Dustin Johnson, Chair
Steve Kolbeck, Vice Chair
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SOUTH DAKOTA
PUBLIC UTILITIES COMMISSION

500 East Capitol Avenue
Pierre, South Dakota 57501-5070
www.puc.sd.gov

Capitol Office
(605) 773-3201
1-866-757-6031 fax

Warehouse
(605) 773-5280
(605) 773-3225 fax

Consumer Hotline
1-800-332-1782

April 28, 2010

Ms. Patricia VanGerpen
SD Public Utilities Commission
500 E. Capitol Ave
Pierre, SD 57501

Re: HP09-001

Dear Ms. VanGerpen

On April 9, 2010, TransCanada Keystone Pipeline, LP (herein TransCanada) filed a limited request for reconsideration of specific items in the Commissions Final Decision and Order in this docket. Subsequent to the PUC's receipt of this filing, several comments by interveners and interested members of the public were submitted and placed in the docket. The Commission's Final Decision and Order in this docket was issued after many hours of public testimony and formal hearing proceedings. While the Commission's Order properly balanced competing interests within the available legal framework, Commission Staff (herein Staff) finds value in several clarifications requested by TransCanada.

Paragraph 16 - Construction Methods

TransCanada seeks clarity in paragraph 16(j) regarding the Commission's Order that "any" spill be reported to landowners. In seeking clarity, TransCanada attempts to connect spill volume with the definition of "spill" in other areas of the law. Staff appreciates the need for additional specificity regarding the definition of spill yet also understands the apprehension expressed by several landowners. Depending on the location and characteristics of the substance, a small (less than five gallon) spill could negatively affect a landowner. In such a case, the landowner reasonably wishes to know of any spill. With that said, Commission Staff has no reason to believe TransCanada would not voluntarily inform the landowner of such an accident.

Recognizing the benefits of clarity, yet the desire for knowledge regarding activity on private land, Staff suggests a compromise. Staff suggests a spill of any volume should be reported to the landowner if, in the opinion of the on-site environmental inspector, it could impact land use or productivity. Staff also believes the environmental inspector could establish guidelines below which it is relatively certain landowners are not impacted thus avoid unnecessary consultation.

Paragraph 20 – Sediment Control Practices

See attached material from Staff witness Ross Hargrove. In his memo, Mr. Hargrove explains further his intent and recommends a reworked condition. His recommendation requires, where appropriate, sediment curtains be installed along the edge of the right-of-way in place of the hay bales. His recommendation is based on construction diagram Detail #11 located in Keystones CMR plan. Detail #11 is also attached for reference.

Mr. Hargrove also noted construction diagram Detail #11 depicts the installation of hay bales along only one edge of the construction right of way. He assumes the omission may be an error as it is more effective to place the hay bales or sediment curtain, as applicable, along both edges of the right-of-way to contain the sediments within the work area. Mr. Hargrove stands by the reworded recommendation in the attached memo but also suggests, the underlined words below may be a prudent addition.

> *Keystone shall use floating sediment curtains to maintain sediments within the construction right of way in open waterbodies with no or low flow when the depth of non-flowing water exceeds the height of straw bales or silt fence installation. In such situations, the floating sediment curtains shall be installed as a substitute for straw bales or silt fence, along the edge of each side of the construction right-of-way as portrayed in Keystone's construction Detail #11 included in the Applicant's CMR Plan.*

Paragraph 22 – Construction across or near wetlands, waterbodies, or riparian areas

Paragraph 22(a)

Condition 22(a) limits the width of the construction right of way to 75 feet in non-cultivated wetlands. As TransCanada wrote, the US Army Corps of Engineers has regulatory jurisdiction of all waters of the United States. Much like the relationship we must establish with PHMSA regarding pipeline safety, regulatory oversight of waterbodies is a shared endeavor. Staff supports TransCanada's position and agrees we must defer to requirements imposed by the US Army Corps of Engineers in non-cultivated wetlands should they exist.

