1995).~~

In sum, the Commission finds that the preponderance of record evidence shows that Nicor does ~~not~~ use short-term debt to finance rate base assets ~~or make long term investments in rate base. The Commission is satisfied that Nicor's use of short term debt, not unlike other utilities, is to meet the seasonal needs of running its gas operations. We began our analysis by establishing the need to determine whether there have been any material changes, whether factual or legal, in circumstances since Nicor's last rate case that would lead to the inclusion of short term debt this time around. The Commission did not find any. The Commission rejects Staff and CUB/CCSAO's argument that the revised Part 285 warrants a different result.~~ Part 285 places the burden on the utility to demonstrate in its initial rate case filing that its short-term debt is not being used to finance items that are part of the utility's rate base. We find that Nicor has not sufficiently met its burden in this instance. ~~Nicor Gas faces the same need today to respond to daily and seasonal cash flow requirements, including gas costs, with revenues and other available sources of funds as it did in 1995. The record also shows that short-term borrowing was used in the same manner today as it was in 1995.~~ As a result, the Commission finds that Nicor's average short-term debt balance of \$177,608,285 should be ~~inexcluded from Nicor's~~ included in the capital structure in this proceeding.

Cost of Short-Term Debt

Commission Analysis and Conclusion

~~As the Commission finds that short term debt should not be included in the capital structure, there is no further need to address the cost of any such short term debt. The Commission has concluded that the entire average balance of short-term debt is appropriately included in Nicor's capital structure. The Commission is now left to determine a cost for that debt.~~

~~The Commission finds that Staff's analysis is correct. Nicor has not justified the (1) the amount of the new bank commitments; (2) the amount of those bank commitments that are assigned to Nicor Inc.; and (3) whether the \$1.6 million bank commitment expense reflects a proper 3-year amortization of those costs over the 3-year life of the bank agreement. The Commission also finds that a proper allocation of the bank commitment fees has not been made to satisfy the requirements of 220 ILCS 5/9-230. Accordingly the Commission finds that the cost of short-term debt in Nicor's capital structure is 2.58%.~~

Adjustments to Capital Structure Component Balances

Commission Analysis and Conclusion

Staff and Nicor Gas have agreed to use the forecast actual end-of-test-year book balances. ~~The Commission has found that short-term debt should be included in the capital structure and accordingly finds that the adjustment to capital structure balances proposed by Staff are appropriate and should be incorporated into Nicor's capital structure. As the Commission finds that short-term debt should not be included in the capital structure, there is no further need to address the proposed deduction from the actual end-of-test-year book balance of long-term debt.~~

Cost of Equity

CUB/CCSAO

CUB-CCSAO, through its witness Christopher Thomas, proposes a rate of return on equity of 9.86%. CUB-CCSAO argues that Nicor overstates the appropriate investor-required rate of return on Nicor's shareholder equity. CUB witness Thomas' proposal is based on a discounted cash flow analysis of a diverse sample of expected growth rates for a group of comparable companies and is an appropriate estimate of the investor-required rate of return on Nicor's outstanding shareholder equity. Since Nicor Gas has a credit rating above that of comparable companies contained within this sample, so CUB-CCSAO's proposed ROE also includes a downward adjustment to recognize the different risk profiles of Nicor and the companies in the comparable sample.

CUB-CCSAO recommend an ROE in this proceeding near the bottom of the range of allowable rates of return for LDCs throughout the country as shown in Figure 1 on page 24 of Nicor Gas Exhibit 21.0. CUB/CCSAO witness Thomas subsequently updated his ROE estimate to reflect a quarterly Discounted Cash Flow analysis (DCF), consistent with the other parties to this proceeding, and to incorporate the risk adjustment proposed by staff witness McNally. These updates changed CUB/CCSAO's ROE recommendation from 9.94% to 9.86%, which is still greater than the lowest ROE shown in Figure 1. According to CUB-CCSAO, its recommendation for an ROE near the bottom of the allowed rates of return for other utilities across the nation is justified by the evidence in the record. CUB/CCSAO points to Nicor's own testimony which touts its position as the lowest cost provider in the state of Illinois which means that management has been effective in keeping costs down. CUB/CCSAO further points out that Nicor's outstanding AA credit rating further demonstrates that investors view Nicor favorably. It is precisely because these factors, CUB/CCSAO reasons, which demonstrate that Nicor is less risky than other companies in the industry. As Staff witness McNally notes investors require higher returns to accept greater exposure to risk. Therefore, it is not surprising that Nicor's shareholders are entitled to a lower rate of return than other companies in the industry.

CUB/CCSAO's cost of equity analysis differs from Nicor's in ~~four~~ three significant areas: (1) the respective growth rate forecasts; (2) ~~the sample selection criteria;~~ (3) stock

prices; and, (3 4) downward risk adjustment. CUB/CCSAO's analysis utilizes the sample of comparable companies proposed by Nicor.

The analysis performed by Mr. Thomas utilizes growth rate forecasts from Valueline, Zack's, and Reuters along with a retention growth estimate. CUB-CCSAO Ex. 1.0 line 262-63. Mr. Thomas utilized multiple growth estimates in order to gain an accurate picture about what investors expect the growth potential of each individual security to be and to reflect the variety of information that is available to investors in the marketplace. (*Id.* at lines 263-68.) While Nicor witness Makhholm utilized the same sample of comparable utilities, he based his calculations on mismatched data from different time periods that produces a meaningless result in both his retention growth estimate and in his value line growth rates. To illustrate, in estimating his Valueline growth rates, Makhholm chose to use the geometric average from 2003 because it resulted in the highest overall ROE. Staff witness McNally testified that because of this, "the average growth rate for the entire sample, upon which Dr. Makhholm's cost of equity estimate relies, is inflated." (*Id.* at lines 739-41.) CUB/CCSAO further argues that the DCF analysis undertaken by Mr. Thomas is superior in that it utilizes corrected and updated growth rate forecasts from a diverse group of sources. (CUB-CCSAO Ex. 1.0 lines 208-11.)

With regards to the sample selection criteria, while CUB/CCSAO witness Thomas utilized the sample proposed by Nicor witness Makhholm, disagreement exists over the proportion of each proxy firm's revenues from natural gas distribution operations in relation to each firm's total revenues. Witness Thomas maintained that the selection criteria proposed by Dr. Makhholm should identify companies that reasonably approximate the risk characteristics of Nicor's gas distribution operations. Makhholm, ~~on the other hand,~~ proposed criteria which excludes companies who earn less than 80% of their revenue from natural gas distribution operations. Witness Thomas maintains that a higher threshold for income from non-utility activities is appropriate. However, Mr. Thomas indicated that there is no strong financial theory that dictates specific criteria. Therefore, if the Commission determines that Dr. Makhholm's sample is the most appropriate sample to use, then Mr. Thomas' proposed ROE should be adopted, as it utilizes consistent growth rates from a variety of sources to appropriately recognize the true investor required rate of return on common equity.

