

BEFORE THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

DOCKET NO. HP07-001

IN THE MATTER OF THE APPLICATION OF TRANSCANADA KEYSTONE PIPELINE,
LP FOR A PERMIT UNDER THE SOUTH DAKOTA ENERGY CONVERSION AND
TRANSMISSION FACILITY ACT TO CONSTRUCT THE KEYSTONE PIPELINE PROJECT

Surrebuttal Testimony of Jenny Hudson on Behalf of the
Staff of the South Dakota Public Utilities Commission

November 28, 2007

1 **Q. Please State your name, business address, and occupation.**

2
3 A. My name is Jenny Hudson. My business address is 7135 Janes Avenue,
4 Woodridge, Illinois, 60517. I am employed as a Senior Project Manager by EN
5 Engineering, an engineering and consulting firm specializing in pipeline design
6 services for the oil and gas industry.
7

8 **Q. Did you provide written testimony in this proceeding?**

9
10 A. Yes.
11

12 **Q. In surrebuttal, to whose testimony are you responding?**

13
14 A. I am responding to the direct testimonies of Raymond and Lillian Anderson.
15

16 **Q. On page 1 of their direct testimony, the Andersons state that Keystone will**
17 **not comply with Title 49, Part 195.6 Unusual Sensitive Areas (USA's). Can**
18 **you please provide comment?**
19

20 A. TransCanada has addressed USAs in section 3.2 of "Appendix B Preliminary
21 Evaluation of Risk to High Consequence Areas". Per information in this
22 document, TransCanada has identified drinking water HCAs using the National
23 Pipeline Mapping System (NPMS). The United States Department of
24 Transportation (USDOT) and the Pipeline and Hazardous Materials Safety
25 Administration (PHMSA) gathered drinking water HCA information from public
26 agencies such as state drinking water agencies and the Environmental Protection
27 Agency.
28

29 As part of a preliminary evaluation, the process TransCanada has used to identify
30 USAs appears to be acceptable. Based upon the intent of §195.452, it is not
31 required for TransCanada to have identified every HCA at this time. However,
32 PHMSA does expect pipeline operators to have identified HCAs by the time the
33 pipeline begins operation.
34

35 Prior to the pipeline commencing operation, PHMSA would expect TransCanada
36 to have a process for incorporating information obtained from local knowledge.
37 Additionally, after the Keystone Pipeline begins operation, PHMSA would expect
38 TransCanada to monitor the status of HCAs along the pipeline. Any newly
39 identified HCAs are required to be incorporated into the Integrity Management
40 Plan within one (1) year of identification.
41

42 **Q. On page 2 of their direct testimony, the Andersons state that the Keystone**
43 **Pipeline will not comply with the following aspects of Part 195 Appendix C:**
44
45
46

1 *B. The rule requires an operator to include a process in its program identifying*
2 *which pipeline segments could affect a high consequence area and to take*
3 *measures to prevent and mitigate the consequences of a pipeline failure that*
4 *could affect a high consequence area.*

5
6 *1. Terrain surrounding the pipeline (USGS maps).*

7 *2. Drainage systems such as small streams and other smaller water ways that*
8 *could serve as a conduit to a high consequence area.*

9
10 **Can you please comment?**

- 11
12 A. Yes. I will comment strictly from a regulatory perspective. First of all, I would
13 like to point out that the intent of Appendix C is to provide additional guidance
14 and clarification to a pipeline operator. Although the expectation is that in most
15 cases a prudent operator will follow the guidance in Appendix C, it is not
16 mandatory per the Integrity Management Rule.

17
18 The excerpt from Part 195 Appendix C that the Andersons provided in their
19 testimony draws on three main points:

- 20
21 1. The rule requires an operator to include a process in its integrity management
22 program for identifying which pipeline segments could affect an HCA.
23 2. An operator should consider terrain surrounding the pipeline and drainage
24 systems when identifying HCAs that could be affected in the event of a
25 pipeline release.
26 3. An operator must take measures to prevent and mitigate the consequences to
27 an HCA in the event of a pipeline release.

