



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

May 15, 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
Form 10-Q for the period ended March 31, 2008**

File No. 1-4119

Dear Mr. Lisenby:

We have reviewed your response letter dated May 8, 2008 and have the following additional comments. If you disagree, we will consider your explanation as to why our comment is inapplicable. 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.

Form 10-Q for the period ended March 31, 2008

3. Inventories, page 7

1. We have read your response to comment 5 in our letter dated April 21, 2008. You state, "Most inventories held by the parent company, Nucor Corporation, and Nucor-Yamato Steel Company are valued using the LIFO method of accounting." Please provide us with a more precise description of the amount of inventories held by the parent company and Nucor-Yamato Steel that are valued using LIFO vs. FIFO. If a significant portion of these inventories are valued using FIFO, please tell us the basis for applying the two different methods since you state the decision is based on the legal entity holding the inventory. Also, please tell us why you have not provided disclosure in the summary of significant accounting policies in your footnotes clearly explaining what inventory items are measured using LIFO and FIFO.

Management's Discussion and Analysis, page 17

2. We have read your response to comment 1 in our letter dated April 21, 2008. You state herein that a shift from outside sales tons to inside sales tons was caused by the March 2007 acquisition of Harris Steel, and that if you continue to acquire downstream businesses, the percentage of your steel production sold to inside customers may continue to increase. Please provide an expanded discussion of the reasons for the slight decrease in steel shipments to outside customers in 2007 and the first quarter of 2008, when steel shipments to outside customers increased significantly every year from 1998 to 2006. Provide a clearer explanation of the relationship between the acquisition of Harris Steel and the change in the amount of shipments to outside customers and a discussion of other factors underlying this change. Explain the "shift from outside sales tons to inside sales tons" in more detail. We note the amount of steel mills segment production sold to non-affiliated customers remained constant at 92% in 2006 and 2007. Clarify who would constitute an inside customer, and the impact of such increased sales on your overall net sales. Tell us whether you expect the percentage decrease in outside sales will be greater in future periods, and describe any other known trends you expect to have a material impact on future operations.

3. We note the expanded disclosure provided in response to our prior comment 2. It appears a more detailed discussion of the mechanics of the raw materials surcharge would be useful information for investors. On page 2 of the Form 10-K, you state you "successfully implemented a raw material surcharge in 2004," which "helped offset the impact of significantly more volatile scrap prices." In your Form 10-Q you state, "we believe the surcharge mechanism, which our customers understand is a necessary response by us to the market forces of supply and demand for our raw materials, continues to be an effective means of maintaining our margins." Please clarify whether you are discussing a specific term in your contracts with customers or a method for adjusting prices on new customer orders. Explain the contract term or method in more detail. Also, describe any significant limitations on your ability to increase prices to compensate for increased scrap costs, including the impact on your prices of global competition in the steel industry and the availability of competitive substitutes. Consider providing a discussion of metal spread, including how it compares to historic levels, whether you believe the current levels can be maintained, and any trends or events you expect to have a material impact on metal spread and your profit margins.

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4. We have read your response to comment 3 in our letter dated April 21, 2008. You state that the decrease in your gross margin percentage was primarily due to “the escalating prices of raw materials, including scrap and energy, and the increased LIFO charge”, as well as “DJJ’s business of collecting and processing ferrous and non-ferrous materials for resale typically operates at lower margins than Nucor has historically experienced.” In future filings, please quantify the effects of the factors you identify on revenues and gross margins to the extent material. Refer to Item 303(a)(3)(ii) of Regulation S-K.

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As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested supplemental information. Detailed response letters greatly facilitate our review. Please file your response letter on EDGAR. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Jenn Do at (202) 551-3743, or me at (202) 551-3355 if you have questions regarding these comments.

Sincerely,

Terence O’Brien
Branch Chief