

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-4628

September 27, 2010

Mr. David H. Welch President and Chief Executive Officer Stone Energy Corporation 625 E. Kaliste Saloom Road Lafayette, Louisiana 70508

Re: Stone Energy Corporation

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

Filed February 25, 2010

Response letter dated July 29, 2010

File No. 001-12074

Dear Mr. Welch:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, 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 or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and 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

Properties, page 16

1. We understand from your response to prior comment 4 that you intend to include both tables and narratives in future filings to report changes in your estimates of undeveloped reserves. While the incremental disclosures that you propose should assist readers in understanding changes in your reserve estimates, we are presently seeking an explanation of your rationale in claiming the undeveloped reserves that you reported as of year-end. We would like to understand your justification for the development schedule necessary to meet the criteria in Rule 4-10(a)(31)(ii) of

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Regulation S-X for claiming those quantities as reserves, given that you have not recently achieved the implicit pace of development for these or other properties.

Please submit details of your development plans for these properties, including a description of the approval and adoption process, the level of your commitment to drill all of the properties within five years, current status of these plans and any uncertainties that may hinder progress. We reissue prior comment 4.

Financial Statements

Note 18 – Oil and Gas Reserve Information, page F-29

2. We note that you have not complied with prior comment 6 concerning the need to include disclosures to explain significant changes in your reserves to comply with FASB ASC paragraph 932-235-50-5. Please include disclosures along with the reserve tables to address significant changes. We will not object if you wish to cross reference other sections where further details are presented. However, the disclosures along with the reserve tables should include the salient details.

Closing Comments

You may contact Craig Arakawa at (202) 551-3650 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3686 with any other questions.

Sincerely,

Karl Hiller Branch Chief