Paragraph 22(c)

Condition 22 (c) addresses crossings of streams greater than 30 feet. Condition 22(d) addresses the same issue, on the same type of stream crossing, yet requires something different. Staff agrees with TransCanada's assumption. It appears the "greater than" language in paragraph 22(c) was a typographical error and should read "up to."

Paragraph 22(e)

Condition 22(e) requires a 15-foot buffer for stream crossings. The buffer is intended to protect flowing streams. The condition provides no benefit, and instead adds construction burdens where dry stream beds exist. Staff agrees with TransCanada's suggestion the buffer condition should apply only to flowing stream crossings.

Paragraph 41 - Protection and mitigation efforts

The United States Department of State's preparation of the Environmental Impact Statement is part of a process designed to involve the public and gather the best available information, project-wide, in a single place. The Environmental Impact Statement along with the Biological Assessment prepared by the US Fish and Wildlife Service bind TransCanada regarding the protection of particular wildlife and natural resources. It is proper to reference, in the Commisson's Order, the protection and mitigation efforts required by those federal agencies. Staff recommends modification of this Condition consistent with TransCanada's request to incorporate those processes within our own.

Paragraph 43 – Cultural Resources

The first request made by TransCanada is merely a clarification. This condition dictates the company's action in the event of a protectable resource discovery. The condition as written by the Commission references the State Historical Preservation Office. In reality, however, the Department of State, not the state office, has authority to determine protectable resources. Staff recommends the Commission adopt TransCanada's suggested languge change as it will more accurately list the office with proper authorirty over cultural resources.

Paragraph 44 – Paleontological Resources

Generally, Staff supports the language suggested by TransCanada. The language does not detract from the protection currently in place and adds specificity.

While Staff recognizes the concern raised by Mr. Larson regarding paragraph (d) we did not intrepret it the same as Mr. Larson. Staff proceeded to confirm our understanding with Keystone. Paleontological resources are landowner property. The landowner can, potentially, benefit from such a discovery. The party to potentially benefit from a find should pay costs associated with the same. More specifically, it is reasonable to expect the landower to pay costs associated with the excavation and protection of the otherwise undiscovered resource. It is possible that if it were not for the Keystone project, the resource may not have been discovered. It reasonably follows then, in Staff's opinion the protection of that resource should come at some expense to the owner. The landowner's responsibility does not extend, however, to resulting issues the pipeline may face such as a reroute or other mitigation. Landowner expenses are restricted to his or her handling of the find. Just as it is a landowers right to excavate and benefit from the find, he may choose not to disturb it. As landowner property, it is his or her choice.

Paragraph 45 – Damage Liability

The condition in Paragraph 45 includes a provision addressing loss of value to paleontological resources damaged by construction. Staff appreciates the difficulty in determining "economic value" of a paleontological resource. Further, it has already been established that paleontological resources are personal property. It has also already been established TransCanada is responsible under other areas of law to make damaged landowners whole. Staff agrees, therefore, it is unnecessary to specifically address paleontologial resources separate from all other personal property. Staff agrees with the removal of this specific point from the Order as it will not affect the landowners ability to seek payment if he believes he is damaged in some way.

Sincerely,

Kara Semmler

Enc.
cc. service list

NATURAL RESOURCE GROUP

MEMO

TO:
Kara Semmler

COMPANY:
South Dakota Public Utilities Commission (PUC)

FROM:
Ross Hargrove

DATE:
April 27, 2010

RE:
Keystone XL Project - Floating Sediment Curtain Use

NOTES/COMMENTS:

In a recent motion, TransCanada Keystone Pipeline, LP (Keystone) disagreed with condition 20(a) of the PUC's Final Decision and Order for the Keystone XL Project, which requires the use of floating sediment curtains during installation of the Keystone XL pipeline within non-flowing waterbodies. This condition is related to written and oral testimony I provided as a PUC Staff witness during review of the project.

