THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF SOUTH DAKOTA

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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 — HP07-001

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Transcript of Proceedings
Alexandria, South Dakota
June 25, 2007

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BEFORE THE PUBLIC UTILITIES COMMISSION,
DUSTIN JOHNSON, CHAIRMAN
GARY HANSON, VICE CHAIRMAN
STEVE KOLBECK, COMMISSIONER

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TRANSCRIPT OF PROCEEDINGS, held in the above-entitled Matter, at the Hansen Gymnasium, Alexandria, South Dakota, on the 25th day of June 2007, commencing at 7 o'clock p.m.

CHAIRMAN JOHNSON: We're going to begin the public input hearing for Docket HP07-001. And that is, as you all know, the matter of the application by TransCanada for a permit to construct the Keystone Pipeline project.

The date is June 25. It's a little bit after 7 o'clock, and we are here in Alexandria. The purpose of this hearing, as I noted, is to provide information to the public about the project and for us to hear public comments regarding the proposed project.

Any of you here have a right to provide information to us, public comment. You don't have to have any sort of special legal status. We want to hear from interested people, and we'll talk a little more about the details here in a minute. The copy of the application is on file with the Marshall, Day, Clark, Beadle, Kingsbury, Miner, Hanson, McCook, Hutchinson, and Yankton County Auditors. You may also access the information in the file on the Commission's website, and that's www.puc.sd.gov. And if any of you need additional help as to how to find that with the links on our web page, grab any of us or any of the commission staff members, and we would be glad to help you.

The parties to the proceeding at this time are the Applicant, TransCanada, the Commission, and numerous other interested persons who have asked and been granted party status. Under South Dakota law, each municipality, county, or governmental agency in the area where the facility is proposed

to be constructed or any interested person or entity may be granted party status in this proceeding by making written application to the Commission on or before July 10, which is about two weeks from now. We do have applications available here today if you'd like to apply for party status.

I should discuss this idea of party status a little bit now. If most of you got the mailing from the PUC saying you were in potentially the affected area, you got an application for party status as a part of that. A lot of people don't know what that is so I want to take just a minute to tell you about it.

If you want to just make your voice heard, if you want to provide some commentary on this project, you don't need to become a formal legal party. You don't have to become an intervenor. All you have to do is send the PUC a letter or e-mail really almost at any time during this process or show up at this public hearing or any that we might have in the future and make your opinions known and those opinions become a part of the record. We don't need any special privileges or fill out any special paperwork to make that happen.

If you want to become a legal party to this case, somebody who would call a witness, somebody who could introduce evidence, somebody who could object to evidence, somebody who wants to be part of the discovery process, really legal -- those are the legal rights and responsibilities of intervenors. Then

you probably do need to look at being an intervenor and filing for party status. Frankly, I suspect most of you wouldn't need to do that. Now if you do become an intervenor, you yourself become open to discovery, and you become open to cross-examination if you present evidence in a formal hearing.

Getting back to the permit now, for TransCanada's permit to be approved they must show that the proposed pipeline will comply with all applicable laws and rules, that the pipeline will not pose a threat of serious injury to the environment or to the social and economic condition of inhabitants or expected inhabitants of the siting area, that the pipeline will not substantially impair the health, safety, or welfare of the inhabitants, and the pipeline will not unduly interfere with the orderly development of the region with due consideration having been given to the views of governing bodies affecting both units of Government.

Based on these factors the Commission will decide whether the permit for the project shall be granted, denied, or granted upon such terms, conditions, or modifications of the construction operation or maintenance of the facilities as the Commission finds appropriate.

We're going to begin tonight -- I'll sort of give you an outline on what we're going to have tonight. The Applicant is going to give us a 45-minute overview of your project. Hopefully that will answer some of your questions, and it will

probably also raise questions in other people's minds. After that, we'll see if the Commissioners have any clarifying questions, and we'll move to the public commentary and have other instructions for how that should go here in a little bit.

I should mention that if you walk away from tonight and you decide not to make verbal comments, that's great. Send us a letter, send us an e-mail. We'll make it a part of the record.

Again, I want to ask everybody to sign in on the sign-in sheet so we have a record of who has attended the meeting.

At this time I'll pause to see if my colleagues have anything we've forgotten.

Mr. Brett Koenecke, attorney from Pierre -- hold on a second.

Mr. Koenecke, an attorney from Pierre, is TransCanada's attorney in this proceeding, and he's here. And at this time I'd ask you to introduce the Applicant's team, and take it away, Mr. Koenecke.

MR. KOENECKE: Thank you very much, Commissioner. Again, my name is Brett Koenecke. I'm a lawyer from Pierre, and I'm representing TransCanada in this proceeding before the State Public Utilities Commission.

We are very pleased to see the turnout tonight. We're glad to engage with you in the dialogue and discussions that

we're about to have about the project as it passes through South Dakota, and we look forward to your input and look forward to having a great night in that regard.

Along with me are a number of people who are employees of TransCanada or contractors with TransCanada. And in the back row we're going to endeavor to answer the questions that you and the Commissioners might ask of us. We will do our best to do that on the spot.

If you have specific questions about your particular property if you're a landowner affected by the project, it might be a better conversation to be had afterwards or perhaps during a break. But we would look forward to engaging with you in that discussion either during the open mike time or afterwards.

We're going to have a short presentation, about 45 minutes by Power Point. That will be done by Robert Jones, Vice President of TransCanada in Calgary, Alberta. Mike Koski is an engineer from Florida and has project management responsibilities. And Buster Gray in the red shirt is an engineer from Kansas City and also Houston, Texas, and he has specific design and construction responsibilities.

We'll do our best to lead you through the presentation, look forward to your questions and thank you very much.

MR. JONES: Thank you, Brett. And thank you very much for attending tonight. It is hot. I know I'm hot. I hope you

find it acceptable that I took off my tie and jacket. I'm far more comfortable anyways like this as opposed to wearing a suit and tie.

The purpose of our presentation will hopefully allow you to formulate some questions, answer some questions you may have, and to respond to any concerns you may have. So we're going to give you a very broad overview and we understand there will be more specific detailed questions that you're going to have later and we certainly are prepared or hope to be prepared to answer your questions.

I'm going to have to move every time to adjust the slide just because of logistics. So bear with us.

So I'm sure you're asking yourself who's TransCanada? Is this a foreign oil company? TransCanada is a leading North American energy infrastructure company. We have over $24 billion worth of assets, and we've been in business for over 50 years. We have more pipelines -- we own and operate more pipelines in the United States than we do in Canada, and we also operate a few pipelines in Mexico.

TransCanada has over the last 50 years developed 36,500 miles of pipelines throughout North America. And associated with those pipelines we have 40,000 landowners that are -- we have relationships with.

We have offices all through the United States. Our U.S. head office is in Houston, but we have offices in Oregon,

Nebraska, Michigan, Illinois, our project office in Kansas City. That's where Buster's located. We have offices in Massachusetts, Connecticut, and New York.

Another question I get quite frequently is why Keystone, and why is it going through South Dakota? And I want to take you to the big picture. And the big picture is that Canada has the second largest proven reserves in the world. There's 175 billion barrels of oil reserves located in northern Alberta. That's second only to Saudi Arabia.

And there are over 300 potential billion barrels if technology improves and we can recover them. So it's a very, very secure, stable supply of oil that is just north of the United States.

Five of the top six countries on this map are countries from the Middle East. So they're offshore and certainly unstable. The other countries that supply a tremendous amount of oil to the United States is Venezuela and Mexico. So Canada's the largest supplier of oil to the United States followed by Saudi Arabia -- sorry. Followed by Saudi Arabia, then Venezuela, and Mexico.

Oil output out of Alberta is about 2 million barrels a day, and that is expected to grow to 3 million barrels by 2015. And the market for this oil, the natural market for this oil, is U.S. refineries. And U.S. refineries produce products that we need every day: Gasoline for our cars, diesel for our trucks,

fuel oil, fertilizer, lube oils, aviation fuel for the airplanes, and asphalt for our highways and roads.

So Keystone will connect this large reserve of oil in northern Alberta with the refineries in the U.S. Midwest. And these refineries in the U.S. Midwest provide the products that will be used here in South Dakota.

I have help.

TransCanada's Keystone Pipeline project will have an initial capacity of 435,000 barrels a day. And it has the ability to expand with additional pump stations and pumping units to 590,000 barrels a day. We went out to the marketplace, and we secured 340,000 barrels a day of binding contracts from U.S. energy companies. These are energy companies that -- sorry. I shouldn't say U.S. energy companies. These are U.S. and Canadian energy companies. So companies from both sides of the border. They either are producers who produced oil or refineries that refined the oil.

And they signed these contracts. And the average length of these contracts is 18 years. So this is a demonstration of the need, the commercial need, for this project.

I like to use the analogy that Keystone or TransCanada is a trucker. We don't own the product. We just move it. So TransCanada does not find the oil. TransCanada doesn't own the oil. We just move the oil.

We are out there right now soliciting an expansion of this pipeline. I mentioned it can expand to 590,000 barrels, and that is to access even additional refineries in the U.S. The potential location is Cushing, Oklahoma, and that would require a 300-mile extension through Kansas and Oklahoma to get to Cushing.

I want to make it very abundantly clear Keystone is not associated with the recently announced proposal for a new refinery here in South Dakota.

We have 340,000 barrels of binding contracts and a system that's designed to move 435. So we already have shippers, and our shippers already have refineries that they want to go to.

Here's a map of North America. I would like to just describe the projects briefly. Keystone is approximately 1,800 miles long. 1,082 of those kilometers will be constructed in the United States. The pipeline will be 30 inches in diameter. It will operate at a pressure no greater than 1,440 PSI. And in the first phase the pipeline when it's moving 435,000 barrels a day the maximum operating pressure will be around 1,000 pounds.

Like any good Canadian, this pipeline looks like a hockey stick. The blade of the hockey stick goes across the prairies. And the reason it does that is that we have an existing pipeline system that goes across the prairies and we're going to convert one of the existing lines from gas to oil

service. So that's why the project starts near Winnipeg. And then the shaft of the hockey stick goes straight down to Cushing, and that will be the new construction.

Because I'm sure you're wondering why the pipeline doesn't just directly go from Alberta on a diagonal to the refineries either in Illinois or Oklahoma, and the reason is that we're utilizing this existing pipeline that's already in the ground in Canada.

The oil moves down the pipeline by pumps, and the pumps are electrically driven. And they are approximately 50 miles apart, these different pump stations.

Regulations. Keystone Pipeline is regulated by -- and reviewed by numerous federal agencies and state agencies. In order to construct this pipeline we're going to cross the international boundary. When we cross the international boundary, the Canadian/U.S. border, we need to get a presidential permit. Therefore, the lead agent to give us the presidential permit is the Department of State.

The Department of State will then be required to prepare an environmental impact statement, and that is a requirement under NEPA, the National Environmental Policy Act.

The project will then also be reviewed by the Corps of Engineers, Fish & Wildlife, and the Department of Transportation. Here in South Dakota, the South Dakota Energy Conversion and Transmission Facility Act authorize the siting

and construction of the project. And that's what these Commissioners are here to do, and that's why we're all here at this hearing.

Also in South Dakota other agencies have a role. They include the Department of Environment and Natural Resources and the State Historic Preservation Office.

The regulatory process to permit this pipeline will take over two years. And we are anticipating that to occur in the first quarter of 2008 so we can commence construction in the spring of next year.

Project benefits to the people of South Dakota. During construction there will be short-term benefits with regards to construction jobs. The pipeline spread has approximately 300 to 350 people, and a number of people have to work at each pump station. These construction workers, some will be hired here, some will come from out of state, but they'll need to use the lodging and food as they build the pipeline along the right-of-way.

They'll also need to access contractors in the state. They'll need hardware supplies, fuel, equipment, parts. They'll also need supplies of sand and concrete and aggregate.

There will be long-term benefits as well. The Keystone Pipeline project will pay local community taxes annually to the counties. We estimate the first year of taxes based on a construction cost of $302 million to be 6.5 million

to counties and school districts that are along the pipeline right-of-way.

In addition to these property taxes, we also have to pay sales and contractor excise tax, and that will be a benefit to the entire state.

There will be permanent employees. Pipelines don't require a lot of permanent employees. We'll need two journeymen electricians and a journeymen pipeliner. But we'll need a number of contractors to support ongoing operation and maintenance activities. We anticipate that number to be somewhere between 50 and 60 contractors.

I'm now going to ask Mr. Mike Koski to come up and talk to you about route selection and the environmental impact.

MR. KOSKI: Thank you, Robert. Good evening, everybody. Good evening, Commissioners and staff. Thank you all for coming out tonight. As Robert mentioned, it's hot and, you know, we all know that, and so do I.

I just wanted to give a brief summary of the route selection process for pipelines in general and for Keystone specifically and a summary of the environmental impact process associated with the process and some mitigation commitments made.

The project as proposed in South Dakota consists of approximately 220 miles of 30-inch pipeline, four pump stations, and 15 main line valves. The route selection process is --

occurs in a number of steps. And it occurs through an (Inaudible) process involving a number of disciplines. The first part of the process is to identify what the objective of the project is, what is the project supposed to accomplish.

And the basic objectives for Keystone are there's a bunch of oil in northern Alberta. There's refineries in Wood River, and -- Wood River, Illinois and delivery points in Patoka, and there's a desire to utilize an existing natural gas pipeline in Canada to the extent possible. So those are the three initial components that form the objectives of the project.

As the project was developed, the market objectives changed slightly to include Cushing, Oklahoma and to drop one in Salisbury, Missouri. And you'll see the importance of that as we go through a couple of these slides.

The next step once the project objectives are established is to set some control points. These are important points through which the project is desired to pass. Obviously the market points are control points. It's got to get there. The source is a control point. It's got to start there. But then in the middle there is often major river crossings where there's very few good places to cross. There may be gaps between national parks or other no-go areas that serve to define where the route goes.

And once we establish these dots on the map we connect

the dots and that establishes the initial study area. Now based on that initial study area, we start gathering data. We gather a lot of environmental data, wetland information, soils information, land use. We take all of that stuff, and we start looking for what we call constraints and opportunities. Constraints are places we'd like to either avoid or to minimize going through.

Examples of constraints are large complex wet areas, parks, poor soils, unstable terrain. And opportunities are -- tend to be existing linear facilities such as power lines or pipelines.

Just as an example, some of the data we use we've got a map showing up here on the left. It's kind of hard to see from where you are, but most of those lines on there are existing pipelines in the State of South Dakota that we always look to see if there's a possibility of following those. And, unfortunately, for most of South Dakota there isn't a pipeline that goes where we need to go. There are a few discrete areas, most notably the Missouri River crossing at Yankton where we are adjacent to existing pipelines.

