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Mr. David Domagala
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Dear David,

I have reviewed the information that you sent me regarding proposed terms of a one-year sale of U.S. Gulf Coast crude oil to qualified refiners. Specifically, the MMS is interested in comments regarding the price formula included in that proposal. The following comments are based on my experience in the industry, a review of historical data and consultation with market sources.

The world-wide crude oil markets have been depressed in recent months due to an excess supply condition caused by a variety of factors. There has been some recent improvement as major exporting countries have reduced production in an effort to improve prices. While this has met with some success, there are additional efforts in progress to further reduce production. One of the effects of this over-supply condition is that the oil markets are in contango. That means that future barrels of oil are valued more highly than current barrels. This has contributed to the relative strength of the Cushing, OK market relative to other geographic locations in the U.S. because of the ability to store oil at that location and to deliver it in fulfillment of NYMEX futures contracts. Needless to say, this is a volatile situation that can and does change rapidly.

The proposed formula is:

X-5, X-4

The first two elements of the formula are a valid basis for valuing oil on a one-year term agreement in my opinion. Both elements have been reported reliably for several years and are frequently used by the industry for this purpose. These terms need to be specifically defined in the agreement including the dates that will be used for each monthly calculation, how weekends and holidays will be treated (postings apply to each calendar day while Platt's is only published on business days), deemed gravity and perhaps most importantly, a method for either party seek relief in the event an unforeseen condition changes the characteristics or availability of either of these data elements.

The third element, X-5, X-4, is in my opinion the most problematic element in the proposal. The Light Louisiana Sweet (LLS), Heavy Louisiana Sweet (HLS) and Eugene Island (EI) differentials are published each day in Platt's OilGram along with X-4, X-5 cited above X-5, X-4 assures that the crude price will not

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reflect market value for at least a portion if not the entire term of the agreement. This is particularly of concern to a seller (MMS) who might lock into a X-3, X-1 reflecting the market conditions noted above that are less favorable than those represented by the X-2, X-4

X-5, X-4

There are other aspects of the proposed agreements which can affect the economics of each of the parties involved. The analysis described above does not consider these items. As such, a range around these numbers would be a more appropriate description of market value.

As an aside, I understand that the specific crudes sold by the MMS are not physically deliverable to the refineries owned by the qualified purchasers. In a period of excess crude supplies, it would appear that this transaction may not be necessary. If the objective of the MMS is to aid some refiners by assuring them access to physical crude oil, it may be more appropriate to consider offering a call option on crude oil at market value to be exercised only when they specifically need the crude to obtain appropriate refinery supply. I would be pleased to discuss this concept or other alternatives at your convenience. Please call if there are any questions.

Sincerely,