



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

October 6, 2010

Russ M. Strobel
Chairman, President and Chief Executive Officer
Nicor Inc.
1844 Ferry Road
Naperville, Illinois 60563-9600

Re: Nicor Inc.
Form 10-K for the Fiscal Year Ended December 31, 2009
Filed February 24, 2010
Definitive Proxy Statement on Schedule 14A
Filed March 10, 2010
File No. 001-07297

Dear Mr. Strobel:

We have reviewed your letter dated September 20, 2010 in response to our comment letter dated August 23, 2010 and have the following comments. In our comments, we may ask you to provide us with information so we may better understand your disclosure.

You should comply with the comments in all future filings, as applicable. Please confirm in writing that you will do so, and also explain to us in sufficient detail for an understanding of the disclosure how you intend to comply by providing us with your proposed revisions.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2009

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 18

Financial Condition and Liquidity, page 27

1. We note your response to comment four in our letter dated August 23, 2010. Please also briefly provide the facts relied upon to make the 4(2) exemption available. Please see Item 701(d) of Regulation S-K.

Definitive Proxy Statement on Schedule 14A filed March 10, 2010

Compensation Discussion and Analysis, page 15

Setting of Compensation, page 17

2. We note your response to comment 13 in our letter dated August 23, 2010. Based on your statement that “[t]his data is used in order to determine the competitive market information used to establish the total target compensation,” it appears that your use of this data goes beyond review or consideration of such information for a more general purpose and rather, constitutes benchmarking. We note your indication that your indication that the companies contained in the surveys and their specific underlying data were not disclosed to Nicor, however, that does not impact whether or not you benchmarked any element of your compensation; it simply means that you were not aware of the underlying components of the benchmark you utilized. Accordingly, please clearly state, if true, that you neither review nor know the individual company data underlying the aggregate data. Please see Item 402(b)(2)(xiv) of Regulation S-K and Question 118.05 of our Regulation S-K Compliance and Disclosure Interpretations located at our web-site, www.sec.gov.

Please contact Angie Kim, Staff Attorney, at (202) 551-3535, or Mara Ransom, Legal Branch Chief, (202) 551-3264 or me at (202) 551-3720 with any questions.

Sincerely,

H. Christopher Owings
Assistant Director

cc: Neil J. Maloney