CUB/CCSAO witness Thomas further argues that using a 3-month average stock price is the most supportable approach to incorporate stock prices into a DCF analysis since evidence on the efficient market hypotheses seems contradictory. CUB-CCSAO Ex. 3.0 lines 264-68. Thomas utilized three-month average stock prices in order to balance the view that markets are efficient with the growing body of evidence that suggests that markets may not price securities appropriately in the short term. While Nicor witness Makhholm asserts a preference for spot closing stock prices adjusted to reflect the timing of dividends in relation to the Ex-Dividend date, CUB/CCSAO contends that witness Thomas sufficiently demonstrated that Makhholm's choice of an adjusted spot stock price estimate is not significantly different than the three-month average historically utilized by witness Thomas. CUB-CCSAO Ex. 1.0 lines 309-11. CUB/CCSAO's chosen methodology is superior in that it reflects different views of what the actual stock price might be. (*Id.* at lines 300-13.)

Finally, CUB/CCSAO believe that the 23 basis point downward adjustment proposed by Staff witness McNally is reasonable and necessary. CUB-CCSAO Ex. 3.01; CUB-

CCSAO Ex. 3.0 lines 280-83. CUB/CCSAO agree with the notion that investors require higher returns to accept greater exposure to risk. Conversely, the investor-required return is lower for investments with less exposure to risk. Staff witness McNally's adjustment properly recognizes the relative credit ratings, a proxy for financial risk, of Nicor Gas and the samples of comparable companies utilized by the parties to this proceeding. According to CUB/CCSAO, the 23 basis point adjustment proposed by Mr. McNally reflects the spread between A-rated and AA-rated 30-year utility debt yields. In short, CUB/CCSAO believes McNally relied on a reasonable standard and urges the Commission to adopt it.

Commission Analysis and Conclusion

Nicor Gas, Staff and CUB/CCSAO all introduced evidence into the record designed to support their proposals on the appropriate ROE. While the parties disagreed over several aspects of their respective ROE calculations and methodologies, there are ~~two~~ three critical areas of disagreement the Commission must resolve in order to determine the appropriate rate of return in this proceeding. The first is over the selection of comparable samples to serve as proxies. The second concerns the appropriate growth rate estimates used to determine the ROE for the sample companies. The Third concerns whether Staff's proposed 23-basis-point downward adjustment was necessary in calculating a fair return on equity.

In order to accurately estimate the ROE of Nicor Gas, which is not publicly traded, it is necessary to identify a group of proxy firms with characteristics similar to those of Nicor's Gas distribution operations. The Commission believes the critical determination concerns what constitutes a reasonable proxy of comparable companies to compare to Nicor's gas distribution operations.

Staff's Gas Sample comprises eight cash dividend-paying, domestic, publicly-traded companies assigned an industry number of 4924 (i.e., natural gas distribution companies) within S&P's Utility Compustat database for which Zacks growth forecasts were available; that were not involved in any pending merger; and that derive 70% or more of their revenues from regulated gas delivery operations. Staff's criteria includes a lower revenue threshold and excludes companies earning less than 70% of their income from non-utility activities. Staff explains that the 70% threshold was selected to balance measurement error due to sample composition against measurement error due to individual company cost of equity estimates.

Nicor witness Makhholm employed a sample of six dividend-paying publicly-traded companies that derive at least 80% of their operating revenues from regulated utility operations. Nicor's initial analysis was performed using data available as of September 17, 2004. Makhholm subsequently updated his analysis using data available as of February 7, 2005. CUB/CCSAO adopted Nicor's proposed proxy group in this matter. *See CUB/CCSAO Init. Br. at 27.*)

The contested issue regarding the sample groups deals with the percentage of operating revenues that are derived from regulated utility operations. All of Nicor's proxy companies derive at least 80% of their operating revenue from regulated utility operations. Staff's elected revenue threshold for its sample group is 70%.

The Commission finds that the percentage of revenues derived from non-regulated business activities is an important criterion in the selection of an appropriate and

comparable sample group. The gas sample must resemble Nicor Gas as closely as possible in order to accurately reflect the risks associated with the provision of gas distribution operations. When the companies chosen for the proxy samples were updated in February 2005, four out of the eight companies Staff had chosen to include in their proxy no longer qualified for their 70% revenue criterion. Staff's response that the proxy was valid despite the fact that the sample companies fell below the 70% threshold for 2004 is insufficient. The Commission does not agree that Staff's sample, from which half of the companies now fail to qualify for Staff's more relaxed threshold for unregulated revenues, is more representative than Nicor's sample, which remained intact under a more stringent standard. Accordingly, the Commission finds that the proxy group of six publicly-traded companies identified by Nicor and accepted by CUB/CCSAO better represent Nicor Gas and, consequently, allow the Commission to calculate a fair return for the utility.

Both Staff and Nicor used their sample groups in the DCF and CAPM models to estimate the Company's ROE. The aforementioned concerns with the robustness of Staff's sample also will be present in the proposed ROE that Staff derived therefrom. The Commission therefore looks to the results of the estimate derived from the sample proposed by Nicor and accepted by CUB/CCSAO. Nicor's proposed ROE of 10.82% is derived by averaging the results of its DCF and CAPM analyses. Nicor's DCF model estimated a 10.68% ROE while its CAPM analysis estimated a 10.95% ROE. CUB/CCSAO proposed a 9.86% ROE based upon Mr. Thomas' DCF analysis. This rate of return incorporates Staff proposed 23 basis point downward adjustment. CUB/CCSAO's unadjusted ROE is therefore 10.09%. Both Staff and CUB/CCSAO expressed serious concerns with the growth rate estimates utilized by Nicor's analysis. However, no party presented serious criticisms of the analysis performed by CUB/CCSAO. CUB/CCSAO's 10.09 ROE These results are preliminarily accepted.