So based on all of this information we developed a series of alternatives. We review those alternatives in a desktop setting with engineers, environmental people, biologists, land people. We go through aerial photography, mapping. And then we hit the road, look at it in the field, fly

it, and narrow that process down -- narrow it down to one preferred alternative and perhaps a number of options.

And then we hit the road and showcase this. We have open houses with the public to solicit input on those initial concepts. We go to state agencies and federal agencies and run this by everybody and get the feedback.

And we take all of that information and circle back through the entire process again. And we do this over and over again over the course of it's been two years to arrive at a route that is ultimately filed. And that route that is filed is then subject to review by the regulators. It is not us who pick the route. We provide a preferred option, alternative, that meets all of the needs of the pipeline and the environment, and the NEPA process that Robert described evaluates our preferred route.

Now we certainly heard suggestions that I-29 might be a viable linear feature to follow. And our first thought that certainly makes a lot of sense. It's running north-south. It's a linear feature. And we actually did look at it at one point in the project. And I'll explain how that came about.

There's two ways to follow the I-29 corridor. You could be within the highway right-of-way, or you could be adjacent to it on private lands adjacent to it.

The concept of being within the right-of-way was never considered, as it very seriously has -- interstates tend to

involve a lot of interchanges, a lot of overpasses, and there's towns, villages, and cities all located along interstates.

So every one of these features is difficult or impossible to follow the existing -- stay within the existing right-of-way so you end up deviating around.

Just as an example, there are over 100 interchanges in North and South Dakota along I-29. So that's as a minimum 100 times you're deviating away from the line. And then you're on private property anyway, and you're basically trading one set of landowners for the other.

Other reasons we don't like to be within the highway right-of-way is presence of a large facility such as the Keystone project is an impediment to highway expansion and maintenance. The addition of interchanges is complicated by that highway departments tend not to like us in Interstate right-of-ways.

And there's also a safety concern during the construction of the pipeline. It can serve as a pretty serious distraction to highway traffic, and it subjects the pipeline workers to traffic hazards as well.

Now I mentioned there was two ways to do this. The other way is to follow adjacent to the I-29 corridor. And we certainly looked at that. And, again, we did this at the time when we were going to Salisbury, Missouri and Wood River, Illinois. At that time the route was going through Iowa. It no

longer goes through Iowa, and I'll explain why in just a second.

Running adjacent to I-29, you still have all the interchanges and the overpasses to deal with so you're still deviating away. And just looking at this map, I mentioned control points. Here we used this existing pipeline from Canada it sets up for crossing here which is approximately 30, 35 miles west of I-29. The Missouri River is also a control point. I'll describe that in a second. But it's about 30 miles west of I-29.

So we've got two points where you essentially go through that are 30 miles west of I-29. To utilize I-29 for any significant reach involves going over to it and then coming back from it and deviating around all of these interchanges and overpasses and the result being a far greater impact on private landowners.

Now I mentioned that -- the impact of the changing market. By including Cushing as a market for the project, it forces us -- we had to go south further to make it reasonable to access Cushing. That keeps us further west, and it involves a crossing of the Missouri River now. And the Missouri River, as everybody knows, is a pretty significant crossing. There's good places and bad places to cross it.

After a lot of study we landed on Yankton, South Dakota as a good crossing point for the Missouri. It's relatively stable there. It's -- and it's adjacent to the

highway bridge and two existing pipeline crossings.

The environmental review for the project. As Robert mentioned, the Department of State is the lead federal agency conducting the NEPA process. The NEPA process will involve the preparation of an environmental impact statement. There are many other federal agencies that cooperated in the preparation of that document as well as other state and local agencies as well.

In support of that application there is extensive environmental information filed with the Department of State. That included a lot of desktop work and an extensive amount of field surveys conducted over it's been a year of work now collecting field data. And that information has also been provided to the South Dakota PUC in Keystone's application.

The summary of impacts associated with the project are included in the South Dakota PUC application that covers all environmental resource areas typical of an environmental impact assessment.

The project also included Keystone has prepared what we call construction mitigation or reclamation plan. This plan is basically our book of specs. It's the how-to of constructing and reclaiming this project.

It includes procedures for crossing water bodies, wetlands, farmland. It details topsoil salvage and stripping methods. And it also outlines how we monitor reclamation after

construction.

That plan is very comprehensive. It's been filed with all of our major applications, and it's fully anticipated it will form part of our approvals as well.

And with that, I think I'll hand it over to Buster Gray. He's going to talk a little bit about the land acquisition process and construction.

MR. GRAY: Good evening. And as Mike indicated, the next few minutes I'll take discussion a little bit about land acquisition and construction of the project with an overview. I think one of the things I would start with is that certainly we have initiated acquisition of easements in South Dakota. And you may or may not have been contacted as we're having this meeting. But certainly within the next few weeks you will be contacted if you have not been.

Again, I apologize for the slides, but we will be acquiring a 110-foot construction right-of-way. In South Dakota very typically of it that's comprised of a 50-foot permanent easement and a 60-foot temporary construction easement that we only utilize during construction.

Also we'll be acquiring additional temporary work space in areas like road crossings, streams and river crossings, or other areas where we have to move a significant amount of dirt or soil material that we need extra space to store the dirt on.

As I said, we've started our acquisition process. And our policy in building -- or in acquiring the right-of-way for the project is a pretty standard program across the entire project. And I'll briefly summarize our payment policy.

Our payment policy is for the permanent easement to pay 100 percent of market value or fair market value for the property.

The temporary work space we will pay 50 percent of fair market value for the land that we take. And for crop losses we will pay 100 percent of the loss the first year, 75 percent for the second year, or the year following construction, and 50 percent for the third year after -- or the third year following construction. So it's 100, 75, and 50 percent.

Also the point that we would like to make about a pipeline being a buried utility is that being buried when we acquire an easement we put some restrictive rights in the easement concerning your ability to build a structure or other things above the easement.

But the key item is your ability to farm the land or agricultural production or grazing the land or its use -- you get the full enjoyment of that use back. We work very diligently to restore the land to its original productivity.

I also wanted to touch on a few contact names here. They're actually in some of the literature that you have over on

the table. But our state supervisor for right-of-way acquisition is Tim Slorbi. We have an office located in Huron, South Dakota that Tim is managing the acquisition efforts in this particular state. Denny Needham is the land manager in the Kansas City office where I'm located. And if for whatever reason you believe that you would need to contact that office or not satisfied with the South Dakota office, you're welcome to do such.

And then one other name, Sandra Roth who is here this evening, is a TransCanada employee from landowner relations.

We've had some report earlier today that potentially some land agent interfaces have not been done with respect and fairness and dignity. And we conduct our business that way. And if we get feedback that we have any operations going like that or let's just say what you would consider strong-arm tactic, we need that feedback, and we will deal with that situation. And these are contact numbers that will allow you to do so.

And I fully believe that -- the engineering, construction, right-of-way people are accountable to myself. If you don't reach satisfaction, you're welcome to contact myself at that office.

This next slide I'll walk down through just a little bit. And I want to give you an overview of what construction looks like on a pipeline project. And this particular is a

graphic presentation of a construction spread. And we use a spread is the term of a contractor.

The construction spread is made up of an assembly line. And that assembly line is made up of a multitude of crews that progress out in construction right-of-way. We call it a spread, but it's essentially an assembly line. It's very similar to how a car's manufactured where people stay stationary and the product goes by on the factory. For our construction work the product stays stationary and the workers go by and assemble the pipe.

So this particular construction spread is what you could expect in South Dakota is that from the surveying and the clearing crews that are represented in the front of this construction operation, and then you have the multiple crews that work along to the very end of it where the clean up and the testing and the final completion is, is made up of multiple crews that move down the pipeline.

From the front crew to the back crew will typically be about 50 to 60 miles. The crews will move at a rate of about a mile and a quarter to a mile and a half a day. We always qualify that just based on weather conditions. If we will get inordinate weather, then it might not move as quickly as I've described.

We also describe that the impact on the landowner's land will probably be somewhere in the neighborhood of 8 to 12

weeks of these construction crews moving along the pipeline right-of-way.

These photographs -- and I hope that you can see them some. But they are literally photographs of pipeline construction along that assembly line or spread that I just talked about. And I'll run through these just to give you a little bit of idea of how construction flows and what you would see.

But this first slide shows topsoil removal in the Midwest. In particular with agriculture being such an important part of your -- not only your economy but your personal livelihood, the removal and preservation of topsoil and the restoration of topsoil is one of the functions that we do in pipeline construction where we remove topsoil to allow construction and bring it back after construction.

Another set of operations that we follow are from pipe yards along the pipeline route we would haul and transport the pipe to the construction right-of-way.

We would put it along the construction right-of-way with a terminology we call stringing where we string the pipe along the pipeline right-of-way. And then bending is the next operation where we have to bend the pipe to make turns in the pipeline and then to follow the topography of the earth. We have hydraulic machines by which the pipe will bend.

These two pictures represent the two methods we dig

trenches with. One of them is a wheel trencher. The other is a backhoe type trench in it. And my belief right now in South Dakota is the southern maybe two-thirds or half of the state would likely be dug with wheel trenches where the northern part of the state would potentially be dug with backhoes, a lot of that being the function of ground conditions and how wet the ground is.

The next operation of pipe comes to the right-of-way in approximately 8-foot lengths and it has to be joined together and is joined together by welding. And pipelines based on (Inaudible) are typically either manual welding or automatic weld. When I say automatic, with a machine. And it will be determined which methods are utilized. But then the welds are made, and they're inspected by either radiology or ultrasonic devices to determine the quality of the welds.

After the welding operation, the coating of what we call the field joints, this has to come to the right-of-way bear to facilitate the welding. Once that's completed, that what we call field joint is either brushed or spray coated to make a continuous coating. And prior to the pipe being put into the trench we use an electronic device called a jeep or a holiday detector that will search for nicks or damage in the coating during the transportation of the pipe or the handling of the pipe so that those defects in the coating are repaired before it's placed into the trench.

Placing the pipe into the trench is called lowering in by which long strings of pipe are picked up and put over into the trench at one time.

The next operation is padding and/or backfill. We will typically use the spoiled materials that come out of the trench for backfill. Those materials if we happen to run into rock or large cobble or things, we will do what we call padding where we separate the fines out of the backfill material to put adjacent to the pipe before we put the other materials back in around the pipe.

I mentioned the removal of topsoil. Also the method is, is that we will bring it back and restore it as near as possible to the original profile of the topsoil.

Utility crossings and road crossings. With utilities our normal procedures are is that we're required by law to have a separation between our facilities and an existing utility. That code requirement is 12 inches of separation is what we try and maintain -- or we do maintain. We don't try and maintain. We maintain a minimum of 12 inches of operation.

And utilities, typically we'll contact a utility, whether it's electric, water, sewer, fiberoptic cable, electric utility, about crossing those existing utilities. We coordinate with those utilities on their requirements for crossing their facilities and typically if a utility requires an agreement like a contract between us, we will typically execute an agreement.

If the existing utility does not, we will not.

Once the pipeline is completed, it's filled with water for -- and hydrostatically tested to 125 percent of its maximum operating pressure. The water is sourced from major rivers or streams along the pipeline route. The pipeline is filled, and once it's tested the water is returned to the stream or the watershed from which it came.

The records that are required to be kept under our safety codes are these records are required to be kept for the life of the pipeline.

The other device that you see here is what we call a caliper pig. It's an electronic device that runs down the length of the pipeline by which it will detect the degree of buckle or wrinkle in the pipeline or any type of damage of inclusion into the pipe. It will detect that, and if there should be any damage during construction or the transportation of the pipe, that will be removed prior to putting the pipeline in service.

The next slide just represents a few other things. But one of the most important things I have to do on this project working with specifications and contractors is the restoration of your land to return it back to the original production as expediently as I can.

In doing such, one of the most significant things that would impact farmland is we have very large equipment, very

heavy equipment, that moves along this right-of-way that creates compaction. And we're leaving -- compaction is probably the most significant mitigation that we come in after we construct the pipeline and I call it ripping but we rip and decompact much like you as farmers do on a periodic basis.

We test the right-of-way for a compaction level that's comparable to that on the adjacent right-of-way.

In the Midwest rock or glacial till that may exist in particular fields is that we will pick the rock either mechanically or by hand to a size and density that is less than that of the adjacent right-of-way. That's the standard which we will work to.

In nonagricultural areas one of the things we can do is put a cover crop or re-seed the right-of-way as expediently as possible to try to get a growth of ground cover as quickly as possible so for large rains or those types of events it will minimize erosion.

In this particular photograph that I had put in here this is a before construction and an after construction picture. And the two points that I bring out in this picture are is that we restore the right-of-way to the best of our ability. We maintain a right-of-way without trees in the 50 feet, as can be evidenced by the particular photograph on the right. But we strive to return the ground to its original production, its original to the extent possible.

But we are certainly here to tell you it is not possible to return it exactly like it was before. And we're not here to try and convince you that that's the case. We will restore it to the best of our ability. We believe in a three-year period we can restore it to its original productivity.

If for any reason we cannot restore it to its original productivity and you suffer crop loss that you can document post for three years, our responsibility to you for the production of the land is -- does not terminate at any point in time. It's continuously.

All right. Thank you. Robert.

CHAIRMAN JOHNSON: Mr. Koenecke, I might just note, about 5 minutes left for your team.

MR. JONES: Thank you. I'll try and close the presentation on time with a little discussion on pipeline safety and integrity.

We've talked about regulations. I've suggested -- I've already advised you that we have to comply with federal and state regulations. We also have to comply with national codes. These are engineering codes and specifications and these regulations which are intended to protect not only the public but our employees and the environment.

Some of the design safety features that I think are very important to talk about is the depth of cover. One of the

key safety features about the Keystone Pipeline and one of the advances we've had over the 15 years, the best practice is the fact that we're going to make sure this pipeline is buried with a depth of cover of 48 inches. The code is only 30 inches. And one of the highest risks a pipeline has for damage is mechanical damage, and so this is a very, very important safety factor that Keystone is utilizing best practice.

Obviously, we're using the best quality steels. The coating is an epoxy coating. It's a high-tech coating that is fused right on to the steel in the plant, and like Buster suggested, it is then fused again on site.

Cathodic protection. In the event that during the installation of the pipe, even after the coating has been checked, there is an anomaly, a low voltage electrical current is applied on to the pipe to ensure there's an additional cathodic protection for exterior corrosion.

I'm going to talk about the SCADA system and couple other slides and the leak detection system. Marker signs, you probably don't notice them when you go down the highway. I do because I'm into pipelines. But there's a number of marker signs whenever you see the pipeline cross the highway, and that, of course, is to advise people in those areas where we expect to be an opportunity to dig up the line.

