



Shell Oil Products US
Martinez Refinery
P.O. Box 711
Martinez, CA 94553-0071

December 31, 2019

Subject: Response to University of California, Davis comments regarding the application of the Shell Martinez Refinery Cat Gas Plant Energy Reduction Project under the RICP provisions of the LCFS Program

Dear CARB LCFS Branch Staff:

Thank you for the opportunity to respond to the comment letter that was provided by the University of California, Davis regarding Shell's application under the LCFS Refinery Investment Credit Program ("RICP") for its Cat Gas Plant Energy Reduction Project. As you know, finding the right balance for disclosure of process information into the public domain is challenging, as is evidenced by many types of applications to CARB under various aspects of the LCFS program being heavily redacted. This redaction is not only due to the information being competitively sensitive confidential business information ("CBI"), but under certain scenarios could be construed as anti-competitive even being placed in the public domain. These are both lenses through which we must look when deciding what information to redact. Further, as you also know, the information that was redacted publicly was fully supplied to staff at CARB to allow a robust evaluation of our RICP application. We received and thoroughly responded to questions from staff to allow them to be confident that the methodology proposed in the application was robust. We stand behind the level of redaction that we provided to CARB for the public version as appropriate but appreciate the feedback regarding this balance. As a new feature in CARB's LCFS program, this is not unexpected.

Regarding the concern about the sufficiency of the application's system diagram, CARB will be aware in our application to them that the valve locations and steam flows in the wet gas compressor have been provided but were redacted as CBI. These are provided in an equipment-specific diagram in the section on steam reductions at the J-125 wet gas compressor. We will review if there is a way that we can illuminate these details further without unnecessarily compromising any CBI that must remain outside the public domain.

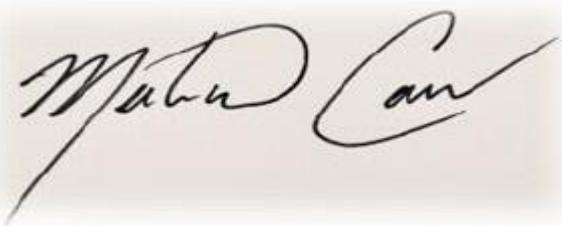
Regarding the concern about potential inadequacy of the simplified process flow, again CARB will be aware that this information was provided to them in detail in the unredacted version. Specifically, a fully detailed process flow diagram visually highlighting the changes with specific callouts on the side is included. We will also review this diagram to ascertain if there is a way to provide any further detail without compromising CBI.

Regarding the system boundary, it is important to recognize that the 160# steam header has hundreds of data points that represent discrete inputs and offtakes for this system. Fortunately, the RICP application process contemplates the need for a technical evaluation to be made to allow a robust system boundary to be drawn that is as simple, elegant and complete as possible. In this case, the energy balance for this project can be confidently and appropriately simplified by drawing this boundary around the cat cracker and cat gas plants, which is what was done for this application. This was done in the section on steam reduction at J-123 air expander, both in the application (though redacted in the public version) and in the staff summary.

Regarding the HSRG feedwater economizer, this is a new piece of equipment that replaced former air coolers from which all waste energy was exhausted as explained in the application section regarding the HRSG economizer. This new economizer does not supply all the additional energy input needed to maintain temperature; the energy input that is provided can be very accurately quantified on the water side and represents a real energy savings in this process that results from the significant investment made in this project. This accuracy is enhanced by the fact that the cooling water operates in a tight range throughout the year that varies by no more than 30 F.

We will be pleased to follow up with you on any of these details at your earliest convenience, inclusive on aligning on the extent to which any further detail in the RICP application can be placed in the public domain.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Carr", written in a cursive style on a light-colored background.

Michael Carr
Manager – USWC Policy and Business Coordination