

May 13, 2010

Via EDGAR

Securities and Exchange Commission
100 F Street, NE
Mailbox 3030
Washington, DC 20549-6010
Attn: Lynn Dicker

**Re: SPX Corporation
Form 10-K for the year ended December 31, 2009
Filed February 26, 2010
File No. 0-06948**

Dear Ms. Dicker:

This letter sets forth the responses of SPX Corporation (“we” or “our”) to comments on the above-referenced filing provided by the Securities and Exchange Commission (“Commission”) by letter dated April 29, 2010.

The Commission’s comments are restated below in bold type and, in each case, are followed by our response.

Note (9) — Investment in Joint Venture, page 72

1. We note your joint venture, EGS, with Emerson Electric Co., whereby you hold a 44.5% interest and account for the investment under the equity method of accounting. Additionally, we note that you recognized \$28 million of equity earnings in EGS for 2009. It appears your investment in EGS meets the significance test for pre-tax income at a greater than 20% level for 2009 and that you are required to provide historical audited financial statements required by Rule 3-09 of Regulation S-X for EGS. Please provide us with your significance tests as set forth under Rule 1-02(w) related to your investment in EGS and tell us how you have considered the requirements of Rule 3-09 of Regulation S-X in connection with your equity method investments.

Response

In connection with the preparation of our annual consolidated financial statements and in accordance with Rule 3-09 of Regulation S-X, we evaluate each of our equity method investments, including our 44.5% interest in EGS Electrical Group, LLC (“EGS”), to determine whether we need to include, with our annual Form 10-K filing, separate historical audited financial statements for any of these investees. In performing our evaluations, we apply the significance tests of Rule 1-02(w) of Regulation S-X, substituting a 20% threshold for 10% as required by Rule 3-09. For

the year ended December 31, 2009, none of our equity method investments exceeded the 20% thresholds using the Rule 1-02(w) tests and, thus, we concluded that none of these investments were significant as defined under Rule 3-09. In the aggregate, all our equity method investments, other than our investment in EGS, are immaterial to our consolidated financial statements. Summarized below are our significance tests, as set forth in Rule 1-02(w), related to our investment in EGS for the year ended December 31, 2009 (\$’s in millions):

1) Investment Test

SPX’s Investment in and Advances to EGS as of December 31, 2009	<u>\$ 56.5</u>	(Per Footnote 9 of SPX’s 2009 Form 10-K)
SPX’s Total Assets as of December 31, 2009	<u>\$ 5,724.4</u>	(Per SPX’s 2009 Form 10-K)
SPX’s Investment in and Advances to EGS as a Percentage of SPX’s Total Assets	<u>1.0%</u>	
Meet or Exceed the 20% Threshold	No	

2) Asset Test - Not required under Rule 3-09 since we account for EGS under the equity method and own less than 50% of the entity.

3) Pretax Income Test

SPX’s Equity Earnings in EGS for the Year Ended December 31, 2009	<u>\$ 28.0</u>	(Per Footnote 9 of SPX’s 2009 Form 10-K)
SPX’s Share of EGS’ Income Tax Expense for the Year Ended December 31, 2009 (\$6.9 * x 44.5%)	<u>3.1</u>	
SPX’s Share of EGS’ Pretax Income	<u>\$ 31.1</u>	
SPX’s Average Pretax Income - 2005 Through 2009	<u>\$ 244.4**</u>	
SPX’s Share of EGS’ Pretax Income as a Percentage of SPX’s Average Pretax Income	<u>12.7%</u>	
Meet or Exceed the 20% Threshold	No	

* Represents the amount of income tax expense per EGS' 2009 audited financial statements.

** SPX's pretax income from continuing operations, exclusive of amounts attributable to noncontrolling interests, ("pretax income") totaled \$92.7 for the year ended December 31, 2009. As permitted by Rule 3-09, we used the average pretax income for the last five years, since our pretax income for the year ended December 31, 2009 was at least 10% lower than the average pretax income for the last five years as summarized below:

2

	Pretax Income	Less: Pretax Income(Loss) Noncontrolling Interest	Pretax Income SPX Common Shareholders
Year Ended December 31, 2005	\$ 88.6***	\$ (0.2)	\$ 88.8
Year Ended December 31, 2006	264.2***	(0.9)	265.1
Year Ended December 31, 2007	374.9***	0.6	374.3
Year Ended December 31, 2008	411.3***	10.0	401.3
Year Ended December 31, 2009	95.4***	2.7	92.7
			1,222.2
			5.0
SPX's Average Annual Pretax Income - 2005 to 2009			\$ 244.4
SPX's Pretax Income for the Year Ended December 31, 2009			\$ 92.7
SPX's Pretax Income for the Year Ended December 31, 2009 as a Percentage of SPX's Average Annual Pretax Income - 2005 to 2009			37.9% (2009 is 62.1% lower than average for last five years)

*** Amount per Item 6 of SPX's 2009 Form 10-K.

Exhibit 10.13

2. We note that the credit agreement dated September 21, 2007, filed as exhibit 10.1 to your Form 8-K filed September 27, 2007, does not appear to include all of the schedules to the agreement. Please explain why these attachments were not filed pursuant to Item 601(b)(10) of Regulation S-K, or refile the agreement with all attachments.

Response

We will refile the agreement with all schedules as an exhibit to our Quarterly Report on Form 10-Q for the period ending July 3, 2010.

In connection with this response, we acknowledge the following:

- The company is responsible for the adequacy and accuracy of the disclosure in the filing;
- 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

3

- 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.

If you would like additional information or desire to discuss our responses to your comments, please contact the undersigned via telephone at (704) 752-4455 or via e-mail at patrick.oleary@spx.com.

Very truly yours,

/s/ Patrick J. O'Leary
Patrick J. O'Leary
Executive Vice President
and Chief Financial Officer

cc: David Burton
Staff Accountant

Louis Rambo
Staff Attorney

Mary Beth Breslin
Legal Reviewer

Kevin L. Vaughn
Accounting Branch Chief