Isolation valves, you need to have a number of isolation valves to minimize the amount of discharge in the

unlikely event of a leak.

Construction safety features. Again, this is where TransCanada shines. We're a leading operator. With our 50 years of experience, we've designed a quality control and quality assurance program that starts with the fabrication of the steel. We inspect the steel in the mills. We test it in the mills. We then monitor and inspect it during delivery right to the site. Whether it comes via rail or truck. And then it is placed along the site and we have a QAQC program during the entire process.

The pipeline is monitored with a computerized system 24 hours a day 365 days a year. And the control center has a redundant backup control center. So if something happens to that center, there's a redundant one. So their system is always monitored every second of the day.

The SCADA computerized system monitors for changes in pressure and changes in flow. And there's a dedicated leak detection system that measures the volume changes in the pipeline. So the pipeline through this new technology is measuring the volume that comes into the line and measuring the volume that comes out of the line.

Buster talked about some of the tools he uses to ensure the pipeline is safe after construction and prior to operation. But during operation we continue to monitor the pipeline. One of the effective tools we can use is regular air

patrols. And this is where we will fly the line approximately 26 times a year.

The other thing we do is in-line inspections. Buster talked about a caliper tool. This again is a very, very smart tool. We call it a smart pig. We put it in the line. It's a computerized device that can measure any anomaly, either the pipe quality or the pipe welds. Our first pipeline inspection after this pipeline goes within service will be within three years of operation.

Once we get that data if we see anything in that data, we will dig up the pipeline, inspect it, and repair it.

The other thing we can do is public awareness, make people aware where the pipeline is, and we'll participate in the One-Call system.

Oil spill response. Keystone will submit a detailed oil spill response to PHMSA prior to oil operation. We will deploy oil spill cleanup equipment in prepositioned locations along the pipeline. This equipment which will have booms and skinners and other devices to -- in the unlikely event that there is a spill, will mitigate and contain the spill area. And it's based on the worst case discharge.

In any unlikely event of a spill, Keystone has to restore the site in coordination with federal regulators and state agencies.

In conclusion, I just want to say that, you know, we

have worked hard, working with all the communities that TransCanada parallels, and we respect not only our landowners but our employees, our contractors. And we look forward to being part of the community here in South Dakota.

CHAIRMAN JOHNSON: Thank you very much. At this point we will see if the Commissioners have any clarifying questions, and then after they've had that opportunity we'll have public comment.

Mr. Hanson, Commissioner Kolbeck. Go ahead.

COMMISSIONER HANSON: Thank you, Mr. Chairman. I had asked some questions when we were in Yankton, and I think they are pertinent enough that we should at least have an opportunity to discuss them for these folks.

And my first question is pertaining to the leak detection and the SCADA system and the sensitivity of the SCADA system. We all appreciate the fact that there is an opportunity for you to detect a leak, and we want to know the -- I would like to know or if you can clarify the sensitivity of that equipment.

MR. KOENECKE: We'll call on Brian Thomas to answer that.

MR. THOMAS: Good evening. Good evening. My name is Brian Thomas. I'm part of the Keystone team. My responsibilities will be for operation of the control center in Calgary. I've also been involved to some degree in planning

emergency response associated with the Keystone project.

So in order to respond to those two questions firstly with respect to the SCADA system I'll maybe just describe exactly what it does. The SCADA system is basically this computer application that brings back data from each pump station and valve site along the pipeline right-of-way.

So it is bringing back data again from all of the pump stations, from all of the valve sites and displaying it on a console that is in Calgary for monitoring by the control operator.

Our scan cycle is expected to be about 8 seconds. So that cycle really it rolls around every 8 seconds, and it completes one pass of these 40 pump stations every 8 seconds.

The leak detection system -- and Keystone will be using a computer-based application as well for leak detection, a computational model. This model will be capable of detecting leaks down to we're estimating 2 percent of the pipeline flow in 102 minutes.

Now the system is capable of detecting leaks larger than the 2 percent. And it will detect those in a quicker time frame. But when you get down to the smaller leaks of that 2 percent magnitude it's 102 minutes for at least the system to begin with. We will be fine-tuning it as time goes on and would hope to be able to improve those numbers somewhat.

Now I don't want to leave you with the impression

that, you know, anything smaller than 2 percent, you know, is not detectable. Because there certainly are other applications that are used in the control center. As was mentioned earlier, there is the routine line patrols and so on that are performed, all of which are used to detect these leaks that are smaller than that 2 percent limit.

COMMISSIONER HANSON: Thank you. Could you tell us also the isolation valves that were referred to, are those manually operated, or are they automatically operated?

MR. THOMAS: The isolation valves, I believe it was 15 that were referred to earlier. Those are all automatically or remotely controlled from the control center in Calgary.

COMMISSIONER HANSON: So if you detect a leak, you would be able to shut those off as a leak was detected?

MR. THOMAS: That's correct. Basically the sequence of events that would occur is in the event of a suspected leak the operator would first shut the pipeline down, and by that I mean he would stop all of the pumping units at each of the pumping stations along the pipeline right-of-way. And then once those units have all been stopped, he would proceed to close these isolation valves.

That complete operation inclusive of stopping the pumps and actually closing the valves will take approximately 10 minutes to perform. The valves themselves are 30-inch diameter obviously. And they themselves take 30 inches to --

or, excuse me, take 3 minutes to close.

COMMISSIONER HANSON: Thank you. And just out of curiosity, how thick is the pipe? I assume the pipe that was on the display table is the sample of the pipe that will be used. I didn't hear. Someone probably presented it earlier, but I didn't hear the thickness of the pipe.

MR. THOMAS: The typical wall thickness is .386 of an inch 386-thousandths of an inch.

COMMISSIONER HANSON: Thank you. Thank you, Mr. Chairman.

MR. KOLBECK: As Commissioner Hanson had stated earlier, when we were in Yankton there were a few questions that we asked, and I had heard a couple of repeats so I'll ask that.

The first one that I had heard while we were at Joe's this evening is what is the flash point? We hear a lot about explosions and pipeline explosions, and that's a big concern I think on some people's minds that are here in the audience.

Could you explain a little bit about that?

MR. THOMAS: I'm going to provide you both -- well, two numbers here and an explanation with both. The first number is the flash point, and the crude types that Keystone will transport the flash points will typically be about 104 degrees Fahrenheit. Now what that flash point actually is, it's a test that's performed in the laboratory where a sample of crude oil in this case is actually warmed -- warmed up and then it's

placed close to a spark such that as you continue to warm the sample you continue to spark above the sample and when the sample actually ignites that's considered to be the flash point. And again that number is 104 degrees Fahrenheit.

The other number I'm going to provide you is the auto ignition point. And what the auto ignition point is, is it's the same type of test, but there's no external spark. So basically you just continue to heat the sample and heat the sample until you reach a point at which it spontaneously combusts. And for the crude oils that Keystone will transport that number is 489 degrees Fahrenheit. So very, very hot.

MR. KOLBECK: Thank you. The other question actually referred to trees. And I think I actually misunderstood the first one. Sorry.

It was my understanding that you can plant trees over the 50 foot right-of-way. Is that not true? You can plant trees in the 110 temporary, or you can plant trees through the whole thing?

MR. GRAY: Mr. Commissioner, from the day -- I'm sorry if it wasn't clear, but we maintain a 50-foot permanent easement that we would say would be vacant of trees.

However, we have worked with landowners like a wind break or someplace like that to allow encroachment of trees further into our 50-foot permanent easement.

We need to maintain a lane for equipment in the case

of an emergency that we would need to get up and down the right-of-way. But on a case-by-case requested basis we have considered allowing tree rows back closer in than the 50 feet.

MR. KOLBECK: The next question was asked earlier too of me. If the property is sold, how do the easements transfer? So one person -- an existing landowner right now signs an easement with TransCanada, and that property is sold or transferred maybe through the process of death or estate. How is that taken care of?

MR. KOENECKE: So your question, Commissioner, is if the landowner sells the property, how is the easement transferred?

The easement is recorded at the county courthouse and runs with the land and the obligations would transfer to subsequent owners of the larger bundle of property rights, as a lawyer would say. But the person who owns the bulk of the property rights, the owner of the property, those obligations and rights would all transfer along because the agreement is recorded and a subsequent taker or purchaser of the property would succeed to that interest.

MR. KOLBECK: Another one I guess is what is the money breakout for the taxes? I know that was asked in Yankton, and that was asked of me in Joe's tonight.

For the property taxes they say is 6.7 million. How do the counties get that money?

MR. KOENECKE: Commissioner, pursuant to state law, the value of the entire pipeline will be assessed as one unit from Marshall County down to Yankton County by the State Department of Revenue. They'll take a look at what's the whole thing worth so we don't have individual counties assessing at different rates perhaps as far as the value of the line, the property value.

The Department of Revenue has to do that every year by statute on July 5 and then transmit its finding of the value of the property -- the line itself to the counties who will then apply their usual mill levy, and taxes will be paid directly to the counties and school districts pursuant to state law.

With respect to the four pumping stations, those will be assessed individually by the counties in which they exist. We're looking at 10 to 12 million dollars to spend to build a pumping facility so that will be a huge property tax value in those individual counties. And that process will be, you know, determined by the individual counties in which they exist.

So the pump stations, individually assessed. The pipeline itself, centrally assessed, but the taxes go to the counties.

MR. KOLBECK: And one last question that I didn't get a chance to ask this morning is would you explain what happens if the pig finds a problem a year from now -- say when the pig is going through the pipeline, finds a leak.

Can you explain that process, how it's all shut down, what will happen from there on out?

MR. JONES: Certainly, Commissioner. So this computer-based tool that goes down the line will have to be run within the first three years of operation. If it detects a thinning in the pipe wall, if it is actually what we call an RPR less than 1, we will immediately lower the pressure in that area to ensure that gets rupture pressure ratio -- that's what RPR stands for. Sorry about the feedback here, folks. Make sure that we lower the pressure in the area of that defect so that it will continue to have an RPR above 1.

We would then schedule an outage. We will excavate over the pipeline so the pressure in the line is reduced. The oil may still continue to flow. But it will be flowing at a reduced pressure. And then once we actually -- if we've examined it, confirmed that the wall of the pipe was thin and does need to be cut out, then the pipeline will be shut down. The oil will be drained from that section. A new piece of pipe that's already pretested will be welded back in. Those welds will be 100 percent x-rayed to ensure that they're perfect, and then the plant will be put back into operation.

MR. KOLBECK: And obviously the obligation by TransCanada would be to replace everything exactly the way it was, basically the same as if it was being first installed?

MR. JONES: Right. As Buster described, just like

construction, it will be done in reverse. So again we strip the topsoil over the excavated area to preserve that quality topsoil. And then we would excavate the subsoil, do the repair, and then put the subsoil back over the top of the pipeline and then preserve that topsoil and put it back over so we would ensure the quality of the growth production and that sort remains.

MR. KOLBECK: Does the 100 percent, 75, and 50 start over then?

MR. JONES: No. I don't believe it does. But I don't know that specifically because that's not what I do. So let me defer that to the experts in this area.

The question was we do pay for the damages of the crops, but is it based on the same three-year from an operational perspective? And I thought -- I actually don't know the answer so I should ask.

MR. GRAY: My experience with a situation that you've described is very localized and, for example, it may be an area of less than half of the size of this gymnasium because it's a spot we're working on. Typically those damage payments haven't been a function of I guess the disturbance of crops. They've been more of a payment of nuisance value. It's probably way overvalued to the crops.

But I would suggest to you any damages that are done at that location if they did not return the crop productivity

over time, we would still have the same responsibility as we had at original construction. It's just that my experience has been on a very localized area compensation's generally done more out of an inconvenience than a spot we're disturbing.

CHAIRMAN JOHNSON: Thanks very much, Commissioners. I should just note for those of you that aren't particularly familiar with the Commission process, this isn't the whole opportunity we're going to have to question TransCanada.

This is really -- first it's an opportunity for you all to learn about the Applicant's project. And the second half is we're moving in to the opportunity for you to educate all of us about your questions and concerns.

As far as our questions for TransCanada, most of the questions we'll have will likely be part of a formal process. There's no cross-examination here. Nobody's sworn. You know, at some point this process will likely move where TransCanada's calling witnesses who will be sworn and all of the intervenors will have an opportunity to cross-examine witnesses and so a lot of the Commissioner's questions will likely come as a part of that process. We get into a lot more depth and it won't take a couple of hours but it will take days, likely days.

With that, we're going to pause for just a moment, and I know our court reporter needs an opportunity to move to a different location.

(A short recess is taken)

CHAIRMAN JOHNSON: If you want to make some comments or ask questions, just raise your hand, and Mr. Solemn will get you a wireless mike. Also Ms. Van Bockern. There is no cover on that mike so I would just ask that you actually hold it a little ways away from your mouth and not to pop your Ps like that. So hold away, but speak loudly so we can make sure you pick it up. This is for us the most important part. We want to hear from as many interested parties as possible.

The Commission at our June 12 meeting set some guidelines. I don't know how many people are here. I'm going to guess 120. If everybody here got up and talked for 10 minutes we would be here 12 hours. Oh, no that's not 12 hours. That's 20 hours. A lot of time. That's a lot. More time than probably some of us would like to.

So here are some ground rules that we've established that I think will allow us to get as much input as possible.

First off, there's no time limit, but we would ask that people who have brief comments have an opportunity to go first. Maybe your son or daughter has a baseball game tonight and you just want to make two minutes worth of comments. Let's have you go first so you can have your comments on the record and get out of here and you don't have to track behind people with maybe lengthier comments. We're going to ask for people with shorter comments go first.

Secondly, we're going to ask that you speak up. State

your name and your place of residence so we can have that as part of the record. Cheri who is our court reporter may ask you to repeat something, and we'd ask that you do that.

Third, we'd ask -- and this is not a ground rule. This is more of a request. We ask that you try to stay focused on this project and the Commission's authority over this project. If you need to go off on a tangent, you know -- again this is more a suggestion than a ground rule. We understand that people have a lot of questions and a lot of concerns about this, and we don't mind drifting off into that. But if it goes too far, we may can you to come back to this project, this Commission's authority, so we can stay focused on what we need to do.

Number four, we're most interested in your experience, your opinions, what you think or have concerns about or believe. Not as much about hearsay. So we'd ask that you try to stay focused on your experiences.

Fifth, we would ask that you try to avoid a lot of repetitiveness. If something's been said pretty well, you can certainly get your comments on the record by saying, you know, I agree with Mr. Smith, Mrs. Jones about what they said about evaluation for the land agents and that's fine. But you don't necessarily need to repeat everything that they said.