My concern prompting the recommendation that Keystone be required to use floating sediment curtains in non-flowing waterbodies was based on an analysis of the original route alignment and data provided by Keystone in its application to the PUC or in response to Staff data requests. In its initial application, Keystone identified 15 crossings of waterbodies as lakes or reservoirs. In its August 21, 2009 response to a Staff data request, Keystone indicated that the number of lake/reservoir crossings was reduced to six as a result of route refinement and field review of the pipeline corridor. Keystone identified the crossing lengths for these six lakes/reservoirs as ranging from less than 50 feet to 200 feet long. Review of aerial photos of the pipeline route indicated that some of these waterbodies were dry when the photo was taken (suggesting that they could potentially be dry at the time of construction).

In its application and responses to Staff data requests, Keystone proposed to install its pipeline across waterbody features with standing water at the time of construction in accordance with the Best Management Practices (BMPs) described in its Construction, Mitigation, and Reclamation Plan (CMR Plan), which was included with its application. The CMR Plan contains a typical drawing (Detail #11; Non-Flowing Waterbody – Open Cut Wet Crossing) depicting the BMPs to be implemented during open cut construction across non-flowing waterbodies. The typical drawing shows as a BMP the placement of hay bales along one edge of the right-of-way within a non-flowing waterbody.

In its motion, Keystone references sections 6.4 and 7.7 of its CMR Plan as addressing the appropriate use of sediment barriers. These sections of the CMR Plan describe the installation of sediment barriers across the right-of-way (i.e., perpendicular to the right-of-way) where the pipeline would cross wetlands and waterbodies. The purpose of the sediment barriers as described in these sections is to prevent the introduction of

sediments into wetlands and waterbodies from adjacent upslope areas during construction and restoration activities. Floating sediment curtains are not intended as a substitute for the sediment barriers described in sections 6.4 and 7.7 of the CMR Plan as they each serve distinct and separate purposes.

Floating sediment curtains are designed to reduce the spread of sediments suspended in the water column during construction activities within waterbodies. As required by the PUC's permit condition, floating sediment curtains would be installed along the edges of the construction right-of-way (i.e., parallel to the direction of the right-of-way) similar to Keystone's depiction of hay bales in Detail #11 to prevent the migration of suspended sediments beyond the limits of the construction right-of-way. The floating sediment curtains would be removed after enough time has elapsed to allow the suspended soil particles to fall out of suspension. The PUC's requirement for the use of floating sediment curtains is intended for waterbodies with depths that prevent the installation of straw bales or silt-fence as identified by Keystone on Detail #11 or would render such measures ineffective.

In its recent motion, Keystone argues that floating sediment curtains are used only within flowing streams. In fact, floating sediment curtains are ideal for installation within waterbodies with no or low flow. Further, they often have reduced effectiveness when placed in flowing water because pressure from the current can prevent proper installation or lead to a failure of the sediment curtain. Erosion or scouring of the stream/river bottom may also occur if a sediment curtain is installed across a waterbody perpendicular to the flow of the waterbody. The South Dakota Department of Transportation's *Erosion and Sediment Control* guide, dated 2006, provides several examples regarding the appropriate use of sediment curtains. None of these examples include the installation of a sediment curtain across the main channel of a flowing waterbody.