The respective DCF and CAPM calculations performed by the parties are also in dispute. Staff, in particular raises certain criticisms related to Nicor's ROE analysis. The Commission ~~does not find~~s that the issues raised seriously detract from Nicor's overall analysis ~~nor do they serve to rehabilitate Staff's questionable proxy group.~~

Both Makhholm and McNally computed their respective ROEs by averaging DCF and CAPM calculations. Both employed a quarterly version of the DCF model. The CUB/CCSAO witness updated his ROE estimate to reflect a quarterly DCF, consistent with the other parties to this proceeding. All used five-year growth rate data. Nicor witness Makhholm employed Value Line DCF growth rates that Staff and CUB/CCSAO believes are questionable are manipulated to produce a higher return. Nicor responded by stating that Makhholm's growth rate is derived from several credible and complementary sources including *The Value Line Investment Survey*. ~~Nicor also points out that Staff's calculations not only relied on a single source for the growth rate but also did not utilize growth rates from The Value Line, which Nicor argues is considered the most reliable source of growth rates.~~

~~Nicor refutes Staff's criticism of Makhholm's failure to use *Yahoo! Finance* growth rate estimates for the companies in his sample, despite using *Yahoo! Finance* information for other portions of his analysis. Nicor explains that the use of *Yahoo! Finance* data is not a requirement and also further explained that its witness prefers to utilize sources such as~~

~~Value Line and Zacks. The Commission agrees that the sources used by Dr. Makhholm are credible, but does not believe that Dr. Makhholm used these sources appropriately. Staff also took issue with Nicor's "dismissal" of beta estimates published by Zack's. Nicor explained that Makhholm used published betas (such as Value Line) because they were visible to investors. The Staff calculated betas are not publicly available. There is no presumption that either Value Line betas or calculated betas are superior as long as the underlying calculation is valid. Clearly Messrs. Makhholm and McNally both utilized different sources of data.~~ As Staff correctly points out, the application of financial models and the analyst's informed judgment are both required in a cost of equity analysis. Because cost of common equity measurement techniques necessarily employ proxies for investor expectations, judgment is necessary to evaluate the results of such analyses. The rate of return analyst should attempt to replicate the thinking of investors, in developing their expectations regarding the growth in dividends. The Commission finds that the analysis performed by CUB/CCSAO witness Thomas presents an accurate picture of what investors expect the growth potential of each individual security to be, and reflects the variety of information that is available to investors in the marketplace. The Commission finds that while Nicor witness Makhholm utilized the same sample of comparable utilities, he based his calculations on mismatched data from different time periods that produces unreliable results in both his retention growth estimate and in his Value Line growth rates. The Commission finds that the analysis performed by Mr. Thomas is superior because it utilizes corrected and updated growth rate forecasts from a diverse group of sources.

Having identified a preliminary ROE, the Commission will consider the proposed adjustment to reduce the ROE by 23 basis points, or 0.23%. Staff contends that the reason for its 23 basis point downward adjustment is the notion of "risk/return tradeoff" from the investor's perspective. Equity costs are affected by debt leverage. As debt leverage rises, the cost of equity rises while credit ratings fall. In other words, there is an inverse relationship between credit ratings and equity costs. Staff's 23 basis point adjustment proposed by Mr. McNally reflects the spread between A-rated and AA-rated 30-year utility debt yields. CUB/CCSAO also adopts Staff's position and believes that the 23 basis point downward adjustment proposed by Staff witness McNally is reasonable and necessary. We agree.

The 23 basis point adjustment proposed by Mr. McNally reflects the spread between A-rated and AA-rated 30-year utility debt yields. Nicor Gas has been assigned a credit rating of AA and a business profile score of 2 by S&P. In contrast to Nicor Gas, Dr. Makhholm's proxy sample has an average credit rating of A and business profile score of 2.5, which indicate that Dr. Makhholm's sample is significantly riskier than Nicor Gas. The Commission finds unpersuasive Nicor's contention that the 23 basis point adjustment is improper because it improperly mixes debt and equity risks. While the Commission agrees with Dr. Makhholm that equity and debt are very different financial securities, the Commission does not find them mutually exclusive for purposes of determining an appropriate ROE in a rate case context. Nicor itself concedes that, "[L]ike all questions of affording a fair overall return, it is also about *how investors see Nicor Gas . . .*" (Nicor Init. Br. at 85). Basic financial theory posits that investors require higher returns to accept greater exposure to risk, while the investor-required return is lower for investments with

less exposure to risk. We agree with Staff that, while there is no way to directly measure the relationship between debt and equity, ignoring the risk differential in this context would be inappropriate. The Commission accepts that each proxy sample has its own inherent risk level that may differ from that of the target company. When the sample does not accurately reflect the total risk level of the target company, an adjustment is necessary and should be applied. This case is one of those instances. Standard & Poor's has assigned Nicor Gas a credit rating of AA and a business profile score of 2. Nicor witness Malkolm's proxy sample has an average credit rating of A and business profile score of 2.5 clearly making it more risky than Nicor Gas. The Commission finds that an adjustment is necessary to prevent Dr. Makhholm's cost of equity for his proxy sample from overstating Nicor Gas' cost of equity.

The Commission reiterates that there is no proscription against the use of informed judgment in arriving at a final rate of return recommendation in a given case. The Commission requires that an analyst who departs from the results of his models must explain why he or she did so. The explanation must be rational and aimed at serving both the ratepayer and the shareholder by setting a return sufficiently high that the utility can attract capital, but not so high that it earns an excessive return. In this instance, Mr. McNally sufficiently explained how and why he adjusted the ROE downward by 23 basis points to reflect the spread between A-rated and AA-rated 30-year utility debt yields. Finally, as Staff correctly points out, the downward adjustment being applied is consistent with the approach the Commission has taken under similar circumstances in previous proceedings. (98-0632 (Mar. 24, 1999), 4-5; 02-0798/03-0008/03-0009 (Cons.) (Oct. 22, 2003), 80, 89-90.) In short, we find that Staff witness McNally sufficiently demonstrated that the 23-basis point downward adjustment is justified. The adjustment is, therefore, adopted.

In summary, the Commission finds Nicor's proxy group to be superior to Staff's and a more accurate reflection of Nicor Gas for ratemaking purposes. The Commission adopts CUB/CCSAO recommendation on the appropriate unadjusted ROE because it uses appropriate growth rate forecasts and accurately represents investor's expectations. The Commission also finds Staff's proposed downward adjustment of 23 basis points to be reasonable. Nicor's ROE is therefore set at **10.59 9.86%** (~~10.82%~~ as originally proposed by CUB/CCSAO Nicor minus Staff's proposed adjustment). While several of the parties discussed whether flotation costs should be recoverable in the "cost of equity" section of their legal briefs, the Commission addresses that issue separately in the next section of this Order.