You know, in the past we've done sitings like this before for transmission lines or power plants. We've

occasionally had people get up, and they want to read an article into the record. We would ask if you have anything written, provide that to us. That will be part of the official record of the entire proceeding and not read it.

Frankly, it will touch a lot more people, and it will be a lot more useful to people if we have a hardcopy that will be out on the web that anybody can access at any time and, frankly, is in a format a lot more user friendly than somebody having to go through the transcript. So please don't read anything into the record.

And the final ground rule is that we want to avoid having a group of people make the same comments all four of these meetings. You know, we felt like that would actually take away from our opportunity to hear from the maximum number of interested people.

If somebody's made a presentation earlier today or plans to make a presentation over the next couple of days, we would ask that you not make that presentation today, and we would appreciate your cooperation with that.

COMMISSIONER HANSON: There's a few people that have requested to be able to sign up to -- the sign-up sheet didn't get to them. I see we located one of them. Where is the other sign-up sheet?

Okay. Would you raise your hand if you weren't able to? A couple of people -- okay. This area right here was not

able to -- thank you.

CHAIRMAN JOHNSON: We're going to go about 20 minutes and take a brief break to allow people an opportunity to go to the bathroom and for the court reporter to sort of rest a little bit.

Let's get started. We did have a request from a gentleman who said he drove 407 miles to see me. Maybe that wasn't it. But anyway go ahead. Sir.

MR. ED GOSS: Yes, I did, Mr. Chairman. Thank you. I drove 407 miles. My property is in Kingsbury and Codington County. Ed Goss, Belle Fourche, South Dakota. Most of the Commissioners probably knew that. I'm sorry.

One question I guess that was brought up by Commissioner Hanson that really scared the daylights out of me, I'm neighbors to an individual who has been 30 years in the pipeline and refinery construction business. I don't know. He's a pipeline engineer, I believe.

I don't have a problem with the transportation of the crude from -- or from Canada through South Dakota. I do have a problem with the easements. I have a bigger problem with what he told me this morning. He just returned from Siberia. He's been in the Arctic Circle.

But he said, Ed, you don't have to worry because it will be an inch to an inch and a quarter thickness of this high grade steel similar to what I looked at back here that's less

than four-tenths of an inch in diameter.

Second, I'd like to know if every piece of ground is surveyed from the ground?

The reason I ask is I probably have more native grass in Desmond (phonetic) Township than probably any other individual. I'd like to see a show of hands from people of TransCanada and the Commission how many of you know what a buffalo wallow is. I got one. That's good.

Well, these -- on these native grasses I've got four of them on my property. I'll explain to you if you want to know what it is, but these are a part of the historic thing.

Grandpa bought this place in 1910. My wife owns the property in Marshall County that was signed by Grover Cleveland in 1893. But if you're going to re-seed, do you re-seed with native grasses on these natives? I don't want to see any grown grasses with flax and all of that good stuff with it.

Then you're going to reimburse 100 percent of forward market value and 100 percent of market value. Well, I've never known what yield I'm going to get, and I've never known what price I'm going to get. And if you pay less than $4 soybeans at 10 bushel per acre or 50 bushel beans at 13 and a quarter, let me tell you, I don't know how you're going to do that. I guess it's possible.

The NEPA process should have -- if you've surveyed this on the ground, you should have seen what I'm talking about

in the native grasses on the two quarters of my property that you cross.

I think I had one for -- if I can find it here, for the Commission. I guess I've overlooked it. But anyway I'd like to have the answers to those questions. Thank you.

MR. GRAY: Mr. Goss, I believe I jotted down the questions. And the technical questions -- and I may have to ask for a clarification question to yourself. But I think the first point that you made was a pipeline engineer that's a friend of yours had indicated that the pipe would be 1 to 1 and a half inches thick.

MR. ED GOSS: One and a quarter.

MR. GRAY: Very well. I'm sorry. And by federal codes and standards we have formulas by which pipe wall thickness is determined. There's safety factors, and there's an equation from which the wall thickness of pipe is derived. And that process in this results in the wall thickness of .386 inches, which is about three-eighths of an inch. I suggest to you that an inch or an inch and a half or inch and a quarter, I'm sorry, wall thickness for a cross-country pipeline, regardless of its pipe in North America, would be far excessive of any pipeline that I'm aware of.

Pipelines that are constructed of that diameter -- or that wall thickness would typically operate in the thousands of pounds of pressure.

The other question that I will try and address -- and I'm sorry. I tried to make the note, but you had mentioned about fair market value and the price of soybeans at approximately $4 a bushel, but I lost the intent of your question.

MR. ED GOSS: The question was what -- the question would be how do you determine what 100 percent of fair market value is if I can't tell if my yield this fall will be 10 bushel per acre on soybeans and I can't tell if the market's going to be $4 for that bushel or if I'm going to have a 55 bushel yield this fall and $13.25 a bushel for that.

How do you determine what is fair market value if that's the situation?

MR. GRAY: Okay. And I'll -- and I want to be sure we're not in apples and oranges. And I'm like the other gentleman. I apologize for the feedback on the microphone. But when I speak of fair market value I'm speaking of the fair market value of the land relative to your ability to sell it or someone to acquire.

How we do that is typically we send agents, land personnel, into your county, and we will evaluate comparable sales of land in your county in the most recent period for acreage of land that is sold that is similar to yours. And that is how we will establish fair market value to make an offer in your particular region.

Relative to crop loss, is crop loss in the relative sense of us predicting your yield, us predicting the price of the crop in the future is we are at this point in time at the execution of the easement we would pay you for the fair market value of the land plus one year crop loss of 100 percent loss of that crop.

What we typically do is we will look at the price of the commodity today, and if it is $4 a bushel was I believe the price that you gave me, if that was an acceptable value to you, we would work from that.

If you believe the price of the commodity is going to increase in the future and you desire some protection to that price movement, that is a negotiable item in the easement acquisition process.

I will tell you from my experiences we typically offer higher than average yields, and we typically offer higher than average commodity prices to protect you and us from having to deal from the situation you described.

I hope that answers your question.

MR. ED GOSS: Yeah. The other question was related to the survey and the native grass.

MR. GRAY: I'm going to have to give that to another gentleman. Thank you.

MR. ELLIS: Yes. My name is Scott Ellis, and I'm somewhat in charge of doing a number of our environmental

studies, including we have been into doing native prairie surveys wherever we can find good intact native prairie. And I don't know whether, you know, anyone's ever asked you for permission to come across your land.

If not, we would be very interested in learning where your parcel is and how it relates to the bipod because that's actually a very key area that we're interested in identifying.

Our approach in doing that, identifying those prairie remnants, is to develop vegetation mixtures that do, in fact, go back to a native composition, try to put those prairies back. Because, I mean, we've done enough work in this country to know that there are very few native prairie pieces left. And what is left needs to be preserved as well as we possibly can.

So we appreciate your bringing that up, and if we could talk to you afterwards and get a fix exactly where your buffalo wallows and your native prairie are, we very much would like to do that.

CHAIRMAN JOHNSON: Okay. Great. Other short comments or questions? Gentleman, we'll get that mike up to you.

MR. ORVILLE HOFER: I'm curious to the people that get the easement what type of easement are you taking? Perpetual easement or easement the length of the pipeline? Orville Hofer, Bridgewater, South Dakota.

MR. GRAY: The easement is being sold is a perpetual easement.

CHAIRMAN JOHNSON: Other questions? Right over there. Do you need the microphone or sign-up, sir?

MR. HOWARD EASTON: Question. Howard Easton of Kingsbury County. Perpetual easement I believe most states, at least the State of North Dakota, has the 99 or 75-year total easement that's allowed. So why are you asking perpetual when you're going to North Dakota and getting with the state law that has a certain time frame on it? I think it should all be the same.

CHAIRMAN JOHNSON: Thanks for the question. We'll look to the Applicant to answer.

MR. GRAY: From my experience actually North Dakota is a very unique state relative to the 99-year requirement that's in the statutes that you have cited. And indeed it is the law in North Dakota, and we are seeking the 99-year -- I don't know if lease is the proper word but a 99-year agreement based upon that statute.

But the industry standard and industry practice in the pipeline industry has been a perpetual easement, if that's allowed under South Dakota Law, and that is what we're considering.

MR. BRYAN ROTH: My name is Bryan Roth, R-O-T-H, from Salem. You mentioned the monitoring stations along the pipeline there and the different stations. How do they signal back and forth, talk back and forth to each other and go to your center

up in Canada?

MR. THOMAS: The signal exchanges between the remote pump stations, and the main home system will be done either by satellite or by telephone systems. We will as well have two redundant forms of communication so that if -- in the event of a failure of one of the systems, we'll be able to divert to a secondary system and maintain communications with each of those facilities.

We haven't yet completed the detailed design to the level to know, you know, whether it's going to be satellite or telephone frame relay type systems at this point.

MR. BRYAN ROTH: When you say "telephone system" are you talking about using the telephone company's -- the local exchange carriers or laying your own fiberoptic-owned facilities?

MR. THOMAS: It would be to use the, well, local telco-based companies. We would not be laying any of our own fiberoptic cable.

MS. LEANNE EICH: I'm Leanne Eich, mailing address Canova. I know another gentleman and myself were contacted by land agents and asked to review their contract and sign it and take the check.

When reviewing the legal description of the land it was incorrect. What if I didn't notice it, signed it, took the check? Down the road what would have happened?

MR. GRAY: Certainly --

MR. KOLBECK: You get two checks.

MR. GRAY: Certainly we strive to not make mistakes in the documents that we bring out for execution. But should that be done, we would come back and seek an amendment to the easement we do to execute that amendment to cure or correct that particular incorrect document.

MS. LEANNE EICH: Let's say an older person in a home or something didn't notice it and the land --

MR. GRAY: I'm sorry. I just can't hear. I apologize.

MS. LEANNE EICH: Say perhaps an older person didn't notice it or in a home they signed this contract, wanted to sell their land, they're thinking no easement. Then it turns up it does have easements because legally it's written up wrong.

MR. GRAY: We will be -- when I say quality assuring the various documents that are received back in to our offices for the very things.

And you mentioned, you know, an incorrect legal description. But just things that all legal entities in the particular tract of land that we have acquired the signatures from all parties necessary. We have to QA our easement instruments for a multitude of things and that being one.

It's my belief that that quality assurance process would identify the particular issue that you've described, and

we would come back to the party to cure the particular incorrect document. And certainly curing that document, it's my belief that if we have to deal with some type of remuneration to cure that error that was made that was our fault, we'll have to deal with that.

MR. KOLBECK: On a similar matter that happened to me when I bought a house, my house and my neighbor's house was fully built at the same time and I had the legal description for his house and he had the legal description with mine. We figured it out with our first tax assessment, and then the county actually fixed it back. It was a matter of paperwork and the title company paid for that.

So my question to TransCanada, if you make the mistake, are you paying the legal fees to correct it?

MR. GRAY: I certainly look back to the lady that's more experienced in the actual -- the documents than myself. Certainly if it's our mistake, if it's our error, then we have the burden of the costs that will go correcting that particular situation.

CHAIRMAN JOHNSON: Go ahead, sir.

MR. DON BECHTEL: My name is Don Bechtel. I'm from Sioux Falls, South Dakota. I looked at that map up there. I thought I had a quarter of land that that pipeline would go through.

Is that pipeline pretty well determined where it's

going to be, or could it vary?

MR. GRAY: You were referencing some maps at the particular table here?

MR. DON BECHTEL: Yes.

MR. GRAY: And I guess was somebody there to assist you, and is the tract -- is the pipeline crossing the tract of land?

MR. DON BECHTEL: I don't believe so, but it's awful close.

MR. GRAY: Okay. Because certainly during the break or conclusion of the meeting myself or Ms. Roth here, we can look at the maps with you and tell you definitely whether we are impacting your tract of land or not.

MR. DON BECHTEL: I don't have a problem whether they are or not, but the person that had the question about making a mistake, if I was going to sell you mine, I'd have some flags out there and know exactly where it goes in looking at it.

MR. GRAY: And we typically have a landowners request that we stake the flag, the easement, prior to your selling it to us and if a landowner wants that done, he would request it of his land agent and we would stake the right-of-way for you to ensure you understand exactly where the easement would be.

MR. KEVIN SIEFKEN: I'm Kevin, and I'm from up around Fedora. Siefken.

Okay. Now if I was in the -- feedback. I was in the

navy and I had plenty of opportunity to do some cleanup after oil spills. Okay. And I don't care about whether the quality of the oil is good or if it's a low quality of oil, but I know that a little bit can go quite a long ways in water. And my concern is is if there is a leak before it can be contained, shut down, whatever, how far will that spread?

And I do know one thing. I've seen it over and over time again with gas stations and then they get that little notice from the EPA that their tank sprung a leak and then they got to go clean it up, okay? And they got to go in there and remove all the topsoil and subsoil and do all of this stuff to try to clean it up.

And I don't know as if I've ever seen that that really did get it cleaned up. Okay. So I have the concern there regardless of the soil being pretty much contaminated for quite some time and what that oil's going to do if a leak did spring up and get into our water aquifers and water tables.

And see where I live I'm not on rural water, okay? And I've heard what this oil can do to the different parts on the pipes and things like that leading to the rural water system. And they get water from wells and rivers. And most of this pipeline I've seen looks like the oil, if it did leak, would flow into the watershed area from the James River and then on in to the Missouri, see.

So those rural water companies are going to get their

wells contaminated if they get water from the River and whatever. I mean, that's my concern. And so I'd like to hear just a little bit about that.

How would they clean it up, and is there a guarantee that it could be cleaned up? And if not, what kind of remuneration can people expect? That's all I have for now.

MR. THOMAS: I'm just going to start with -- it was a number of questions, but just to begin with I want to tell you and explain a little bit more about the emergency response plan that Mr. Jones talked about earlier.

Keystone will have an emergency response plan that will be filed with PHMSA, the Pipeline and Hazardous Material Safety Administration. And they will certainly review this plan before Keystone goes into service.

So really they are the regulators that are there to ensure that Keystone's plan is adequate to protect the very things that you're speaking of.

But to talk, first of all, a little bit more about the potential for a spill and that spill in a river, as an example, what I can tell you is that Keystone will have as part of its emergency response plan various control points identified along the River downstream of the pipeline right-of-way.

Now it's extremely unlikely that we're going to have a spill. It's that much more unlikely that it's going to occur and then actually get in to a river.

But these response plans and the various control points that we will have established along the River basically ensure that any time of year knowing what the flow condition is, the velocity of the current at the time, that we're able to get resources and equipment to the various points downstream of pipeline right-of-way in order to contain the volume spill. And we'll utilize equipment such as booms and skimmers in order to basically pick up as much of that oil as we can and bring it back to shore and load it on to tanker trucks and so on.