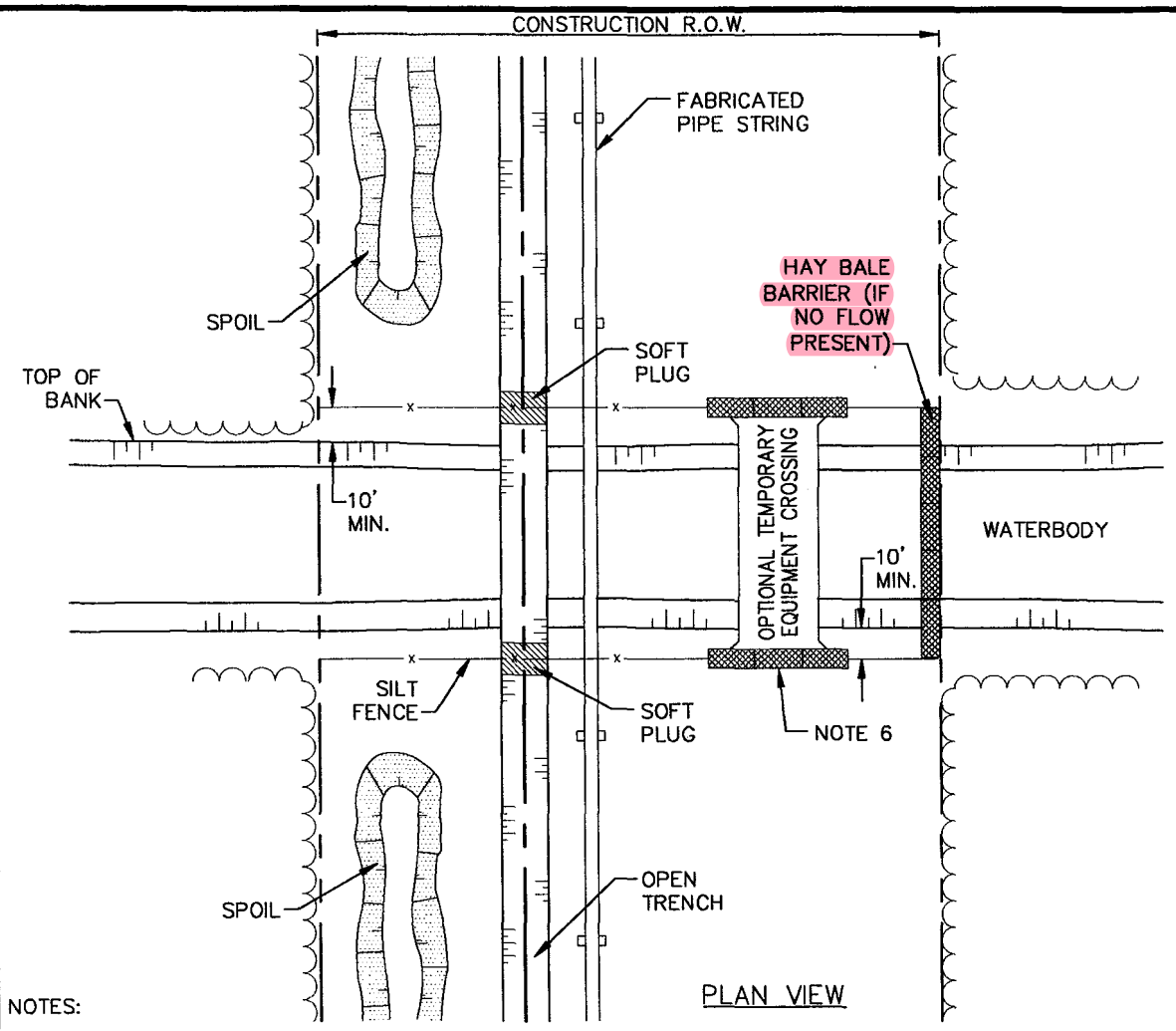
Keystone states that waterbodies will be crossed within 24 to 48 hours making in-stream devices unnecessary. This timing limitation is a common practice by the pipeline construction industry to reduce construction impacts (e.g., suspended sediments) during the installation of pipelines within flowing waterbodies. Limiting the duration of in-stream activities reduces the period during which a turbid water column is likely to be present at any one downstream location along a flowing waterbody, thus minimizing impacts on aquatic biota. Due in part to the difficulty of installing floating sediment curtains in flowing waterbodies, limiting the duration of construction activities within the waterbody is generally considered the most effective BMP to reduce impacts on downstream aquatic habitats during in stream excavation.

Turbidity resulting from in-water construction activities may persist in waterbodies with minimal flow well after the 24-48 hour construction period, depending on the composition of sediments disturbed by construction. Without proper containment, the suspended sediments may affect aquatic biota outside of the construction right-of-way. The use of floating sediment curtains along the edges of the in-water work area (in those instances where the depth of water would exceed the height of straw bales or silt fences as shown in Detail #11) would minimize potential impacts by containing most of the suspended

sediments within the approved construction right-of-way. Following the settling of the sediments from the water column, the curtains would be removed from the waterbody.