Approved Rate of Return on Rate Base

As discussed above, the Commission finds that it is appropriate to exclude short-term debt from Nicor's capital structure. The Commission also adopts a 10.59% cost of common equity for reasons discussed above. Upon incorporation of the conclusions contained above, Nicor's capital structure and cost of capital, resulting in overall cost of capital of 8.90% may be summarized as follows:

Class of Capital	Share	Cost	Weighted Cost
<u>Short Term Debt</u>	<u>13.65%</u>	<u>2.58%</u>	<u>0.35%</u>
Long-Term Debt	<u>36.77%</u>	6.72%	<u>2.47%</u>
Preferred Equity	0.11%	4.77%	0.01%

Common Equity	<u>49.47%</u>	<u>9.86%</u>	<u>4.87%</u>
Total	100.00%		<u>7.7%</u>

5. COST OF SERVICE, RATE DESIGN, AND TARIFF TERMS & CONDITIONS

a. Cost of Service Study

Marginal Cost of Service Study

Nicor originally proposed to determine the cost to serve each individual rate class based upon a marginal cost of service study (MCOSS). Staff and IIEC filed testimony opposing Nicor’s proposal. CUB/CCSAO concurs and filed extensive testimony disputing the use of marginal cost based pricing to determine regulated prices for natural gas distribution.

In Rebuttal Testimony, Nicor withdrew it’s proposal to use the MCOSS to determine class cost of service, but contended that the Commission should use the MCOSS to set individual rates. In this section, the Proposed Order appropriately determines that using Nicor’s MCOSS to determine class cost of service is no longer an issue and in later sections rejects Nicor’s request to set individual rates based on marginal cost.

CUB/CCSAO agrees with the Proposed Order’s conclusion, and respectfully recommends that this section of the Order include a summary of the evidence taken at trial and a conclusion that Nicor’s proposed MCOSS is not an appropriate basis for natural gas distribution rates. Incorporating that conclusion into this section would provide substance to the decision and would insulate the Order from appeal.

Embedded Cost of Service Study

One of the foundations of rate design has historically been the embedded cost to serve each customer class. Since Nicor keeps no records detailing exactly what it costs to serve each individual customer class, which would be extremely difficult to do, allocations have to be made to estimate these costs. Nicor proposed an embedded cost of service study (ECOSS) that allocates costs based on a modified distribution main study (MDM) that uses the coincident peak (CP) allocation methodology to determine the share of costs that are attributable to each customer class. IIEC supported Nicor, while Staff and CUB/CCSAO testified that the MDM study was inappropriate and that the CP allocation methodology is inferior to the average and peak (A&P) allocation methodology in determining the costs that are attributable to each customer class.

Nicor revised its proposal to accept the A&P methodology but maintained that the MDM study should be used to determine the peak portion of the A&P. Staff accepted Nicor's contention but proposed modifications to the MDM study. IIEC reiterated its support for the CP allocation methodology and urged the Commission to reject the A&P methodology. CUB/CCSAO presented evidence that demonstrated that using the MDM study to determine the peak portion of the A&P allocation methodology is unreliable and does not accurately assign costs. The Proposed Order adopts Nicor's proposal to allocate costs based upon an A&P allocator that utilizes the MDM study to determine the peak portion.

There are two minor, but important, inaccuracies in the Proposed Order's summary of CUB/CCSAO's positions on issues relating to Nicor's proposed Embedded Cost of Service Study (ECOSS). First, on Page 97, the Proposed Order insinuates that Staff

Witness Luth's adjustment to Nicor's proposed MDM allocation factors corrects inaccuracies in the flawed results that occur when averaging an A&P analysis with Nicor's MDM study. It is correct that Mr. Luth's adjustments to Nicor's MDM study are more closely linked to the actual demands placed upon the system than are Nicor's flawed estimates. However, because averaging an A&P analysis with Nicor's MDM produces fatally flawed results, statements inferring that Mr. Luth's adjustments correct for these flaws are inaccurate. Averaging the results of a cost study based on cost allocations grounded in cost causation (an A&P analysis) with cost study results that inaccurately assume that all delivery costs are incurred and caused by peak day demands only (Nicor's MDM) does not produce a reasonable allocation of costs. Consistent with prior Commission determinations, the Proposed Order concludes, "a utility can not justify its transmission and distribution investment on demands for a single day." Proposed Order at 100-01. CUB/CCSAO agree with this determination and reiterate the position that using any MDM study based solely on the Coincident Peak allocation methodology, which allocates costs based on demands for a single day, does not produce a reasonable estimate of allocated costs. CUB-CCSAO Ex. 3.0 lines 637-42.

Second, on page 98, the Proposed Order omits an important concept. In summarizing Mr. Thomas' proposed A&P allocator the Proposed Order does not adequately explain the undisputed fact that R-squared is a measure of how much of the variation in throughput is explained by time. CUB/CCSAO Initial Br. at 41. This concept is critical. Without a solid understanding of the purpose of the R-squared statistic, Nicor's criticism that Mr. Thomas' regression analysis is statistically insignificant seems valid. However, the fact that variation in throughput is not explained

by time does not detract from the fact that Mr. Thomas' analysis of Nicor's monthly and daily throughput data presents the most accurate picture of the actual load on Nicor's system. CUB/CCSAO Initial Br. at 41.

These two inaccuracies lead to incorrect conclusions in the proposed order. First, on page 100, the ALJs appear to accept IIEC's flawed insinuation that the CP methodology is acceptable because it is one of the two factors considered in the A&P methodology that CUB/CCSAO support. This is a misleading characterization. Peak usage is undeniably a factor that must be considered in determining cost of service. However, it is only one aspect of the actual demands placed on a natural gas distribution system. CUB/CCSAO Initial Br. at 38-39. As CUB/CCSAO and Staff have demonstrated, an A&P allocator places appropriate weight on both the average and peak demands placed on the system. *Id.*; Staff Initial Br. at 105. The Proposed Order acknowledges the strengths of the A&P allocator, but instead focuses on Nicor's proposed MDM, which relies solely on the CP allocation methodology. Proposed Order at 101. This is not an accurate representation of cost causation. CUB/CCSAO has successfully demonstrated that coincident peak allocation is inconsistent with both the demands placed on Nicor's system and Nicor's own tariffed mains extension policy. CUB/CCSAO Initial Br. at 39.