So hopefully that addresses that part of the question. And now I'm going to just turn it over to Ms. Tillquist to address the aquifer portion.

MS. TILLQUIST: My name is Heidi Tillquist. We recognize that aquifers are very sensitive resources. In our routing process we actually looked at that and tried to get count of that -- that was one of the constraints we talked about initially in our routing process.

When you look at aquifers not all aquifers are equally sensitive, equally susceptible to contamination. The majority of aquifers along the pipeline are constrained. They're consolidated material that provides a barrier for the -- again, the oil and the -- if it were to leak and the aquifer itself. However, there are some areas along the pipeline where a spill could possibly contaminate, given enough time.

So those are the things we're looking at as far as

emergency response plan. And I think it's really important that it's a combination of things. Emergency response plan or leak detection, all of those things in combination are designed to detect, contain, clean it up as quickly as possible. Anything that's left we remediate.

If in the unlikely event a spill did happen and it did contaminate an aquifer, there are some remediation standards that are applied. They're both federal and state level. So Keystone would be responsible for remediating the water back to what it was.

I guess the last thing I'd like to throw out too is when we're looking at aquifers there are some that the State agencies have worked together with the Department of Transportation specifically identified that they're public water supplies, if they're, you know, susceptible to contamination because of the overlying soils. Those are actually specifically identified by Department of Transportation, and they have even more stringent requirements if it were in the general area of those.

So we have our normal standards, and we have even more stringent standards that will be imposed in those areas to protect those aquifers.

MR. KEVIN SIEFKEN: I still haven't heard anything about the -- I still haven't heard anything to answer my other question about the soil. Like at a gas station when the tank

springs a leak. You know, because I've seen cases like I came from Washington and I saw what a pipeline burst out there and how it contaminated the soil. And I've seen in places where they had to remove like 4, 5, 6 feet of the soil in order to try to clean the soil and were unable to.

Okay. So in the event of a leak how would Keystone address contamination of the soil?

MS. TILLQUIST: There's a variety of methods that are used to remediate soil. In addition to the emergency cleanup methods that would try to collect and contain as much of the oil that was spilled initially, there's additional remediation methods that would be used.

Some of those include, as was suggested, is soil removal of the contaminated soil, re-manufacturing it, and then replacing it with clean topsoil. There's other remediation techniques. The standard in the industry -- the standard practices by remediation practices including things like adding fertilizer to the soil which actually enhances the microbial activity which can break down the hydrocarbons.

So there's a variety of techniques that are used and that would be implemented, and they would be -- the choice of the remediation method would be selected in conjunction with state and federal agencies.

CHAIRMAN JOHNSON: Let's go ahead and take a 10-minute break at this time to allow our court reporter an opportunity to

rest, and we'll be back at a few minutes after 9.

(A short recess is taken)

CHAIRMAN JOHNSON: All right. Thank you very much, ladies and gentlemen. You know, I think there are a number of good questions that people asked. Frankly, I don't have a lot of the answers so rather than answer any of them myself, I just asked a lot of you to, you know, make them public here.

One that I think is particularly interesting that I'll just open this up -- and this is more of a taxation issue, doesn't really deal with the Commission, but I am curious. This pipeline depreciates. Does that affect the taxation as it's assessed, or what is the mechanism?

Anybody have any idea?

MR. KOENECKE: Thanks for the question, Commissioner. The assessment of value for property in the state will be longer than you probably wanted, but it's required to be calculated either on the market value of the property or the income value of the property or there's another -- three different methods of valuation.

And it would be really hard to be precise to say which valuation method will be used and how that will evolve over the years. If the value of the pipeline as far as replacement value should skyrocket, then that would be a function of that equation. If it should go down because there are a multiplicity of pipelines, that's something else. All we can project is a

very, very short window in the future, and certainly it looks like construction value will be used for the indeterminate short amount of time. After that it's really hard to say how that will be done.

CHAIRMAN JOHNSON: Thanks.

COMMISSIONER HANSON: Mr. Chairman, during the break there were a number of citizens who came up and addressed each one of them. And apparently there's a few shy people in the audience that would prefer if we were asking some of the questions. So I'll ask a couple of those myself.

I'll ask the three of them so you can prepare for the remarks. Maybe it will speed things along.

One question is what is the temperature of the product in the pipeline? What are the different temperatures? I assume there are different products. What is the track record on the leaks that you have? Have had? And what is the liability towards other persons for damages from leaks?

In this particular situation a landowner -- two situations. A landowner leases the property to someone else. The landowner has signed the easement, and if there is a problem that causes damages to the person who leased the property, is the landowner liable for any damages? And if there are damages caused to a neighbor as a result of a leak or something from the pipeline, is the landowner liable for any damages in that situation? And is this spelled out in the easement itself?

MR. KOENECKE: Thanks, Commissioner. I want to try and restate your question back to you about the easements and the liability which might transfer to an owner.

If I understood you correctly, you asked if the -- if by virtue of the easement being granted -- by landowner A to TransCanada and in the event of a spill neighboring landowner B, does A have liability to B in the event of a spill? And the answer I think is clearly no.

It's important to state that there are federal and state laws which outline very clearly the full liability of TransCanada in the event of a leak and for the remediation and then the efforts that have to be undertaken to clean up that spill.

But I don't find any chain of liability which goes from landowner B back to A by virtue of having the pipeline on his or her property. Did that answer you fully, or was there more to the question?

COMMISSIONER HANSON: Thank you, Brett. I believe it answers the question. The concern is that when a landowner takes an action by accepting funds to provide an easement, are they at all culpable if there is a challenge in the pipeline?

MR. KOENECKE: Is the -- let me try this again. Is the landowner by virtue of taking the payment and granting the easement culpable of I think you said a challenge on the pipeline --

COMMISSIONER HANSON: Yes. If the pipeline ruptures in some fashion and creates damages for a neighbor or for the leaser.

MR. KOENECKE: My recollection of the current form of the easement is there's culpability if landowner A is responsible for having caused the leak somehow through his or her willful or intentional acts. I'd have to go back and take a look at that to make sure.

But if you're the one who caused the leak through something bad happening in your property that you're responsible for, then I can see some liability there. But if it's clearly a TransCanada problem, then I don't find a liability going back and forth between neighbors.

Does that help?

COMMISSIONER HANSON: That helps. It also creates a bit of a question that was also related to me. A lot of farmers have heavy equipment, obviously, and this being buried 48 inches, erosion, et cetera, the challenge of driving heavy equipment over it, ground frost being driven down on top of it, and then heavy equipment being used over it damage the pipeline.

What takes place in that type of situation?

MR. KOENECKE: I think I'll be glad to turn the microphone over to Buster who can talk more about the technical interplay with the document and what you described.

MR. GRAY: I apologize. I was talking to somebody

behind me there. Relative to farm equipment is that there are several hundred thousand miles of pipeline operating in the United States today, both natural gas, crude oil, and refined products of various diameters throughout the Midwest and in your own state.

The question concerning heavy farm equipment at the depth of cover that our pipeline is during operation, it is a depth that your farm equipment moving over it is not an issue, has not been an issue historically in our industry and the 4 feet depth of cover actual engineering calculations will show that that's not a particular issue.

I think the question was posed in terms of frost and driving the frost down into the 4 or 5 feet that you guys have in your coldest regions of winter. I don't know that I can specifically address the issue tonight relative to that other than there are a multitude of pipelines 30 inch and larger operating in South Dakota and North Dakota at present that cross farmland similar to here that that has not been an issue over time.

Was that all of the question?

MR. KOENECKE: Just to follow up, Commissioner, I think we want to make it abundantly clear that it would require a negligent or willful or intentional act by a landowner, and certainly normal farming practices are not anywhere near what we consider to be even a negligent act, let alone willful or

intentional.

We've told landowners that we expect them to be able to continue over the top of the property, and that's normal farming practices. We certainly don't see a connection there on damage or liability.

MR. JONES: I believe you also had a number of more operational technical questions. One of the questions was with regards to the temperature of the crude oil in the pipeline.

The temperature of the crude oil of the pipeline will initially start at 435,000 barrels is anticipated to be between 60 and 70 degrees Fahrenheit. So certainly not cold enough to cause any damage and not warm enough at 4 feet below the surface to cause any damage either.

When we expand to 591,000 barrels we're going to be adding more energy because there will be additional pumps, and the range of the fluid temperature will increase from between 70 to 80 degrees Fahrenheit.

As for the question on track records, TransCanada, as I said, has been in operation since 1957 with gas pipelines in the United States. We developed and constructed the Express Pipeline that went from Alberta towards the Wyoming -- through the state of Montana and Wyoming. So our experience in any pipeline we've designed since 1980, we have had no leaks on post-1980 constructed pipe.

So pre-1980 we have had leaks, and they are on the

diminishing trend. And the reason why we haven't had any leaks since 1980 has a lot to do with the quality assurance and the quality control program we have for construction. So it starts in the mill with the way we monitor the actual fabrication of the steel right to the construction of the pipe.

Also the other thing that we've -- technology has allowed us to do is this computerized in-line inspection equipment. I've talked about the smart pig. Since the incorporation of these tools over the past decade, you see an enormous decline in pipeline leaks, and that's really because now we can map out the thickness of the pipe and we can actually look at the welds years after it's been put in the ground.

So the other thing we've done is since 1980 TransCanada has gone through what we call FBE coatings, fusion bond epoxy coatings, and it's an epoxy coating that is sprayed on the pipe in the mill so as it comes out of the mill it looks like a pipe.

It is sandblasted to a pure white finish. It's heated, and then the epoxy is sprayed and fused on to the pipe. You can take a ball-peen hammer and hit the pipe as hard as you can, and you cannot damage this coating. So this coating is one of the number one reasons why we've had no leaks since 1980.

COMMISSIONER HANSON: Thank you. Thank you, Mr. Chairman.

MR. KOLBECK: Yes, Mr. Chairman. I also had someone

who didn't want to get up and speak, but their question was why the half a mile? Why does it have to be notification given from a half-mile of the pipeline? Is there danger that far out? Or why is that?

MR. KOENECKE: Thank you for the question, Commissioner. That's specified in state law and has nothing to do with the pipeline. It has to do with the Energy and Transmission Facilities Siting Act and that half-mile applies to Big Stone II or electrical transmission project or any kind of project falling under the purview of that state law.

It has nothing to do with the nature of this pipeline. It's a matter of how you are required to communicate notice that this proceeding is going on to people who might be affected in that corridor or range.

MR. KOLBECK: So that wouldn't necessarily mean that the pipeline route could move a half-mile either way?

MR. KOENECKE: That's correct. It simply is notice required to be sent. As I recall, the Commission is required to send that notice to the landowners a half a mile either side of proposed facility, whether that facility be stationed at Groton or on down the line.

MR. KOLBECK: I think there was some confusion as to, well, I got a notice the pipeline could be on my land even though I'm a half-mile away. But that is not the case?

MR. KOENECKE: That's correct. As I understand it,

people who are intended that they be directly affected by the property have either been notified or are going to be shortly; is that correct, Buster?

MR. GRAY: Pardon?

MR. KOENECKE: People who are going to be asked to give an easement for the pipeline have either been contacted or will be very shortly; correct? And that's by the company, not the Commission?

MR. GRAY: That's correct. And actually in South Dakota all landowners that are going to be impacted by the pipeline, whether it's contacted for environmental survey permission or civil survey permission, previously over the past year we made attempts to contact all landowners that the pipeline will truly intersect.

At this stage we've started the easement negotiating process, and we've been in that process now a couple of months. And as I stated earlier, you may not have been contacted as of today, but hopefully within the next three to four to six weeks on the outside you should be contacted.

CHAIRMAN JOHNSON: At this point I think we're still in the short comments or questions area so go ahead, sir.

MR. CALVIN HEITZMAN: I'm Calvin Heitzman from Spencer, South Dakota, and you were wanting to know where there's some native pasture and you found it. Most all of this half-mile crossing will be native pasture from the time when

possible buffalo roamed on it and my cattle for a lot of years.

And, anyway, the crossing will be on Wolf Creek Crossing, and it would be kind of interesting to know how crossings are going to be made because you'll be having to -- I don't want to be responsible if there's ever a break there that goes down to the James River and the Missouri River eventually.

And this perpetual easement thing I've got a section of land that's got a Federal Government easement on it. And it was bought for $3 an acre. And I don't think the easements are anything more than a theft of land. And I think that the landowner should be paid every year instead of just one payment.

They'll be pumping about $30 million worth of crude -- they'll be pumping about $30 million worth of crude through this line per day. If they paid $1,000 a year to a quarter of land a half-mile, that would be a tenth of a day's pumping through that line is all. And I would think that that would be pretty cheap.

And what about the perpetual easement? That will be something down the line. They're putting new lines in Oklahoma already and every place through the years. These people have a free ride on this property again.

And if you want to drive over to (Inaudible), South Dakota, I did Thursday. And the water line, Lewis and Clark went through into Sioux Falls last week here, and I saw corn 4 to 6 inches tall and there's right-of-way and corn where it hadn't been disturbed was waist high.

And as far as putting soil back into the condition, three years don't look like it will ever make it as far as production's concerned when you're looking at $4 corn and beans. And I've got some rental property that I will be dealing with.

And my native pasture, how long is that going to take to get back in production? And what am I going to do with my cattle during the time while they're going through this pasture? Am I going to have to remove them, or where are they going to eat?

And I have some soil that was supposed to be put back into good condition in 1995. It's still nothing but weeds. The state took my land for Highway 38. The nice thing about it is they haven't paid for it yet this day.

Thank you.

CHAIRMAN JOHNSON: I think there were certainly a few issues in there. If you need help remembering them, I'm sure we can feed you back a few.

MR. GRAY: I tried to make notes of them. And I think I'll certainly -- as you saw, I was busily trying to write down the issues. So certainly one of the questions that I think I can address is the Wolf Creek Crossing that you inquired about is typically the stream crossing's a -- significant stream crossings will be crossed by a special crew who will come in and excavate the stream and put a section of pipe in separate from the assembly line that I described above.

Typically that work is compressed to try and do that work with the minimal interruption and disturbance in the stream. But it's not done by the main line, pipeline, single line.

MR. CALVIN HEITZMAN: I would like to make a statement about the Wolf Creek Crossing. This is within a half a mile of the Spencer quarries, and I'm sure they will be seeing some granite there. So it may be a drawn out time. Like I was saying, where are my cattle going to be?

MR. GRAY: Very well. And I think your comment being in our excavation there it may either take like rock hammers and we do use explosives if necessary to get the trench depth that we would need if we would encounter it at that location.

Certainly our geotechnical work we'll be conducting this year we will be seeking to identify areas where there might be rock, or granite for that matter, with our pipeline.

