



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

April 21, 2008

By U.S. mail and facsimile to (704) 362-4208

Mr. Terry S. Lisenby, Chief Financial Officer, Treasurer and Executive Vice President
Nucor Corporation
1915 Rexford Road
Charlotte, NC 28211

RE: Nucor Corporation
Form 10-K for the fiscal year ended December 31, 2007
Filed February 27, 2008

Definitive Proxy Statement on Schedule 14A filed March 26, 2008
File No. 1-4119

Dear Mr. Lisenby:

We have reviewed your filings and have the following comments. Where indicated, we think you should revise your disclosures in future filings in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the year ended December 31, 2007

Management's Discussion and Analysis, page 22

1. Please expand your discussion of net sales to explain the underlying reasons for the decrease in steel production in the steel mills segment in 2007. Although the decrease in 2007 was only 1%, steel shipments to outside customers increased significantly every year from 1998 to 2006. Describe any known trends or events that you expect to have a material impact on future operations.

2. In your discussion of cost of products sold, you mention the 13% increase in the average cost of scrap and scrap substitutes used in 2007 and you disclose a raw material surcharge implemented in 2004 has allowed you to maintain operating margins and meet your commitments to customers in spite of highly volatile scrap and scrap substitute costs. Since scrap is your largest single cost, please discuss the underlying factors driving the cost of scrap, including both global economic factors and factors specific to your supply chain. Explain how the 2004 raw material surcharge works and describe the factors affecting your ability to increase prices to compensate for increased scrap costs. Describe any significant limitations on your ability to increase prices, including the timing of price increases, and the impact it may have on your operations. Describe any known trends or events that you expect to have a material impact on the relationship of scrap costs to revenues.
3. Your discussion of gross margin on page 24 currently focuses on pre-operating and start-up costs. While this disclosure regarding the effect of certain facilities and major projects is useful, the costs represent 2% of both your gross margin and the change in gross margin from the prior year. Please consider revising this section to focus on the key factors affecting gross margin. While the underlying factors may have been addressed in your discussion of changes in net sales and cost of products sold, a discussion summarizing how these factors affected the relationship of costs to revenues would be useful to investors.

Liquidity and Capital Resources, page 27

4. We note that accounts receivable, net and inventories both increased at a faster rate than sales during 2007. In future filings, please explain in MD&A the reason(s) therefor. Also in future filings, please quantify the accounts receivable turnover and inventory turnover for the periods presented and explain material variances therein.

Note 2 – Summary of Significant Accounting Policies, page 43

5. On page 31, you disclose LIFO is used to measure some inventories and FIFO is used for other inventories. In Note 6, you disclose 46% and 63% of total inventories as of December 31, 2007 and 2006, were valued using LIFO. Please tell us specifically which items are measured using LIFO and FIFO. Please tell us why you have not disclosed this in the summary of significant accounting policies in your footnotes. Given the significance of raw materials prices to your business and the impact of your selected cost method on reported earnings, it appears to be useful information for investors. If not apparent, explain the reason for the decrease in LIFO inventory.

Definitive Proxy Statement filed March 26, 2008

Election of Directors, page 4

6. Describe briefly in future filings the business experience during the past five years of Mr. Harvey B. Gantt and Dr. James D. Hlavacek. Other than the year in which Mr. Gantt and Dr. Hlavacek became directors of Nucor, the disclosure does not indicate when their listed business experience began or ended. See Item 401(e)(1) of Regulation S-K.

Executive Compensation, Components of Compensation, page 18

7. Your disclosure indicates that you benchmark total compensation and base salary levels against industrial and material companies of a similar size, and that you use the Comparator Peer Groups to benchmark financial performance, but not compensation. Please clarify for us, with a view toward disclosure in future filings, whether the industrial and material companies are the same as the companies in the Comparator Peer Groups. If not, please discuss how these groups of companies are different, why you choose to use different groups of companies for purposes of reviewing total compensation and setting base compensation and setting financial performance targets. Also discuss how companies in each group are selected, including whether Pearl Meyer & Partners or other compensation consultants assist in selecting the industrial and material companies of similar size, and disclose the companies that you use as benchmarks for total compensation and base salary. Please provide us an example of clarifying language you would propose to include in your future filings.

* * * *

Please respond to these comments by providing the supplemental information requested within ten business days or tell us when you will provide us with a response. Please provide us with a supplemental response that addresses each of our comments. Please file your supplemental response on EDGAR as a correspondence file. We may raise additional comments after we review your responses.

To expedite our review, you may wish to provide complete packages to each of the persons named below. Each package should include a copy of your response letter and any supplemental information.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they provided all information investors require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Mr. Terry S. Lisenby
Nucor Corporation
April 21, 2008
Page 4

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in their filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Jenn Do, Staff Accountant, at (202) 551-3743, or me at (202) 551-3355 if you have questions regarding comments on the financial statements and related matters. Please contact Ed Kelly at (202) 551-3728 or, in his absence, Pamela Long at (202) 551-3765, with any other questions.

Sincerely,

Terence O'Brien
Branch Chief