28
29 First I will comment on point #1. This is a requirement and is not optional.
30 Based upon documentation provided by TransCanada, they do have a preliminary
31 process for identifying which pipeline segments could affect an HCA along the
32 Keystone Pipeline. The final process will need to be formally documented in
33 their Integrity Management Program and they will need to be able to demonstrate
34 to the Pipeline and Hazardous Materials Safety Administration (PHMSA) that this
35 process is appropriate.

36
37 Next, I will comment on point #2. Based upon information provided on page 4 of
38 the ENSR report "Appendix B Preliminary Evaluation of Risk to High
39 Consequence Areas", topographical maps were used to examine the terrain
40 surrounding the pipeline. Additionally, in Ms. Heidi Tillquist's rebuttal
41 testimony, she discusses how TransCanada plans on reviewing each HCA. This,
42 according to her testimony, includes a field verification of the topography.
43 Additionally, per information provided by TransCanada, it appears they have
44 considered drainage systems through their proximity criteria.

45

1 Again, I point out that per the Integrity Management Rule, HCAs and pipeline
2 segments having the ability to affect a HCA do not need to be identified until the
3 pipeline goes into operation.

4 Next, I will comment on point #3. The integrity management rule requires a
5 pipeline operator to implement measures to prevent and mitigate the
6 consequences of a pipeline failure. Through their Integrity Management Program,
7 TransCanada will need to demonstrate how they have identified preventive and
8 mitigative (P&M) measures and which P&M measures have been implemented.
9 Per the Integrity Management Rule, it is not required for TransCanada to have
10 P&M measures identified at this time.

11
12 **Q. On page 7 of their direct testimony, the Andersons state “Plans filed with the**
13 **U.S. State Department and the SDPUC failed to acknowledge that the**
14 **Keystone oil pipeline would cross 8 rural water systems in South Dakota,**
15 **shallow aquifers and thousands of farm wells”. Additionally, they go on to**
16 **say “under federal law, public water supplies are considered “High**
17 **Consequence Areas” and must be protected”. Can you please provide**
18 **comment on this statement?**

19
20 A. Yes. I have not determined what should and should not be classified as an HCA
21 along the proposed pipeline route. To do so takes a detailed analysis. However,
22 strictly speaking from a code perspective and from the information TransCanada
23 has provided, they have performed a preliminary identification of HCAs using
24 data from the National Pipeline Mapping System. By code, this is permissible.

25
26 I cannot comment if these water systems referenced by the Anderson’s should be
27 considered HCAs. Prior to the pipeline going into operation, TransCanada should
28 incorporate local knowledge in their HCA determination process and determine if
29 there are additional USAs along the proposed pipeline route that are not indicated
30 by the National Pipeline Mapping System. As necessary, these USAs should be
31 incorporated into their Integrity Management Program.

32
33 **Q. On page 7 of their direct testimony, the Andersons state “under federal law,**
34 **public water supplies are considered High Consequence Areas and must be**
35 **protected”. Can you please provide comment on this statement?**

36
37 A. Again, speaking strictly from a regulatory standpoint, this is a true statement
38 provided the public water supply meets the definition of an Unusually Sensitive
39 Area (USA) and provided analysis determines that a pipeline release could affect
40 the water supply. I cannot say whether or not the water supplies the Andersons
41 are referring to should be considered HCAs.

42
43 In the final Keystone Integrity Management Plan, TransCanada will need to
44 demonstrate they have made a good faith effort to identify all HCAs that could be
45 affected in the event of a pipeline release. In addition to using the NPMS to

1 identify HCAs, TransCanada should also have a process for incorporating local
2 knowledge into their HCA identification process.

3
4 Additionally, as stated previously, TransCanada will need to demonstrate how
5 they have identified preventive and mitigative (P&M) measures and which P&M
6 measures have been implemented. Per the Integrity Management Rule, it is not
7 required for TransCanada to have P&M measures identified at this time.

8
9 **Q. In your opinion, does the HCA identification process used so far by**
10 **TransCanada meet the intent of code?**

11
12 **A.** At this time, based upon the information I have reviewed, the HCA analysis
13 performed by TransCanada meets the intent of code for this stage of the pipeline
14 design / construction process.
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