The question related to the cattle is that typically in pipeline construction -- typically in pipeline construction we will not relocate the cattle. We will in constructing the crew area in meeting with you if you want to leave passage lanes in our construction right-of-way to allow cattle to move back and forth within a pasture, that's a very reasonable request, and if it's put forward to the agents, those locations will be spelled out into the -- in what we call a construction restriction binding agreement.

MR. CALVIN HEITZMAN: Does that include fencing off this here construction area like we see on roadwork and all of that?

MR. GRAY: We typically do not do that in pipeline construction. And for reasons that during our construction should an animal be damaged, hurt, or the loss of a cattle due to our operation, we would compensate you for the loss of the damage or the animal that was lost in it. But we typically do not fence off our construction right-of-way through pastures.

Let's see. I think you -- another comment that I would just address it, and I won't speak for the Lewis and Clark water line but under the procedures we have to work under removal of topsoil, decompaction, various things that we have to do in our construction mitigation and reclamation plan to bring back the growth of the crops as soon as possible over our land, I will just tell you that it's been my experience whether it's drain tiles or water lines or other utilities, I do not believe that they have to operate under as stringent of guidelines for restoration of right-of-way as we do.

And I would reemphasize to that that if damages do occur post three-year damage period that we mentioned, we are liable for those damages forever, as long as you have loss or damages to that. And, again, with the number of miles of pipeline that are in the United States I just suggest to you that you turn to productivity. Our industry has an excellent

track record. We believe we can achieve it. But if we do not, we are liable. I believe that's all the whoopings I can answer.

MR. ELLIS: I think I want to respond to your concern about recovering native pasture and ensure that those native grasses are not going to come back as aggressively as some of the tame grasses that you see in a lot of replanted areas. And I guess that is a concern that you may have to look at. You know, again your success in any given year's type, how much moisture you have and how much grazing pressure there is and maybe even -- Buster said you don't look at fencing. You might be in need to look at some type of deferment in pasture just to give the grass a chance to catch hold, and that would have to be something the pipeline would have to work out with the landowner on what that means to that operation.

MR. CALVIN HEITZMAN: About two weeks ago they contacted me to walk on this pasture. Do you walk all over the property? Do you walk physically to see what's there? Or was this a thing because of maybe the old American-Indian thing that could be there or what?

MR. ELLIS: Well, I think, you know, as you said before, we were specifically looking for examples of, you know, native prairie that's in pretty good shape. Because there are -- you know, is it's because there's so little of it we're looking at it as a restoration issue as well as a habitat for a number of different animal species.

You know, cultural resources are where you find them. They're not really tied to that kind of requirement. But certainly the grass land investigations we're trying to do we're just trying to get a plan in place so that we do a proper job of restoring those areas. And so that's what that's about.

MR. JONES: The final question I wanted to address was the one with regards to the easement and the thought of an annual payment. TransCanada Keystone doesn't own the product. We are the truckdriver or the mailman. We charge a tariff to move the oil.

The U.S. energy companies, whether they be the refiner or the producer up in Alberta, they own the commodity. That commodity, as you know, is very volatile. This year we're seeing extremely high commodity prices, and I agree with you that it's astonishing how much the value of the commodity that will go down the pipe will be.

However, the cost to build this facility is something we do as an infrastructure provider. And we do that in the public interest, and we try to do it in a safe and reliable manner. And the means in which pipelines are built is for a perpetual one-time payment. We try to make that payment a fair market value and properly compensate the landowner, and that's what we're asking to do here.

And that is the premise on which we're asking for permission and siting of this pipeline.

CHAIRMAN JOHNSON: I want to make sure we get all of the questions that you want answered answered tonight. So I would ask that we not have a flurry of five or six questions all dumped at once because I think there's a problem -- there's a chance we may lose one of them in that process.

So let's if you've got more than a couple of questions, let's pause after a couple of questions and make sure we get those answered.

We've got kind of a short comment question over here. We've been waiting over here. Go ahead.

MR. LARRY FRENCH: I'm Larry French. I live in Lake County, Madison, South Dakota. The land that I'm concerned about is in Miner County. I got 15 questions but -- I've got 15 questions, but I'm going to send some of them to you.

The first question I have, though, is why wouldn't these Canadian folks keep these jobs in Canada and find this fuel in Canada? Seems like they can use the jobs too.

I'd also like to know what is the specific name of this product? Is there a particular type of crude that it is? I don't know. I'm just wondering.

Another question is I presume you're going to need some heavy equipment to do this work. I'm concerned about the township roads. A lot of these towns will have an awful time barely -- barely maintaining the roads. This heavy equipment's going to tear them to pieces.

And are you going to bore, or are you going to cut these roads? Cutting them, I don't think there's any way to do it. You're a lot better off boring them if we have to have them.

CHAIRMAN JOHNSON: Let's go ahead and take some of those questions and we'll get some others and we can come back. If you've got 15 questions, let's get them answered.

The fist one you really talk about the oil refineries; is that right?

MR. LARRY FRENCH: Yeah.

CHAIRMAN JOHNSON: They've said earlier tonight that the projects are not connected at this point. It's just the PUC siting process really of the pipeline and not the refinery. Let's set that one aside, and maybe we'd have the opportunity down the road for you to talk to (Inaudible) or somebody from state Government who's got some involvement because this project we're talking about doesn't have to do with the oil refinery.

The last one dealt with township roads, and what was the one before that?

MR. LARRY FRENCH: What's the name of this particular product? Is there a name?

You misunderstood my first question.

CHAIRMAN JOHNSON: He's going to handle all of them and we'll get the first question you asked too and we'll get that. Thanks.

MR. JONES: It's getting late, Dusty. Your first question was what's the name of the crude. Crude in Canada has a range of names. It ranges from an equivalent to WTI or light crude. We call that a synthetic crude. It has -- every producer that makes this upgraded synthetic crude from bitumen.

Bitumen is a tarlike substance that is found in the oil sands. We call it oil sands now because we've got the technology to turn it into oil. We used to call it tar sands because we thought it was not good for anything outside of possibly building roads.

So technology now is to take the tarlike substance or bitumen and upgrade it into a crudelike product, and it's called synthetic crude. Now what they're starting to do is in order to meet the requirements of the refineries in the U.S. is blend it with different diluents. And so you're starting to hear names like Syn-bit or Dil-bit. And those are just short forms for diluent bitumen or synthetic bitumen and this would be blends of this bitumen or upgraded synthetic product.

What this -- this is still crude oil, and this is crude oil that you could buy in Saudi Arabia, Venezuela, or Mexico or other foreign offshore sources of oil. It's compatible with refineries in the U.S., and it does have a variety of other names.

Every company likes to market their crude oil with a certain brand, but I wanted to give you kind of an idea of the

nomenclature that we use with regards to the oil sands, crude oils.

Your question is why don't we stay in Canada? Why don't you build a refinery in Canada and not build a pipeline? Canada is not a very populated place. We have refineries, and those refineries are supplied by this crude oil. We're going to be able to supply and produce far more crude than we needed in the country.

And so the U.S. imports millions and millions of barrels every single day from countries all over the world. And they import crude oil from Canada, and so refineries are logically built near population centers. That's why we see them today along the Gulf Coast, along the U.S. northeast, and Chicago. Because that's where most of those products need to be delivered.

Once they are refined, they either need to be pipelined as refined products to airports or to other major users. So refineries tend to be in highly populated areas. And again we're just the trucker. We're moving the product from the production fields up in Alberta to the refinery centers here in the U.S.

It doesn't make any sense to build -- there's no economic rationale to build those refineries in Canada. And if we did build those refineries in Canada, we'd have pipelines come to South Dakota with aviation fuel or with diesel or with

refined products. And we'd have a whole bunch of other pipelines. So there would still be a need for a pipeline.

The economic model or the efficient economic reason for the project is to get it to the existing refineries that are already here in the U.S. and to change the reliance on foreign sources of oil to a more reliable source in Canada.

As regards to the boring or road crossing, I'm going to pass that question on to Buster, logistically.

MR. GRAY: Regarding the township and county roads is our philosophy has been that we will bore any improved or well traveled road, public road, be it whether it's paved or not.

What we have experienced, and I don't know if it's in this region of South Dakota, is that there will be times that roads are simply not maintained or there are two tracks I call them. And we may seek permission to open cut a road like that. But if it's a well traveled road by the public that's being maintained with an improved surface, we will likely bore it.

What you need to keep in mind is under the county and the township we have to seek the permit to cross any of your roads. And in seeking that permit that is the vehicle by which requirements that you might want for your township or county roads can be communicated and are imposed upon us as a project. So there is a process we have to go through for a permit that allows an interface for you to express your concerns.

I personally was involved in a large project in

North Dakota about five years ago, and certainly there -- their description, we moved very heavy equipment. The pipe we moved and the condition of the roads is a real concern that we need to address. What we were trying to do is working with the township and counties identify roads that we will use so that we specifically know what we are responsible and liable for repair.

MR. JERRY GLANZER: I'm Jerry Glanzer, Bridgewater, South Dakota. In 1887 my grandfather -- great grandfather, came to America. He was granted a Homestead Act from President Chester A. Arthur.

Today we have Canada coming in here to this country and telling us that we're going to give them land so they can build the pipelines. Just when did we lose our rights?

CHAIRMAN JOHNSON: Quick comment in response to the previous question. We're talking about indemnity. We're talking about towns and township roads and those of you that look like at state laws and have a pen, you can jot down 49-41B-38, and the title of the section is Indemnity Bond For Damage To Roads And Bridges.

It says, "In the case of a trans state transmission facility, the Public Utilities Commission shall require any person performing construction or survey work to furnish an indemnity bond in a reasonable amount that shall be in lieu of any county or township indemnity bond."

And it goes on with it. State law does address some

of this, and if you need more information, feel free to talk to us after questions are done. Thanks.

Ms. Van Bockern, do you have somebody lined up over here.

MR. RICHARD BURKHARDT: My name is Richard Burkhardt (phonetic), from Fedora, South Dakota. What experience does Keystone have with the 1,400 PSI pipelines up to this point? Is this a new line, or have you built others?

My second question, how close will a second pipeline be placed into the existing one in the future time since I see in the easement papers that they list the possibility of a second line being laid?

MR. JONES: I'll answer the first question with regards to 1,440 PSI pipe. That's extremely common for TransCanada. All those pipes that we've built since 1980 are typically 1,440 PSI. And we are now looking at new technologies that will be well over 2,000. With the high strength steels out there, they can be operated very safely at these pressures. So a standard today is certainly no less than 1,440.

I want you to appreciate that that's the maximum allowable pressure. And when we start this pipeline at 435,000 barrels the maximum pressure of the pumps in order to move the oil will only be around 1,000 pounds. And then the pipeline is tested to 125 percent of 1,440. So that's approximately -- excuse me. 1,800 to 1,980 PSI is what the pipeline is tested

for. And then we operate it at less than 1,440.

In the -- as a businessman and as a pipeline company, if there is a potential for a second pipeline to be built because the U.S. requires further reliance on Canadian oil as opposed to foreign oil or offshore oil -- our sound system is challenging here today -- then if there is ever a second pipeline, that pipeline would be no closer than 10 feet.

And there's lots of research and testing that shows if there was an incident on one line, it would have no impact on the adjacent line if you were concerned about that issue.

MR. LAWRENCE NOVOTNY: I'm Lawrence Novotny from Brookings, South Dakota. This pipeline is supposed to be passing through the Prairie Pothole Region in the northeastern part of South Dakota. It's a very important region as far as water fowl production and hunting in our state. And I just want to emphasize you really need to watch for and be considerate of oil concerns and big problems with oil pollution and waters. This was a suggestion. I want to emphasize again.

I have a couple of other questions dealing with the pump stations. I think you're applying for about five pump stations in South Dakota. The pump stations, would that help reduce the pressure in the pipeline and possibly decrease the possibility for oil spills?

In your literature I saw you mention with the pump stations your inclusion of possibly environmental containment

facilities in the pump station. Why not can environmental containment facilities be required to be in every pump station?

Another question deals with your valves. I think you'll be requiring seven valves, shutoff valves in the state. Why can there not be a shutoff valve for every county a pipeline goes through?

MR. THOMAS: I'm going to do my best to get those multiple questions, and if you wouldn't mind to let me know if I miss any.

I'm going to start off with the question in regards to how many pump stations. There's four in South Dakota. There's 15 valves. Basically that number of valves complies with all applicable regulations. I just want to lead into your question with regard to would additional pump stations actually make the pipeline safer?

And the answer to that is is that the pipeline is designed to operate at this pressure of 1,440 PSI. And it has sufficient wall thickness per the engineering formulas that Mr. Gray described earlier in order to do that. So if you were to say rather than use four stations, use eight stations, really what you would then do is use thinner wall pipe. So you wind up with the exact same safety factor irregardless about whether you use four stations or eight stations.

These formulas as Mr. Gray described are in the code, and it is, you know, certainly the way that pipelines are

designed today.

I think you did have at least one other question, I believe.

MR. LAWRENCE NOVOTNY: A question dealing with what you call environmental response centers located in the pump stations. I know in your literature on the table you said it's an option (Inaudible) an environmental response center in the pump station.

How come these centers are not required to be in each pump station?

MR. THOMAS: Okay. Keystone will have emergency response equipment prepositioned at strategic locations along the pipeline. Now basically the way that is done is that we will conduct what we call a spill analysis.

So we will look at the pipeline in a what-if scenario every 100 feet along the length of the pipeline and determine in the event of a -- and determine in the event of a spill how much volume could potentially leak out.

And once we have those numbers now and a volume at each 100-foot placement along the pipeline, we can look then at how much equipment is required and where it would be best located in order to deal with and mitigate those issues associated with the leaks.

So to say that the -- there won't be equipment at every pump station necessarily unless it's required. But it

will be positioned such that we can respond in accordance with the regulations in effect, the CFR 194 regulations, in the time frame specified in order to mitigate events such as these.

MR. CURT HOHN: This is a question for the CEO, Mr. Jones. You mentioned earlier that bitumen, which is like an asphalt tar product, in order to get it to move you have to use a dilutant (sic) I think that was the term to make -- sort of turn it into a synthetic crude.

The question is two-fold. What's the dilutant? We've heard from people in the oil industry in Texas who have family living here in our state that quite often it's a product something like J-4, which is a jet fuel, very explosive material.

And the other is, is that going to be mixed in the crude moving through the -- helping it move through the pipeline? This person said there very likely could be a second pipe going back up the line at the refinery. He said that they strip the dilutant off the refinery and move it back because it's so valuable.

So what is the dilutant? What do you do to make this flow? What is that product, and will there be some kind of MSDS environmental sheet filed with the Commission that shows how volatile that is?