The intent of my recommendation for Keystone was for floating sediment curtains to be used at the crossings of lakes/reservoirs that cannot be avoided and where the depth of water exceeds the height of straw bales or silt fence that otherwise would be installed along the edges of the construction right-of-way within the waterbody as depicted in Detail #11. To provide more clarity, Permit Condition #20a could be modified as follows:

"Keystone shall use floating sediment curtains to maintain sediments within the construction right of way in open waterbodies with no or low flow when the depth of non-flowing water exceeds the height of straw bales or silt fence installation. In such situations, the floating sediment curtains shall be installed as a substitute for straw bales or silt fence, along the edge of the construction right of way as portrayed in Keystone's construction Detail #11 included in the Applicant's CMR Plan."



NOTES:

1. FLAG WETLAND BOUNDARIES PRIOR TO CLEARING.
2. NO REFUELING OF MOBILE EQUIPMENT IS ALLOWED WITHIN 100 FEET OF WETLAND. PLACE "NO FUELING" SIGN POSTS 100 FEET BACK FROM WETLAND BOUNDARY. REFUEL STATIONARY EQUIPMENT AS PER THE PROJECT'S SPILL PREVENTION PROCEDURES.
3. INSTALL TEMPORARY SLOPE BREAKER UPSLOPE WITHIN 100 FEET OF WETLAND BOUNDARY IF DIRECTED BY THE PROJECT.
4. INSTALL TIMBER MATS/RIPRAP THROUGH ENTIRE WETLAND AREA. EQUIPMENT NECESSARY FOR RIGHT-OF-WAY CLEARING MAY MAKE ONE (1) PASS THROUGH THE WETLAND BEFORE MATS ARE INSTALLED.
5. AVOID ADJACENT WETLANDS. INSTALL SEDIMENT BARRIERS (STRAW BALES AND/OR SILT FENCE) AT DOWNSLOPE EDGE OF RIGHT-OF-WAY AND ALONG WETLAND EDGE AS REQUIRED.
6. RESTRICT ROOT GRUBBING TO ONLY THAT AREA OVER THE DITCHLINE AND DITCH SPOIL AREAS AND REMOVED FROM WETLAND FOR DISPOSAL.
7. TOPSOIL STRIPPING SHALL NOT BE REQUIRED IN SATURATED SOIL CONDITIONS.
8. LEAVE HARD PLUGS AT EDGE OF WETLAND UNTIL JUST PRIOR TO TRENCHING.
9. PIPE SECTION MAY BE FABRICATED WITHIN THE WETLAND AND ADJACENT TO ALIGNMENT, OR IN STAGING AREA OUTSIDE THE WETLAND AND WALKED IN.
10. TRENCH THROUGH WETLAND.
11. LOWER-IN PIPE, INSTALL TRENCH PLUGS AT WETLAND EDGES AS REQUIRED AND BACKFILL IMMEDIATELY.
12. REMOVE TIMBER MATS OR PRE-FABRICATED MATS FROM WETLAND UPON COMPLETION.
13. RESTORE GRADE TO NEAR PRE-CONSTRUCTION TOPOGRAPHY, REPLACE TOPSOIL AND INSTALL PERMANENT EROSION CONTROL.

REVISIONS | 1 | Updated drawing notes

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TransCanada
In business to deliver
KEYSTONE XL PROJECT

PREPARED BY:
TROW ENGINEERING CONSULTANTS, INC.
7505 NW Tiffany Springs Pkwy., Suite 400
Northpointe Circle I
Kansas City, MO 64153
Phone: 1-816-801-7063
Fax: 1-816-801-7048
Trow

ORIGINATOR: JOE A. NELSON 9/08/08 (NAME / DATE)
CHECKED BY:
APPROVED BY:

DETAIL 11

FIA #	CHAINAGE:	DISCIPLINE #

TITLE: TYPICAL OPEN CUT WET CROSSING METHOD NON-FLOWING WATERBODY

SCALE	DWG No	REV
N.T.S.	XL-00-ML-7000-510	1

LAST PLOT DATE: Wed, 05 Nov 2008 - 4:45pm

CADD DRAWING: DO NOT MAKE MANUAL REVISIONS PLOTTED SIZE: ANSI A (8.5x11)