

Email from Keith Faretra, RE: Revised Draft Letter
Response to PSCAA's Completeness Letter
(6/30/2017)

From: Faretra, Keith
Sent: Friday, June 30, 2017 8:24 AM PDT
To: Mullen, Thomas; Luebbe, Lorna
CC: Bill Steiner; Wood, Thomas; Hogan, Jim; Stobart, Matthew E; Schiller, Sandra; Eri Ottersburg; Mark Brunner
Subject: RE: Revised Draft Letter Response to PSCAA's Completeness Letter -- Attorney-Client Privileged Information

Perfect, thanks.

From: Mullen, Thomas [mailto:Thomas.Mullen@cbi.com]
Sent: Friday, June 30, 2017 8:24 AM
To: Faretra, Keith; Luebbe, Lorna
Cc: Bill Steiner; Wood, Thomas; Hogan, Jim; Stobart, Matthew E; Schiller, Sandra; Eri Ottersburg; Mark Brunner
Subject: RE: Revised Draft Letter Response to PSCAA's Completeness Letter -- Attorney-Client Privileged Information

Should suffice, I'd replace the word remove with reduce as a majority passes through to liquefaction.

"Additional design features were added to address possible variations in levels of ethane and propane in natural gas to meet the fuel requirements of the end user. Pretreatment changes were made to ~~remove~~*reduce* these constituents prior to methane liquefaction."

-Thomas

From: Faretra, Keith [mailto:keith.faretra@pse.com]
Sent: Friday, June 30, 2017 10:13 AM
To: Mullen, Thomas <Thomas.Mullen@cbi.com>; Luebbe, Lorna <lorna.luebbe@pse.com>
Cc: Bill Steiner <BSteiner@landauinc.com>; Wood, Thomas <tom.wood@stoel.com>; Hogan, Jim <jim.hogan@pse.com>; Stobart, Matthew E <Matt.Stobart@cbi.com>; Schiller, Sandra <Sandra.Schiller@CBI.com>; Eri Ottersburg <EOttersburg@landauinc.com>; Mark Brunner <mbrunner@landauinc.com>
Subject: RE: Revised Draft Letter Response to PSCAA's Completeness Letter -- Attorney-Client Privileged Information

Thomas, how's this?

"Additional design features were added to address possible variations in levels of ethane and propane in natural gas to meet the fuel requirements of the end user. Pretreatment changes were made to remove these constituents prior to methane liquefaction."

From: Mullen, Thomas [mailto:Thomas.Mullen@cbi.com]
Sent: Friday, June 30, 2017 7:38 AM
To: Luebbe, Lorna; Faretra, Keith
Cc: Bill Steiner; Wood, Thomas; Hogan, Jim; Stobart, Matthew E; Schiller, Sandra; Eri Ottersburg; Mark Brunner
Subject: RE: Revised Draft Letter Response to PSCAA's Completeness Letter -- Attorney-Client Privileged Information

One note regarding the second point in Table 2. The statement about removing ethane and propane prior to liquefaction being a requirement due to freezing concerns is not entirely accurate. The ethane and propane portions will not freeze during liquefaction. The materials of concern for freezing are C5+ and their solubility limits. However, that being said, the point of the additional design features to accommodate a more varied feed gas composition that includes greater concentrations of hydrocarbons other than methane (C2+) is to meet a fuel quality requirement for the end consumer of the LNG. That fuel quality standard is the driver for additional removal of heavy hydrocarbons and the subsequent increase in flaring rate. An outcropping of this and secondary driver is the potential for freezing of the heavier constituents.

If the quality driver is to be shielded away from, I'd suggest addressing the freezing as a potential increase in C5+ hydrocarbons in the pipeline feed.

-Thomas



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From: Luebbe, Lorna [<mailto:lorna.luebbe@pse.com>]
Sent: Friday, June 30, 2017 9:20 AM
To: Faretra, Keith <keith.faretra@pse.com>
Cc: Bill Steiner <BSteiner@landauinc.com>; Wood, Thomas <tom.wood@stoel.com>; Hogan, Jim <jjim.hogan@pse.com>; Stobart, Matthew E <Matt.Stobart@cbi.com>; Mullen, Thomas <Thomas.Mullen@cbi.com>; Schiller, Sandra <Sandra.Schiller@CBI.com>; Eri Ottersburg <EOttersburg@landauinc.com>; Mark Brunner <mbrunner@landauinc.com>
Subject: RE: Revised Draft Letter Response to PSCAA's Completeness Letter -- Attorney-Client Privileged Information

Great and by the way, MUCH APPRECIATED that everyone jumped on this. Getting this letter promptly to Ralph today will be an excellent step to show that we will be engaged and earnest. Thanks!

From: Faretra, Keith
Sent: Friday, June 30, 2017 7:15 AM
To: Luebbe, Lorna
Cc: Bill Steiner; Wood, Thomas; Hogan, Jim; Stobart, Matthew E; Mullen, Thomas; Schiller, Sandra; Eri

Ottersburg; Mark Brunner

Subject: Re: Revised Draft Letter Response to PSCAA's Completeness Letter -- Attorney-Client Privileged Information

Once we get comments from Tom I'll incorporate and will get this off to PSCAA. I'll also let Ralph know our letter will be delivered electronically today.

On Jun 30, 2017, at 6:50 AM, Luebbe, Lorna <lorna.luebbe@pse.com> wrote:

Letter looks great. I made some changes to address a wider audience than the PSCAA staff (we expect opposition groups to obtain all these letters and pour through them looking for sound bites).

Tom, if you have any more changes along these lines please add. I was trying to be light handed so we didn't lose credibility nor have the appearance of pandering.

Lorna

From: Bill Steiner [<mailto:BSteiner@landauinc.com>]

Sent: Thursday, June 29, 2017 6:01 PM

To: Wood, Thomas; Faretra, Keith

Cc: Hogan, Jim; Luebbe, Lorna; Stobart, Matthew E; Mullen, Thomas; Schiller, Sandra; Eri Ottersburg; Mark Brunner

Subject: Revised Draft Letter Response to PSCAA's Completeness Letter -- Attorney-Client Privileged Information

Thank you, again, for everyone's rapid responses/inputs today. A lot was accomplished. The attached draft letter is in very good shape now and ready for final review before Keith signs and sends it to PSCAA. All of today's edits are tracked on Tom's first draft for your convenience. As you can see, CBI's revised block flow diagram is also attached plus three tables that Mark Brunner prepared to present PTE emissions in response to PSCAA Question 2.

I will be tied up tomorrow morning and won't be receiving email until late afternoon. Please email Mark Brunner if you need further help with this letter. He will also advise if I need to jump on a call. I can also be reached directly by cell phone (below) if needed.

FYI, our discussion about circuit breakers (on PSE property next to the PDC) was very helpful. They are off the table for now. If they may need to be later it is comforting to know that we have enough info for a very quick response PSCAA brings the topic of GHGs up.

The following PSCAA topics need more work and will be addressed during the next two weeks:

- Documentation of sulfur inlet concentrations for the five flare gas scenarios (Question 7).
- Modeling updates.

Bill Steiner

Senior Principal, Environmental Compliance

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<2017 06-29 First response to June 22 2017 Info Request letter WESredraft-LL.docx>

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