MR. JONES: The product going down the pipeline is crude oil. It is exactly the same properties of crude oil.

Crude oil is a product that we have seen by either drilling and finding what they call conventional or, as I described, the oil sands.

The land I'm talking about, the diluent is still crude oil. It's the bitumen that just has the sand removed and has the tar removed, and so it's very much like crude oil that you would find in Texas. And you blend it with the heavy oil so that we can pump it.

It still meets the standard specifications that you have in every sing the crude oil pipeline in the United States. It doesn't have any unique properties like the volatilities that were described here.

Keystone has no proposal to build a second pipeline that would move the diluent back up to Canada. We have no intention of doing that. The shippers, again we don't own the product, and I'm describing something here that I only -- I know because of my discussions with the oil companies but that I want you to appreciate that there is nothing unique with regards to the volatility of the oil because it comes from Alberta or that it is blended with a diluent.

The diluent is just a lighter crude material so that it can flow in the line. And the reason why you do that is so it emulates what they call heavy crude. And heavy crudes are becoming more and more popular in the Gulf Coast and other refineries because it's cheaper than WTI or light crude oil, and

also there's more of it. It's more prevalent in the world.

So you can find heavy crudes in Mexico. It's called mayan. You can find heavy crudes in Venezuela. It's called orinoco crudes. There are heavy crudes all over the world, and the U.S. imports those.

In Canada the most popular type is called WCS, Western Canada Select. And this is a blend. It is a blend light crudes, conventional light, conventional heavy, synthetic bitumen, and bitumen. And so when you combine them all -- and by far I think there's over a million barrels of heavy oil that is imported every single day from Canada into the U.S.

MR. CURT HOHN: Just a follow-up along that line. Again, this is something that was raised with me by the son of a landowner who happens to be working for one of the companies that is going to ship oil in your pipe.

And he said that very likely there will be a second smaller pipe that will move this liquid back to be injected into the lines to help move the crude much like water moves stuff in the colon. That was the term he used.

But the other question I guess is your easement allows for one or more pipelines in the easement. It says one or more. That hasn't been removed, I don't believe.

I guess you're the trucker. But are you -- are you going to sell this pipe to these companies? Are you going to move it and could they, in fact, go in and add a second line?

We've been told in the business that tar sands is not that flammable, you can't light it with a match. But this fellow who works for one of the companies who's going to move oil in this line says it will light.

And so things change after you build a pipe and somebody comes back in under this easement, they're allowed more than one pipe unless you strike that.

MR. JONES: So there's a number of questions. And I find it challenging because there's also a number of conjecture and speculations that are incorrect. So let me try and break it down into pieces.

Bitumen crude oil when mixed with this diluent and this diluent property could be a volatile material. But when it is blended into the bitumen it stabilizes. And so there's -- it becomes this heavy crude. And the volatility that's described here is not the case. And, in fact, we've given the Commission the flash point of this oil. So the properties are such.

And in the easement it says that we move crude oil or hydrocarbon products. And these are not high vapor pressure lines that are volatile. As for whether or not we're going to build a second line to move this volatile material and we're going to have this volatile material parallel this existing line, that's just not true. It absolutely not true. If we ever build a second pipeline, it's because the demand and the need in the U.S. here is for more of this blended crude oil to come from

Canada and displace foreign sources of oil. It is not to move another volatile product from refineries in the U.S. back out to Canada.

There are proposals out there. So people can get confused to do such. But Keystone is not part of that business model, and we are not suggesting that that's what we would do. So our request for multiline rights is in the future if the U.S. requires this additional crude oil, then we'll be prepared to address it at that time. I don't contemplate that to occur in this round.

And if that was the case, we'd have to go through the regulatory process again, and we would be applying in the future date for another line. Again, as a businessman, I welcome that challenge because that means that the economic model is such that the U.S. is looking for more reliance on Canadian crude and less reliance on foreign crude oils.

MR. STEVE SIBSON: My name is Steve Sibson from Mitchell, and my family has some lands on this pipeline, including the pumping station. And I kind of had like two questions.

One of them is related to the end game. We talked about the 99-year easement in North Dakota. And 99 years I don't think any of us are going to be here. Before I move on I'd like to thank the PUC for allowing us to get together to talk. You people obviously are well intended professionals. We

appreciate what you're trying to do to help the United States with energy efficiency.

But the end game is something that we all need to carry forward as citizens to our prosperity, future generations. How long will this tar sand oil last, America, and how long will it need that pipeline, and when that pipeline is no longer needed, then what will happen because the perpetual easement in South Dakota will stand?

That pipeline will still be in future generation's property, and if that is a hazard, we in South Dakota understand that we have a badger hole on our property, we're not negligent by having badgers on our property. But if somebody steps in that badger hole and breaks a leg, we can still be sued for that.

So we are not just concerned about our property today but how about what we're going to do with all of these pipelines in the future when they're no longer needed because that stuff will not last forever? We all know that.

MR. JONES: Thank you for those questions. They were excellent questions. As I tried to start at the beginning of the presentation, there is over 175 billion barrels of proven reserves in Alberta and potentially 300 billion barrels of reserves that we could potentially access to feed this pipeline.

Now I can't speculate whether or not that is going to be over 100 years, but we're certainly designing this pipeline

so it will be safe and reliable perpetually as well.

In the future when this pipeline let's say many, many, many years from now -- I can't speculate when that could be but if I can take your example, let's go out many generations, and there's no other secondary need for this pipeline. And pipelines have been used for different purposes.

So, for example, the gas pipeline we have in Canada, we're converting it now for crude oil service. So in the future pipelines do have the ability to be used for another purpose. And we are going to maintain it so we can -- perpetually.

And if the future -- again, many generations -- I'll take your case as an example. We will now need to potentially abandon the line. That line will be -- there's a regulatory process for that as well. And you have to comply with state and federal regulations with regards to abandonment. And there's a number of ways to abandon pipe, and we will comply with those at that time because that's what the regulations and the protection you have as a landowner and the law has with regards to future use of the pipe.

MR. STEVE SIBSON: Thank you. For the PUC I have a comment regarding those regulations he spoke about protecting future landowners. I hope they can assure us that will indeed happen when the time comes. You won't be here neither, but we have to make sure that laws can't be changed so that landowners have problems in the future.

Now with regard to how we get to the end game, I have questions from the documentation I found from the PUC website. And, by the way, thank you very much for putting this together. And thank you to the PUC for putting this online so it's available for the public.

This is a pipeline list assessment and environmental consequence analysis done by DENSR Corporation. Page 3-2, what we've been talking -- you guys have been talking about how great this type line is as far as preventing leaks, but your own documentation here says that over 10 years we should expect 1.4 spills. So if we're talking end game over 100 years we have a lot of spills here.

And what concerned me was the 3-2 regarding how this was calculated. It looked at floods and landslide probability and ignored the earthquake probability. They're all 0s for North Dakota, South Dakota, Nebraska, Kansas, Missouri, and Illinois. And I'm hoping somebody on your team understands what the Madrid Fault is down in the Missouri area.

On the Internet I found a printout of earthquakes in the central United States since 1800. And there's quite a few specs in South Dakota here, especially around the Yankton area near the Missouri River. There's a lot of specs in Nebraska where there's been earthquakes. But Iowa's pretty well clean. I was wondering why the earthquake issue has been ignored in this environmental study?

MS. TILLQUIST: Thank you for reading the document. That was great. You're right. The document does discuss a possibility of having a worst case scenario, 1.5 spills I believe it was every 10 years.

That's over the entire length of the pipeline and that's any size spill. If you break that down, you know, for a person living on a house -- well, let's put it if it's South Dakota, you're looking at 220 miles of pipe. That's roughly a spill every 41 years. A spill every 10 miles is 900 years.

For somebody working around their house, a spill in every given mile is once every 9,000 years. It depends on how you look at it. Certainly it's a long piece of pipe. The majority of spills that occur are smaller than 50 barrels. They're not large spills. So there's a possibility of spills.

The earthquake issue, it wasn't ignored. We're aware of earthquake issues. We know about the new Madrid Fault. We have evaluated it. I guess the one thing I -- when we look at hazards that may affect the pipeline that's something we have to do as part of the integrity and management program to comply with federal regulations and earthquake hazards is one thing we evaluate.

The pipeline, also there's lots of studies that show they are actually fairly resistant to earthquake hazards. So it is something we have accounted for, we've addressed. It's

certainly required by federal regulations to talk it out and to evaluate.

MR. BERNIE KAYSER: I want to thank the Commission for finally having the company release their information there, secretive information, 1,000-page document. Bernie Kayser, Alexandria, South Dakota.

Now I find it interesting that when the edited version finally come down it's now 78 pages long. I suppose the Commission finds that a little easier to read than that 1,000-page document. That was supposed to be released a few days after you folks gave that order, and I kept pretty close tabs on the local county. They was supposed to be at our courthouses shortly.

It came here Friday afternoon, four days before this meeting over a weekend. So it really gave the average person time to really digest this. How many in this room have seen a copy of the edited version of their document? Has anybody had a chance to access it? I find that interesting.

I find it interesting in the fact that rural water -- we've talked about pipelines being here. There are so few. We've got thousands of miles of rural water that have an easement, perpetual easement, for every foot of pipe that's laid on South Dakota soil. Yet your company has ignored that and any (Inaudible).

This edited version of this 1,000-page document

mentions rural and municipal waters in only one table. It's in the table that says the times -- well, the amount of line is 0 -- both places 0. That's the only place rural water is mentioned in the whole thing. Isn't that odd?

We have perpetual easements, rural waters in this state. We cover over 65 percent of the area in the state, and yet a foreign corporation come in and stirred up our easements. How do you plan on handling that situation?

MR. GRAY: The pipeline company, we being long, linear facilities, we cross utilities throughout all the states that we're in, whether it's rural water or electric lines, fiberoptic cables, all types of utilities we've crossed. We contact the utilities by letter and/or by verbal notification to sit down and have a meeting with each utility to determine the requirements that you may have to cross your particular utility.

And in these easements, perpetual easements, that you indicate that the water lines have, we will identify them through the courthouses through the One-Call systems or through just truly contacting local officials to identify them. But in our industry we -- not to downplay your concern, but crossing utilities is a very standard and common practice for us.

MR. BERNIE KAYSER: I guess I'd like to address this statement to the people that's sitting in this room. We're a relatively small rural water system, yet you cross our lines, including our main lines, 13 times. 13 times you're going

across potable water lines, which in fact affects approximately 850 taps, five Hutterite colonies, and five municipalities.

In your statement water is mentioned as lakes, streams, rivers but never, never a mention of potable water, the thing that South Dakota definitely, especially this area, rely on. Our ground water is almost unusable for domestic use. We used it for years because we had nothing else. But how in the world are we supposed to just lay down and let you just come on in and do that? Economic development depends more on water than it does on your pipeline, sir.

MR. GRAY: And, sir, you know, in addressing to it is I think we certainly recognize I want to say water, whether it's drinking water or water lines that service municipalities and other systems, but I stand before you as somebody that's worked in my industry 30 years. And we cross utilities as a standard practice, and we do not disrupt water supplies. We do not contaminate water supplies. And we can conduct our business in such a fashion that we do not.

And in your state there are -- I don't know if I would say thousands of miles of pipeline that exist in your state today. I believe they exist in your state in a very responsible manner in conjunction with your water systems, and we plan on just adding another 220 miles to the thousands of miles that currently operate and operate in conjunction with the water systems here.

CHAIRMAN JOHNSON: Our court reporter has requested another short break. Again, 10 minutes is what we typically do to sort of allow her to refresh her hands and everything. A short break.

I will say this: You know, I thought that some of the questions would be redundant from what we heard in Yankton. And I would just say they've been really great questions, and we appreciate it. I'm surprised by the lack of overlap. Thanks very much. With that, we'll take a short break.

(A short recess is taken)

MR. DAN SCHROEDER: Dan Schroeder, Emery, South Dakota. Just a couple of questions. You stated that no accidents happen around PVC pipe. I know what can happen with oil and PVC pipe -- when oil spills on the ground can infiltrate PVC pipe.

Anyway, to make it short, the fuel oil went down through the ground into the PVC pipe, and we had oil in toilets, drinking water in the house. We had to install top of the line to get the soil -- (Inaudible).

What will you do for Hanson rural water if the leak that never happens happens by our 12-inch main that supplies our whole system? We have -- people don't have backup wells anymore. How many days or weeks are we talking before you'd have our water back in service?

And then my next question is once you're in place with

your easements if I want to cross you, what hoops am I going to have to jump through? Are you going to be as bad as the railroad? That's a nightmare.

MR. GRAY: I believe the question regarding our easement and your ability to cross it is the question that I will address. Indeed, we have an easement right in the land, and we will require that the entity wanting to cross us has to deal with us, whether it's in meeting our requirements to cross our facility.

I strongly suggest to you that our utility is not as cumbersome as dealing with the railroad. And we're familiar with the railroad processes as well. But the two primary things that pipeline looks for is 12 inches of separation between your utility and ours. And the second thing is the presence of an individual when the excavation is occurring to ensure that you excavate around our facility safely.

Those are the two primary things that are asked for. And as long as those two items are met, we will typically have a crossing agreement that you'll agree to do those things but it's not a (Inaudible) process whatsoever.

MR. DAN SCHROEDER: Also we have pipelines in road right-of-ways. We have pipelines in road right-of-ways and state right-of-ways, and those are generally pretty much open area. I mean, we can't control anything. What is your process crossing those also who are already there?

Also the 12 inches of separation, do you have to go underneath us all the time if we're at 5 to 6 feet deep?

MR. GRAY: One, where you have the utility that's, say, on the highway right-of-way where you do not have an easement, you might have some type of permit from the highway to do that.

As far as we're concerned, your rights in that utility, whether you have an easement or not's irrelevant to us. The requirements that you have crossing your utility, we will meet those requirements whether you're in a highway right-of-way or on private land.

Relative to the depth of cover is I think I've mentioned earlier is is that we typically go beneath existing utilities simply because most utilities we can't get above you with the separation and maintain the depth of cover. People ask, well, that may be 7 or 8 feet deep or 10 feet deep.

I talked about additional temporary work space. We dig large holes, and we cross underneath utilities. And generally rare instances if you have a water line that was 12 feet deep, we might request you to go over it. But very seldom do we run into utilities that are that deep, very seldom. There were a couple other questions that a couple other gentlemen are going to address.

MR. THOMAS: Thanks. I don't understand 100 percent the example that you referred to in regards to crude oil and how

it may have got via the water line into a residence. But let me just start by saying really the constituent of crude oil that can adversely affect PVC pipelines are the aromatics.