While the general structure of the MDM, which uses a direct assignment methodology, might be a more accurate way to assign the costs of mains to customer classes, its reliance solely on CP usage is a fatal flaw that does not adequately reflect the real demands that are placed on the system. CUB/CCSAO Ex. 3.0 at 28. CUB/CCSAO is not opposed in principle to an appropriately performed MDM study. However, the

MDM studies presented to the Commission in this docket are far from appropriate. CUB/CCSAO Initial Br. at 37-38. No party has successfully demonstrated that the CP methodology is superior to the average and peak allocation methodology. Id. at 39. Accordingly, the Commission cannot determine that the MDM study allocates costs appropriately.

Secondly, on page 101, the Proposed Order rejects CUB/CCSAO's ECOSS because it "does not use the MDM study and additionally relies on a statistically insignificant regression analysis to estimate an allocation factor for the A&P method." As explained above, the Commission cannot accept any MDM study that relies solely on the CP allocation methodology. Such an allocation methodology does not adequately reflect reality and overallocates costs to residential consumers. Additionally, the fact that Mr. Thomas' analysis produces a low R-squared (implying only that there is little causal relationship between usage and time) does not detract from the fact that Mr. Thomas' A&P analysis is the only analysis that fully considers the distribution of demands placed on Nicor's system and accurately considers the total volume of gas that flows through this system on the peak day. CUB/CCSAO Initial Br. at 41-42.

PROPOSED LANGUAGE

VI. COST OF SERVICE, RATE DESIGN, AND TARIFF TERMS & CONDITIONS

Cost of Service Study

Marginal Cost Of Service Study

Nicor

Nicor originally advocated a marginal cost of service study (MCOSS), but subsequently accepted the use of an ECOSS to allocate the revenue requirement. (Nicor Init. Br. at 105.) However, Nicor has maintained that marginal cost principles nonetheless should be applied to set specific rates, especially in the setting of tail block charges for multi-

blocked rates and in customer charges other than the Rate 1 customer charge. Nicor Initial Br. at 107. Nicor argues that “Absent first-best marginal cost prices, which cannot be implemented for Nicor Gas, Nicor Gas’ proposal to utilize marginal cost pricing of tail block units is appropriate and supports the movement toward efficient price signals. Pricing marginal units (i.e., those units where customers are most likely to be consuming) at marginal cost provides appropriate price signals in the range of consumption.” (Gordon Sur., Nicor Gas Ex. 35.0, 1:29 – 2:34)

Nicor responded to CUB/CCSAO’s criticisms of it’s MCOSS by arguing that it was prepared by Dr. Hethie Parmesano who is a Ph.D. economist with extensive experience in marginal cost based pricing, while CUB/CCSAO Witness Thomas lacks similar credentials. Nicor further avers that Mr. Thomas’ criticisms of the efficient nature of marginal cost based pricing are incorrect and unrealistic.

Staff

Staff witness Luth explained why an m-coss is not appropriate for allocating costs when compared to an embedded cost of service study (“e-coss”) (ICC Staff Exhibit 7.0, pp. 4-6, ll. 57-101). An e-coss is more connected to the test year revenue requirement as compared to an m-coss because costs are organized according to the accounts that result in the test year revenue requirement (Id., pp. 4-5, ll. 66-75). In an e-coss, individual groups of costs are allocated to the customer classes according to appropriate cost causation or cost relationship measurements. Thus, through the detailed analysis of costs that represents test year revenue requirement, an e-coss results in an allocation of costs based upon how the utility’s system is currently used in the test year. The Commission’s practice has been to allocate costs based upon an e-coss and Staff recommends its continued use in this docket (ICC Staff Exhibit 7.0, p. 4, ll. 59-64).

Staff also argues that Nicor did not show how the cost of delivery service is marginal or will vary according to changes in use. The cost of the already in-place plant-in-service, direct labor, and overhead, such as customer service, will not vary to a significant degree based upon a customer’s usage (ICC Staff Exhibit 7.0, p. 5, ll. 82-89). As a result, a fundamental principle of an m-coss -- that costs are allocated to customer groups based upon the cost to install or replace similar equipment today, is largely irrelevant because, in general, utility plant-in-service remains in-service for many years (ICC Staff Exhibit 16.0- Revised, pp. 4-5, ll. 82-93). Staff maintains that unlike an m-coss, an e-coss is based upon what the costs of already in-place plant-in-service, direct labor, and overhead are, not what those costs may be at some indeterminate point in time many years from now. Accordingly, since this docket is to determine rates based upon the Company’s current revenue requirement, Staff suggests that the e-coss is the appropriate method to determine the allocation of test year revenue requirement as a starting point for designing rates (Id., p. 5, ll. 87-96).

IIEC

IIEC argues that an appropriately performed ECOSS should be used for revenue allocation in this case. Moreover, IIEC does not believe the use of a MCOSS and

the EPMC method have been justified in this proceeding. (See Rosenberg, IIEC Ex. 1 at 13-15, Lns. 7-23, Lns. 1-25 and Lns. 1-11 and IIEC Ex. 2 at 19-20, Lns. 13-23, Lns. 1-17). As IIEC notes, marginal cost has not generally been used for the design of gas utility rates. Thus, the application of marginal cost methods in this case would clearly be inconsistent with past Commission practice and established precedent in the development of gas utility rates around the country.

Due to the lack of experience with marginal cost studies, such studies are largely untested. Moreover, marginal cost studies are controversial and complicate the cost allocation process. Furthermore, such studies are much less refined than Nicor's embedded cost of service study. For example, the MCOSS does not utilize Nicor's MDM study to directly assign the cost of distribution mains to the customer classes. Finally, all parties to this case, including Nicor, have accepted the use of the ECOSS to allocate Nicor's revenue requirement. For these reasons, the record does not justify the use of a MCOSS or the EPMC method for revenue allocation in this case.

CUB/CCSAO

CUB/CCSAO argues that there are significant flaws with Dr. Parmesano's MCOSS and that a marginal cost of service study is of little value to the Commission. CUB/CCSAO points out that Staff, CUB/CCSAO, and IIEC all agree that the MCOSS should not be used in this proceeding. Even IIEC does not support the use of an MCOSS, despite the fact it allocates more cost to residential consumers and less to industrials and commercial consumers than an embedded cost of service study. IIEC Exhibit 1.0 lines 9-11. While Nicor concedes that revenue allocation should be based on an E-COSS, the Company maintains that the MCOSS should be utilized to determine the effective tail block rates. Nicor Gas Ex. 44.0 lines 407-17. CUB/CCSAO points out three problems with this proposal: (1) Nicor has not demonstrated conclusively that marginal cost based pricing leads to efficiency, (2) Nicor has not demonstrated significant problems with the Commission's current practice of setting rates based on embedded costs or that rates based on the MCOSS are an improvement, and (3) The MCOSS proposed by Nicor suffers from serious flaws in methodology and logic.

