1. Does the paper present the selected problem/system/phenomenon clearly and concisely in the Introduction?  
   The brief section presenting the need for hydrogen fixation simultaneously drew my attention and created a reason to study nitrogenase. The opening remarks gave much needed background on the structure of nitrogenase and a current crystal structure of the cofactor before diving into the historical treatment. The paper clearly states that our historical understanding of the electronic structure of FeMo-co will be described.

2. Does the Method section summarize the details of the reviewed/presented/employed experimental techniques and theoretical methods?  
   Clear and concise descriptions of all the techniques and methods used in this study were presented. Most of these methods were described in class and it was assumed the audience was fairly familiar with the remaining methods, so only a brief reminder was necessary.

3. Were the conclusions clearly presented and supported by the presented Results, Analysis, and Discussion sections?  
   This paper summarizes a huge body of work in a directed and focused manner, concentrating on only a few key features from each electronic structure study. The conclusions section builds off the 30 years of FeMo-co research to give a glimpse at current problems. It would be interesting to have the total charge on FeMo-co and the number of ferric vs. ferrous developments revisited in the conclusions.

4. Are the references of the independent study well incorporated in the text and used to support or contrast statements/observations?  
   Even though a large number of resources were used in this paper none were thrown in needlessly they were cleanly and accurately incorporated into the text.

5. Was the independent study carefully prepared regarding text formatting, figures, and tables?  
   Overall the formatting and figures made the paper straightforward to read. A few minor typos and changes in superscript, subscript, and dash use lead to some initial confusion. An example would be the sites initially referred to as B1 and B2, but were later written as B\(^1\) and B\(^2\), but these few typos did not make the material unapproachable by any means.

   The figures were indispensable for understanding this paper and no tables were necessary. Additional descriptions of what the figures represent would have made them more helpful. In particular, Figure 1 would have been less ambiguous if a brief description of what the colors correspond to was included.