

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549-7010

January 28, 2010

Room 4631

Ronald A. Ballschmiede Chief Financial Officer Chicago Bridge & Iron Company N.V. 2103 Research Forest Drive The Woodlands, TX 77380

Re: Chicago Bridge & Iron Company N.V.

Form 10-K for Fiscal Year Ended December 31, 2008

Definitive Proxy filed March 25, 2009

File No. 001-12815

Dear Mr. Ballschmiede:

We have reviewed your response dated December 23, 2009 and have the following comments. Where indicated, we think you should revise future filings in response to these comments. If you disagree, we will consider your explanation as to why our comments are 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 information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Form 10-K for the year ended December 31, 2008

Controls and Procedures, page 72

1. We note the description of the definition of disclosure controls and procedures. This description appears to be based on the definition of disclosure controls and procedures set forth in Rules 13a-15(e) and 15d-15(e) under the Exchange Act. As described, however, this description does not fully conform to the definition set forth in those rules. In this regard, we note that the description does not indicate that the disclosure controls and procedures are designed to ensure that information is accumulated and communicated to management, including the principal executive and financial officers, as appropriate to allow timely decisions regarding required disclosure. Alternatively, you may conclude that your disclosure controls and procedures were "effective" or "ineffective" whichever the case may be without defining them. See Item 307 of Regulation S-K.

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Exhibit Index, page 80

2. It appears that you have omitted the schedules and exhibits referenced in exhibits 10.16, 10.21, 10.22, 10.23 and 10.26. Please re-file these exhibits with your next Securities Exchange Act of 1934 filing. See Item 601(b)(10) of Regulation S-K.

Certifications, Exhibits 31.1 and 31.2

3. We note that you inserted the term "we" in paragraph 4. In future filings, please file the certifications exactly as set forth in Item 601(b)(31)(i) of Regulation S-K.

Definitive Proxy Statement

Compensation Objectives, Process and Peer Group, page 13

- 4. We note that you disclose that you target base salary and annual incentive compensation at the median level and long-term incentive compensation at the 60th percentile against peer companies for your named executive officers. Please indicate where each named executive officer's actual compensation with respect to these forms of compensation with respect to the targeted range, and explain your reasons for paying any amount outside such range.
- 5. Describe how you utilized studies of internal pay equity to structure your compensation programs and explain how the results of this analysis impacted or influenced specific compensation decisions in 2008.

Base Salary, page 20

6. In future filings, to the extent your base salary and annual and long-term incentive programs are correlated with the achievement of certain individual objectives and performance factors, please discuss the specific items of individual performance the O&C Committee used to determine payments. Please see Item 402(b)(2)(vii) of Regulation S-K.

Annual Incentive Compensation, page 20

7. We note that annual incentive compensation payouts are based on actual performance compared to pre-established company goals. Please clearly identify all specific items of corporate performance that are taken into account in setting compensation policies and making compensation decisions. This includes the performance measures in backlog, free cash flow, ethics, and safety that are identified on page 20. Disclose all previously established goals and discuss how the compensation awarded reflects those goals. If you believe that disclosure of such information would result in competitive harm such that the information

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could be excluded under Instruction 4 to Item 402(b) of Regulation S-K, please provide us with a detailed explanation supporting your conclusion. To the extent that it is appropriate to omit specific targets or performance objectives, you are required to provide appropriate disclosure pursuant to Instruction 4 to Item 402(b) of Regulation S-K. In discussing how difficult or likely it will be to achieve the target levels or other factors, you should provide as much detail as necessary without disclosing information that poses a reasonable risk of competitive harm. Refer generally to Question 118.04 of the Regulation S-K Compliance and Disclosure Interpretations.

8. Please explain the reasons why you decided to pay annual incentive compensation notwithstanding the fact that you did not achieve the EPS goals. Clarify the process by which you determine that you will make payouts when one or all of the applicable performance objectives are not met. Explain whether some performance measures are given precedence when making specific compensation decisions. Describe how you implemented the policies disclosed on the bottom of page 25 in 2008 to achieve the payouts recorded in the Non-Equity Incentive Plan Compensation column of your Summary Compensation Table. Please understand that we expect you to provide a materially complete description of the correlation between performance under the Annual Incentive Plan and the payouts actually made to each of your named executive officers in 2008. For each named executive officer state the factors that you considered in deriving the payouts awarded for each component of compensation and provide substantive analysis and insight into why the Committee determined that the levels of compensation were appropriate in light of the factors considered.

Long-Term Incentives, page 21

- 9. Please disclose the specific performance objectives, the actual results achieved, and how you derived the payouts associated with this element of compensation based on performance or non-performance of the pertinent performance objectives. Please refer to Item 402(b)(v) of Regulation S-K.
- 10. Please provide a complete analytical discussion of the factors the Committee considered in determining the restricted stock unit awards made on February 22, 2008 and why the Committee considered the payout appropriate based on the factors it considered.

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You may direct questions to Sherry Haywood, Attorney, at (202) 551-3345 or Pam Long, Associate Director, at (202)551-3765.

Sincerely,

Terence O'Brien Accounting Branch Chief