CUB/CCSAO argues that Nicor's position is based primarily on speculation. Dr. Parmesano testified that Nicor Gas had not made estimates of the efficiency of its customers' gas consumption decisions under various pricing arrangements, had not computed its customers' demand elasticities for the services Nicor Gas provides, and had not estimated the welfare effects of various rate changes. Nicor Gas Ex. 30.0 lines 243-46. CUB-CCSAO asked Nicor for this crucial information in discovery and, as Mr. Thomas testified, "Absent such support the record in this proceeding does not support a finding by the Commission that setting prices at marginal cost is the most efficient solution in the market for LDC services." CUB-CCSAO Ex. 1.0 lines 619-26. Further, in discussing the efficient allocation of resources in the economy, Dr. Gordon admits, "[t]here certainly might be some consequences outside the sphere of consideration. However, in my judgment, those are very likely to be second order effects, i.e., small, and it's probably safe to ignore them for the purposes of regulating an industry." Transcript at

213. Mr. Thomas cited numerous examples of economic authorities that disagree with Dr. Gordon's assessment. Two examples include Nobel Prize-winning economist James M. Buchanan who stated that equalities between price and marginal cost have no relationship to allocational efficiency, and Dr. Alfred Kahn, who notes that the marginal cost pricing principle does not necessarily "provide a correct guide for pricing in individual markets or industries if it is not being followed uniformly throughout the economy." CUB-CCSAO Ex. 1.0 lines 514-38, 555-84). Conversely, the only authority that Nicor cited is a 25-year-old study. Nicor Gas Ex. 19.0, fn 18) and could not be provided through discovery because "we couldn't get consent from the copyright holder to have it." Transcript at 196-97. CUB/CCSAO argues that clearly Nicor has not met its burden of proof.

Commission Analysis and Conclusion

Accordingly, Nicor has revised its proposal to base interclass revenue allocations on the ECOSS so the MCOSS is no longer at issue with respect to revenue allocation. However, the Company ~~further avers~~ maintains that "[m]arginal cost principles nonetheless should be applied to Nicor Gas' rate design, especially in the setting of tail block charges for multi-blocked rates and in customer charges other than the Rate 1 customer charge." (Id. at 106.) ~~Individual rates will be addressed subsequently.—The Commission disagrees. Nicor has not proven conclusively that marginal cost based pricing leads to efficiency, nor has the company shown that there are significant problems with the Commission's prior practice of setting rates based on embedded costs that will be fixed by basing rates on the MCOSS. The evidence that Nicor has presented is based solely on a single document that isn't even publicly available. Staff, CUB/CCSAO, and IIEC have presented much more persuasive evidence and, accordingly, the Commission concludes that marginal cost is not an appropriate basis for use in setting natural gas distribution rates.~~

Embedded Cost Of Service Study

CUB/CCSAO

CUB/CCSAO assert that the various ECOSS proposed by both Staff and Nicor misallocate the costs of transmission plant and distribution plant, including distribution mains and associated expenses. Nicor's ECOSS relies on a flawed MDM Study, and even the updated MDM presented by Mr. Luth does not fix the problem. The Commission should reject any study relying on CP methodology. Mr. Thomas opined that such a methodology overallocates distribution main costs to residential customers and should be rejected.

Nicor agreed to accept an A&P methodology that incorporates the MDM study to estimate the peak portion of costs. Yet averaging the results of a cost study based on cost allocations grounded in cost causation (an A&P analysis) with cost study results that pretend that all delivery costs are incurred and caused only by peak day demands (Nicor's MDM) does not produce a reasonable estimate of allocated costs. Staff witness Luth adjusted the MDM demand allocation factors to correct some of the ~~this~~ inaccuracy in Nicor's estimates. While Mr. Luth's study fixes one problem with the MDM, it still

relies on the CP methodology, and therefore remains inappropriate. If the Commission believes that the coincident peak allocation methodology is inappropriate, then there is no need to utilize the MDM study for any purpose.

CUB/CCSAO maintain that allocation is a critical aspect of an appropriately performed ECOSS, and an appropriate allocation needs to recognize that the system is designed to meet peak capacity but is utilized throughout the entire year. A utility cannot justify its transmission and distribution investment on demands for a single day. (94-0040 at 138-39.)

Nicor's use of CP for certain costs measures only the demand on the system on peak days, and does not measure the use of the system on the vast majority of days other than peak days. Some customer classes use the system more heavily throughout the year; Mr. Luth testified that they "should be expected to pay for the use of the system based, at least in part, on the use of the system throughout the year, rather than how the system is used on only a few days each year." (Staff Exhibit 16.0 ll. 273-77.) The CP methodology fails to recognize the fact that different customer classes place different demands on the system and should therefore be rejected.

Nicor's position that costs are caused based only on peak day demands is inconsistent with its own tariff, which states:

GAS MAIN EXTENSION (C) General - Facilities will not be provided hereunder for any uneconomic extension, temporary business or business of doubtful permanency. For the purposes hereof, the term "uneconomic" shall mean any case where expected revenues make it doubtful that a reasonable return would be derived from the required investment. In such cases, the Customer or Subdivider may provide an additional deposit, over and above that provided for above, to make the required extension economic, as determined by the Company; provided, however, that this section shall not operate to deprive any Customer of his right to 100 feet of low pressure main, or 200 feet of high pressure main, as the case may be.

The Company recognizes that mains are installed based upon factors other than demand on the peak day. According to Mr. Harms, investment in mains depends upon expected revenue generated compared to the cost of the investment and expected expenses. (*See* Tr. 755.) Given the actual tariff language filed by Nicor and interpreted by Mr. Harms, CUB/CCSAO argue that the total annual usage of each customer is relevant. Accurate cost causation analysis would recognize that factors other than peak day demand cause costs. Mains are installed to meet varying demand throughout the year and Nicor's CP methodology fails to recognize this fact.

Mr. Thomas presented testimony on the appropriate A&P allocator for use in this proceeding on behalf of CUB-CCSAO and Mr. Luth presented similar testimony on behalf of Staff. The primary difference in the A&P allocation factor proposed by Mr. Luth and the one proposed by Mr. Thomas lies in the underlying data considered in their analyses. Mr. Luth used an A&P factor that is weighted according to "the percentage of the peak demand day that an average day represents." (Staff Ex. 7.0 ll. 114-16.)

