

**South Dakota Public Utilities Commission
TransCanada Keystone Pipeline, LP
Docket HP07-001
Response to Staff's First Data Request**

**June 18, 2007
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Data Request:

Please provide an analysis of any constraints that may be imposed by geological characteristics on the design, construction or operation of the proposed facility and a description of plans to offset such constraints per 20:10:22:14 (8).

Response:

With the exception of the potential for landslide hazards, there are no other significant geological hazards that limit the design, construction or operation of the Keystone Pipeline.

Overall, landslide potential is considered a low hazard along the Keystone Pipeline route in South Dakota. While landslide hazards, as measured by the presence of swelling clays, previous landslide incidence and susceptibility and subsidence due to undrained organic soils, may exist along the Keystone right of way (Natural Disaster Study, National Pipeline Risk Index Technical Report, USDOT, Office of Pipeline Safety), these hazards can be mitigated through the implementation of following measures:

- Returning disturbed areas to pre-existing conditions or, where necessary, reducing steep grades during construction.
- Preserving or improving surface drainage
- Preserving or improving subsurface drainage during construction
- Removing overburden where necessary to reduce weight of overlying soil mass
- Adding fill at toe of slope to resist movement

Keystone will assess the need for the above techniques and utilize them where necessary.