Consistent with changes he proposed to Nicor's MDM study, Mr. Luth updated the peak demands for several customer classes in rebuttal testimony. He proposed a 26.76% A&P

factor for use in this proceeding. Mr. Thomas examined daily average data and the aggregated monthly information. His analysis indicates that mean weighting presents a skewed picture of the system load and results in an estimate of average that is skewed lower than it actually should be. Mr. Thomas's analysis is the only analysis that examines the full scope of available data on customer usage and is therefore the most balanced option available for the Commission.

Mr. Thomas compared actual throughput for the 12-month period ending December 2004 with the average and coincident peak information utilized by Nicor's ECOSS in the creation of his A&P allocator. The average of the total system throughput data is 45.44% of the peak month, while the daily average data is only 23.1% of the coincident peak data. Mr. Thomas's regression analysis indicates that the appropriate A&P allocation factor is 37.5%. Thus 37.5% of costs should be allocated on the basis of average demand and the remaining 62.5% should be allocated based upon peak demands. Nicor argues that since the R-squared of Mr. Thomas's analysis is low, the entire analysis should be disregarded. In this instance R-Squared is a measure of how much of the variation in throughput is explained by time. CUB/CCSAO ~~counter~~ argue that the value of the analysis is not diminished by the result that time does not explain the variation in throughput.

CUB/CCSAO also argue that peak usage should be Nicor's actual throughput on the peak day. Nicor inappropriately considers only firm peak throughput on the peak day. On the peak day, interruptible customers still receive some level of gas service. These customers should be responsible for the costs they cause, but are not under the Company's study. The amount of gas that flows to these customers on the peak day still places a demand on the system, and should therefore be recognized in allocating costs.

Commission Analysis and Conclusion

The underlying issue is the method that best allocates transmission and distribution demand costs to those that cause them. The Commission notes that the MDM study was accepted in the previous rate case (*see* 95-0219 at 49) and its use in the instant case is supported by Nicor, IIEC, and Staff. ~~The arguments offered by IIEC against Staff's adjustment to the MDM study (See IIEC Reply Br. at 4-6) are well reasoned and persuasive, and the Commission rejects that adjustment.~~ CUB/CCSAO argue against the MDM because it relies on CP methodology. The Commission ~~does not~~ agrees that this renders the MDM fatally flawed, ~~however, the Commission notes IIEC's comment that CP methodology is one of the two factors considered in the A&P methodology that CUB/CCSAO support.~~

~~The next consideration is whether to use CP or A&P to allocate transmission and distribution costs not assigned by the MDM study.~~ IIEC advocates the CP method, asserting that A&P misallocates costs away from small volume customers to industrial users. Nicor prefers CP but has accepted A&P in its latter two ECOSS. Staff and CUB/CCSAO argue for the A&P method. The Commission accepted A&P rather than CP in Nicor's previous rate case, stating that "some T&D investments are not peak-related." (95-0219, 49.) The A&P methodology also has been adopted in subsequent rate cases for other utilities. (*See* 03-0008/03-0009 (cons.) (Oct. 22, 2003) at 98 ("In light of the nature in which the transmission and distribution systems are used and because of the relatively declining cost of increasing capacity, peak demand is not the

appropriate emphasis in allocating demand costs. * * * The A&P method properly emphasizes the average component to reflect the role of year-round demands in shaping transmission and distribution investments.”); *see also* 04-0476 at 74-75; 02-0837, 90-91.) IIEC argues that Nicor’s system would be inadequate if it relied on the A&P method to meet system demand. The Commission does not find this argument persuasive, because A&P is being used to allocate the costs of the system among rate payers, and not for engineering purposes. Also, the Commission rejects IIEC’s contention that A&P inappropriately considers average demand costs. The Commission has previously determined that “a utility can not justify its transmission and distribution investment on demands for a single day.” (03-0008/03-0009 (cons.) (Oct. 22, 2003) at 98, citing 94-0040 at 138-139.)

After considering the various ECOSS studies offered by the parties and the arguments regarding their respective methods, the Commission accepts the ECOSS methodology offered by CUB/CCSAO in the Direct Testimony of Mr. Thomas. The Commission is not persuaded by the criticisms of Mr. Thomas’ analysis. Nicor in the surrebuttal testimony of Mr. Heintz. (See Nicor Ex. 42.1.) That study best uses the MDM study and the A&P method, and is the appropriate ECOSS for setting rates in this case. The IIEC ECOSS does not use the A&P method, and takes a position with respect to the SBS charge which the Commission declines to adopt, (*See infra*). The CUB/CCSAO Nicor ECOSS does not use the MDM, ~~and additionally~~ which relies on the illogical CP methodology that the Commission has previously determined to be inaccurate. ~~a statistically insignificant regression to estimate an allocation factor for the A&P method.~~ The Staff ECOSS, presented in the rebuttal testimony of Mr. Luth, utilizes an incorrect design-day demand total, and thereby improperly adjusts the MDM. The Commission views the remaining ECOSS presented earlier in Nicor direct and rebuttal testimony and in Staff direct testimony to be superseded by those in Nicor surrebuttal and Staff rebuttal testimony.

b. Rates, Riders, and Other Terms and Conditions

Rate 1

Rate design and the allocation of a proposed increase to individual customer classes is a very important issue that could have potentially disastrous consequences. The Commission could determine that the level of an overall rate increase is relatively minor and would not adversely impact customers, but through rate design could impose drastic rate increases on specific customers while other customers come through relatively unscathed. It is critical that rate design be performed appropriately with careful attention paid to inter and intra-class rate shock.

The Proposed Order omits one very important section of the evidence that CUB/CCSAO presented regarding the design of residential rates, Rate 1. CUB/CCSAO recommended that once the Commission determines the appropriate revenue requirement, that Nicor's proposed rate design should be adjusted based on a very well defined set of objectives. CUB/CCSAO recommended that the interclass allocation proposed by the Company should be preserved, at least as it applies to residential consumers. Further, the Commission should keep the second block and tail block rates for Rate 1 at the levels proposed by the Company and allocate the remaining increase between the customer charges and the first block rates, utilizing the approved billing determinants. These changes will maintain consumption efficiency incentives embedded within Nicor's proposal, while preserving gradualism in the move towards a flat-rated demand charge. CUB-CCSAO Ex. 1.0 at 34. CUB/CCSAO proposed this mechanism to preserve gradualism in the rate design in order to reduce the rate shock that could occur among customers with different usage levels, i.e. space heat customers vs. cooking gas customers. *Id.*

The rate design contained in the Proposed Order could produce intra-class rate shock. The Proposed Order accepts Nicor's proposed \$8.40 customer charge and three-block rate structure, and states that the rates for the three block structure should be set according to the ECOSS adopted in the Order. Proposed Order at 103. There are two problems with this adjustment. The first is simply that the ECOSS does not justify different rates based upon individual usage levels, i.e. there is no difference in the cost to provide the 50th and 51st therm, accordingly it cannot be used to determine different rates for each block. CUB/CCSAO Ex. 1.0 at 35; Nicor Ex. 30.0 at 21. The second issue is

the front-loaded nature of the mechanism in the Proposed Order. While a high fixed customer charge may provide more certain revenue recovery for Nicor, it reduces incentives that Nicor has to behave efficiently. One of the guiding principles of public utility ratemaking should be to provide incentives for the company to behave as efficiently as possible, and having some at-risk revenue provides such an incentive. CUB/CCSAO Ex. 3.0 at 30. Additionally, front-loaded rates have the effect of discouraging efficient consumption by customers. The rate design mechanism proposed by Mr. Thomas is intended to avoid sending incorrect price signals to both customers and Nicor's management. Accordingly, the Proposed Order should adopt the rate design adjustment mechanism proposed by CUB/CCSAO witness Thomas.

Additionally, the Proposed Order fails to Order the Company to file tariffs consistent with the Commission's determination of the appropriate design of rates for residential end users.

Level of Rate Increase: Rates 4 & 74; Rates 6 & 76; Rates 7 & 77

Provided that the Commission adopts CUB/CCSAO's proposed changes to the Marginal Cost of Service Study (MCOSS) section of the Proposed Order, no changes are necessary to this section. However, if the Commission does make changes to the MCOSS section, then more detailed analysis is necessary in this section to support the conclusions on pages 155 and 156 that Nicor's calculated marginal cost of service is not an appropriate basis for rates.

PROPOSED LANGUAGE

Rates, Riders, and Other Terms and Conditions

Rate 1

CUB/CCSAO

The residential rate structure proposed by Nicor is a reasonable compromise between cost reflection, feasibility, and gradualism. CUB/CCSAO state that the Company's proposal moves toward cost-based rates, while moderating the effect of the increase. They maintain that this is the most reasonable option available to the Commission. They maintain, however, that Nicor has not demonstrated that marginal cost-based rates will offer an improvement in efficiency.

CUB/CCSAO urge the Commission to reject Staff's proposed rate design because it failed to incorporate any degree of gradualism to limit the rate shock to residential customers. In addition, CUB/CCSAO maintain that Mr. Luth did not consider the effect that his rate design would have on residential end users who use either significantly more than or significantly less than the average usage for each rate class.

CUB/CCSAO recommended that once the Commission determines the appropriate revenue requirement, that Nicor's proposed rate design should be adjusted based on a very well defined set of objectives. CUB/CCSAO recommended that the interclass allocation proposed by the Company should be preserved, at least as it applies to residential consumers. Further, the Commission should keep the second block and tail block rates for Rate 1 at the levels proposed by the Company and allocate the remaining increase between the customer charges and the first block rates, utilizing the approved billing determinants. These changes will maintain consumption efficiency incentives embedded within Nicor's proposal, while preserving gradualism in the move towards a flat-rated demand charge. CUB/CCSAO proposed this mechanism to preserve gradualism in the rate design in order to reduce the rate shock that could occur among customers with different usage levels, i.e. space heat customers vs. cooking gas customers.

Commission Analysis and Conclusion

Nicor proposed that Rate 1 consist of a fixed monthly customer charge, the gas cost determined in accordance with Rider 6, and a three-block declining rate structure for distribution charges. The Commission accepts this general structure. The alternate design proposed by Staff replaced the three-block declining distribution rate with a nearly flat two block distribution rate. The Commission concurs with the Company that an essentially flat distribution rate would increase the weather sensitivity of Rate 1 customers. Staff points out that the commodity cost of gas poses a much larger potential for weather sensitivity and other price spikes. Even so, the Commission does not believe that a rate design that unnecessarily enhances weather sensitivity should be adopted.

Nicor proposes to cap the increase in the flat monthly customer charge at 40%, raising it from \$6.00 per month to \$8.40 per month. The Company asserts that its proposal will allow it to recover more of its fixed costs in the flat monthly charge, while moderating the impact of the rate increase. Vanguard contests the cap on the Rate 1 customer charge, urging that only cost causation should be considered. The Commission rejects Vanguard's argument, finding it consistent with the arguments made against A&P methodology in the ECOSS.

The Commission concurs with the AG that the Company failed to justify its forecast decrease of 17,937,000 therms. The Company contends that the AG's position is unsupported, but it fails to state why the analysis is incorrect. Accordingly, the Commission rejects Nicor's estimate of test year residential sales of 2,256,096,000 therms, and accepts the AG's estimate of 2,301,985,000 therms.

The Commission accepts Nicor's proposed ~~customer charge of \$8.40 and three-block structure and proposed second block and tail block charges.~~ The rates for the customer charge and first block shall be set by allocating the remaining increase equally between the first block and customer charge using the approved billing determinants. ~~three block structure shall be set according to the ECOSS adopted *supra*. Within the results of the ECOSS, the Commission finds that declining block pricing for the latter rate blocks is appropriate. The first block rates should not be increased from the amounts originally proposed by the Company, however, unless an increase to the first block is necessary to avoid an essentially flat rate structure.~~

6. COMFORT GUARD

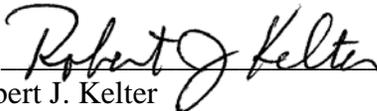
In its Initial and Reply Briefs, CUB/CCSAO argued that the Commission should reduce Nicor's revenue requirement to include revenues earned through Nicor Services' offering of Comfort Guard and HVAC services. The Proposed Order did not address revenues from Comfort Guard. CUB/CCSAO continue to believe that the discovery and cross-examination related to Nicor's direct testimony on the Comfort Guard issue should have been admitted, as it related directly to Nicor's direct testimony. As such, CUB/CCSAO continue to believe that the Commission should reduce Nicor's revenue requirement consistent with the methodology set forth in CUB/CCSAO's Reply Brief.

CONCLUSION

WHEREFORE, for all of the foregoing reasons, the Citizens Utility Board and the Cook County State's Attorney's Office respectfully request the Commission to adopt the changes discussed in this Brief on Exceptions and detailed in the attached order.

Respectfully submitted,

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