And I guess it's of the aromatics it's the benzine content that is most detrimental to PVC. The crude oils Keystone will transport typically have very low concentrations of benzine. So it would take -- in the event of a spill, you know, the spill would have to basically sit or at least the PVC would need to sit in the spill for a significant period of time before there would be really enough action that it would harm the PVC line.

Now if -- and that's a very unlikely scenario. But if we just carry it out a step further, the water line itself is pressurized, and if you look at, you know, what would happen in that case as unlikely as it is, the PVC would eventually deteriorate, and then the water line would leak because it's pressurized.

So that water -- so a lot of the water line, the PVC water line -- and I don't understand how, you know, like the crude oil would get into the physical water pipe.

MR. CURT HOHN: I would refer you to a study that was just recently done by Iowa State University for the American Water Works Association, AWWA. We'll be filing it with the PUC. It goes through the wall. It permeates through the wall. Now it would require a doctorate degree to explain it.

We experienced the very same thing Dan was referring to in another community where the petroleum product gets near the pipe, and the first thing that happens is the customer tastes the fuel in the water long before the pipe fails. It's like it goes through the wall. And it's a chemical process, and if you look at that study you'll see what I mean.

The other then is there's rubber gaskets in most of these pipes that rural water has in South Dakota. And it will start working on the gasket. We've seen rubber that's been deteriorated by oil that looks like chewing gum. That's the second step.

And then eventually the pipe sort of expands and fails. But that process could happen -- take some time before the pipe actually fails. The first thing that's going to happen, the customers are going to be complaining about the taste of gas or oil in the water, and they're going to be calling DNRD and asking to have our water sampled.

And you could have -- before it fails you could have it go through an entire system. And if it gets in the inside of the pipe, this is what the regulators that regulate us say. If somebody pulls out a tap 10 miles away, you got a problem. He's got a contaminated line and so do I long before it leaks. So, again, American Water Works Commission study, Iowa State. It just came out about a month ago. It supports other studies that have been done.

And there's two solutions. One of them is run the water faster. If it goes by fast enough, apparently you don't pick up petroleum. That makes sense. It might work in the summer.

The other is replace the lines. And as I said in Yankton today, if you contaminate our 12-inch line that serves all of Day County, it's $11 million to me. I don't have it. Depending what you do to his system, there's probably just as many customers on that, and I bet he doesn't have (Inaudible).

So Bernie Kayser is on his board, the gentleman who spoke earlier. We're frustrated that you're not paying attention -- I don't think you're paying attention to this rural water situation. You came to the state, and you environmental people, all you experts in your fields, and you say you're looking closely at us and you're assuring this board, this Commission, that we've really looked at this.

How the hell -- excuse my French to the transcriber. How in the world did you miss eight rural water systems? You are going to affect us if you have a leak, and when that leak gets in a trench it's not just going to stop. It's going to follow the trench down the hill into the draw. If it goes in the Wolf Creek and there's a leak, can your environmental experts there -- follow the sand, follow the soil.

And up at BDM rural water country my colleague who you will meet when you go to Britton, you couldn't have laid that

pipeline more on top of a shallow aquifer, 45 feet deep, if you tried. So you environmental people who did the plotting and you said you tried to avoid it, you're not looking at the same map I'm looking at.

These rural water systems are really important to our state. Where I live the only way to get water is 1,000 feet deep, and it's salty. You can't even drink it. Dan's got a system here that's got a different problem.

So I hope you'll look at this study. I'm sure you will because this sounds like it's your area of expertise, and I think it's available on AWWA. It's a problem and you're costing eight of us and we're all concerned and we all have constituents who are going to be looking at us to try to protect their water supply.

MR. CORY EICH: A couple of questions. Cory Eich from Epiphany. The first question probably is directed at the PUC.

Last night, Commissioner Johnson, your interview with a KELO was on TV. I got the illusion -- maybe not illusion but the impression that this tax dollars, 6.5 approximately million, that they paid to the State would decrease over time.

And I couldn't understand the rationale over that because we pay property taxes. They don't go down unless the item that's being taxed decreases in value, and that usually doesn't happen. And considering this pipeline is going to last several generations, I don't see where that would be the case.

So I was just -- that's my first question. Did I understand that wrong or what?

CHAIRMAN JOHNSON: Well, you made the mistake of taking my word for something first. No. Truth be told, I'm not a revenue expert, a Department of Revenue expert. That's why I asked Mr. Koenecke exactly how the evaluation and taxation would go.

We had a little bit clearer understanding of that earlier today, and so I feel better about it. I had been told by somebody that the value of that pipeline would likely depreciate over time. I don't think there's any sort of straight line method and certainly not an issue the Public Utilities Commission has authority over but certainly something that I'm going to ask the Department of Revenue about as a concern and curious citizen. So thanks.

MR. CORY EICH: So we really don't know for sure how long the valuation would stay? Or, I mean, that's --

CHAIRMAN JOHNSON: We can certainly ask Mr. Koenecke to come back up. I think he indicated earlier there were a couple of different methods that the value of the pipeline if it's built, how it would be valued, and taxation would be based on one of those two methods and at this time would be -- I don't want to put words in his mouth, but it would be very difficult to say 20, 30, 50, or thousand years from now if this pipeline is built what the taxes would be.

MR. CORY EICH: Okay. This will probably go to Buster. You know, I hear you talking about exceeding the minimum requirements of 30-inch cover and going to 4, and that sounds fine. But when they come out of Canada you know all about frost and everything so I'm not going to tell you anything. But wouldn't it be better if you -- I can't -- you know, the cost of this project if you bury it deeper. You know, we had a 10-inch rainfall, we got 4 foot gullies, and earlier I think one of the Commissioners talked about, you know, farm traffic across it.

Well, that thing might have been 4 foot deep at one time but it gets erosion and then you're pulling a river across there, I mean, I believe the pipeline is made with integrity and is good, but it's getting into mechanical stuff and you're looking at a guy that was stupid enough to drill into a fiberoptics cable with a posthole digger.

And I know things can happen. This is a little harder to do. It doesn't need to have a hole, but you dig up that coating that's on there, and pretty soon you're going to get erosion. Why not deeper, and I think that would eliminate a hell of a lot of chances of getting damaged from farmers and contractors.

MR. GRAY: You know, your question is asked let's build it 100 feet deep or let's build it 90 feet deep and nobody could ever get to it to damage it. But we live in a society of

engineered things. We live with bridges. We live with power lines. We live with water lines, gas lines, and various things.

Over tradition engineering science has developed standards that we construct all types of facilities. Automobiles are built to standards. Farm equipment's built to standards. And over time we have met these design requirements that have proven to be safe. Pipelines have been constructed in the United States actually since the late 1800s, and there are many pipelines in operation today that are approaching 100 years of being in service and being in service safely.

So I think my -- my response to you is our federal standards, the 30 inches or 3 feet, have proven historically over time in agricultural areas, in flood prone areas, in cities, in various places to be very adequate standards. We in going to the 4 feet of cover we believe we have gone the extra step that addresses the issues of particularly the heavy farm equipment and the deep tilling that occurs in this region of the country.

So I suggest to you there's our belief that we have met those standards. We have extended those standards. But it's the theory of where does the economics stop of how much to spend? And just should we make slabs on houses 4 feet thick because that's better than 12 inches of engineering standards or something?

That's the best direct answer I can give you.

MS. SUSAN SIBSON: I'm Susan Sibson from Howard, South Dakota. I've got a couple of questions.

Our land agent was out last Saturday and we were talking about the construction part of this project and she assured us that our cattle that run on grass in the construction phase a fence would be put -- excuse me, would be put around the construction so that our cattle would not go in to the construction area.

And then tonight I don't know which one of the TransCanada people said that there would not be a perimeter fence. And I would like that issue addressed because if you would have been around cattle, they'll be right in there with the welders. So I would like to know if there's going to be a fence or not. It's very important and very vital to our cattle operation to know this answer.

MR. GRAY: Ma'am, and I am the gentleman that answered that question. And what I would -- I think the comment that I would make is that we typically have looked at the -- when I say the cost or the expense of fencing it off versus the exposed or lost animals. And every case is looked at on a case-by-case basis. However, this is a negotiable item in the dealings with you concerning your easement and your damages. If you're adamant that that is a requirement for us to acquire an easement from you on your particular tract of land, that is a condition that you could ask for that would be brought back to me and my

staff for consideration.

And we may very likely come back to you and say we may not wish to do that and these are the reasons why. But it's a negotiable item, and if it's something that is very important to you in the consideration of that, that is something we'll have to deal with in the negotiations.

MS. SUSAN SIBSON: If we did not have a fence to block off the construction, it would seriously damage our economic future that we have. It will be very important to us, and that is something that we will talk about with our land agent.

MR. GRAY: And unequivocally damages, regardless of the shape or fashion they take, we are responsible for. And if it's in our best interest to lower the exposure to your damage by installing a fence, then indeed that's what we would do.

I also might suggest one other alternative is compensation to relocate cattle to other grazing until construction is completed.

MS. SUSAN SIBSON: You find a pasture for us then.

MR. GRAY: I'm not familiar with the area.

MS. SUSAN SIBSON: I have a couple more questions. We're one of the lucky four in South Dakota to have a pump station located on our land. I told my husband maybe he should buy a lottery ticket, but it hasn't happened.

But I have some questions about the pump station. And I do want you to -- to tell you when we had a land agent there

about the pump station we had to ask him for a diagram. We had to ask him for the map. And I don't feel when you come into our farm that we have to ask for the information when you're there to help us and give us information.

I also requested that day to have information sent to us from Canada about pump stations, and it's been over a week. We still have not received any information. And I would really like some information from TransCanada about pump stations. It would be very beneficial.

My questions about pump stations are does the pump station have a ground grid and an oil containment plan, and if it does, I would like to see a copy of it.

MR. GRAY: I will address the first question about your initial meetings regarding the pump stations. And I don't know that you've won a lottery to have one that's located on your property, but the hydraulics of the pipeline are calculated and the pump station locations are determined by where it's needed to pump and raise the pressure on the pipe to get it down the pipeline say another 50 miles.

So in doing such our initial inquiry of landowners was simply a question that was posed about the willingness of you to consider a pump station. And our land agents initially went out. We have some flexibility, say a mile or so each direction, about where we site a pump station. And those initial inquiries is our desire to site a pump station on a willing seller's land

to us. And some of those initial inquiries were simply to go, Would you consider selling us a pump station site?

I think that I might ask a question about a map or diagram. If you said you would consider it and requested those items, then we should be providing those to you for your review.

MS. SUSAN SIBSON: I'm waiting for them.

MR. GRAY: Very well. And I might would ask for the land agent's name at the conclusion of the meeting or --

MS. SUSAN SIBSON: At this time I don't remember what his name is. I'll have to get back to you. I think you give us -- we're supposed to give you 24 hours to get back to us.

MR. GRAY: Very well.

MS. SUSAN SIBSON: We'll do the same to you.

MR. GRAY: That's fair. And I would like to collect your name and phone number.

MS. SUSAN SIBSON: I'd also like to know if there will be a study conducted around a pump station about the noise level. Because we understand for the electricity that goes to a pump station it's going to be in the area of what it would be to -- per -- it would be the electricity to run an ethanol plant. And I know how loud an ethanol plant is.

And I was just wondering if you need that same type of electricity for that is that what the pump station's going sound like too? Is it going to be that loud?

MR. GRAY: Ma'am, I'm going to defer discussion about

pump stations to Brian. And you had actually asked another question about a --

MS. SUSAN SIBSON: I just want to know if there is a plan, and I would like a copy of it. You don't have to go through everything tonight about it. I just want to know.

MR. GRAY: Very well. Let me defer those questions to another gentleman, please.

MS. SUSAN SIBSON: Okay. Thank you.

MR. THOMAS: I'll start with the oil spill containment plan. And we --

MS. SUSAN SIBSON: Sir, you don't need to explain that all tonight to me. I just want to know if there's a plan and could you send me a copy.

MR. THOMAS: Yes. We certainly can.

MS. SUSAN SIBSON: Thank you.

MR. THOMAS: There's one in place.

MS. SUSAN SIBSON: And then I have another question too. What kind of fence or wall will surround the pump station?

MR. THOMAS: Fences around pump stations will be typical -- the typical six-foot high chain-linked fence with barbed wire along the top.

MS. SUSAN SIBSON: Okay. So I'll let you know right now if the pump station goes on our land, we will not accept a chain link fence. It's going to have to be a decorative wall.

MR. THOMAS: We can certainly work with you on that

and likewise on the noise issue that you raise. Mitigated measures can be implemented such that we stay within regulations.

MS. SUSAN SIBSON: But there will be a sound study done?

MR. THOMAS: Yes, there will.

MS. SUSAN SIBSON: All right. Thank you very much.

MR. STEVE SIBSON: Steve Sibson from Mitchell again. We are related, by the way. The literature that I read off the PUC website regarding the pump station noise is 45 decibels, and there was talk about expanding the capacity of the pipeline by putting more pumps.

In how high will that DB get? What's the maximum sound level you can expect?

MR. THOMAS: As part of the noise study, when the line is expanded mitigation would be from that 55 DBA level.

MS. CLAUDIA PULLMAN: Claudia Pullman from Freeman, South Dakota. I have two questions. One is when you pressure test your pipes with water where do you hope to get the water from, and where is it going to end up when you're done with it?

And the other one is why do we have to have a perpetual easement on contract if we're pushing for bio fuels and renewable fuels?

MR. GRAY: Regarding the source of the water, we will permit to access the water from rivers and streams in

South Dakota to test the pipeline. And we'll withdraw the water. Typically through our permits we have to return it to the watershed or the streams that it comes out of. Because the pipeline is a new steel pipe, it's not contaminated by putting it in the pipe and bringing it back.

Regarding the perpetual easement, I'm going to look at my staff here and my staff -- actually I work for him. I better be careful with it, but Robert, this gentleman's probably adept in answering that question.

MR. JONES: As you can tell, I think we all work for Buster sometime. With regard to your question with U.S. today consuming 20 million barrels of oil and the forecast for that consumption to continue to grow even with the massive change we've seen over the past year with ethanol fuels, it is still in the very, very small percentages. So it's very unlikely that you'll see a replacement of crude oil as a fee stock for these refineries within any end period soon I would suggest.

So, again, even though we've seen massive increases in ethanol, it still represents a very, very small percentage of the crude oil requirements for these refineries.

MS. LYNETTE NUTTER: Lynette Nutter from Howard. Do you guys, TransCanada, sign the easement after the landowner has signed it? And is this your first crude oil pipeline?

MR. GRAY: The land agents that you're working with are contracted through a company to TransCanada. A person, a

TransCanada employee, does not execute that agreement on behalf of TransCanada. Through the contractual relationship of the service company providing those services as agents of TransCanada, they are contractually bound as their agents who sign these instruments.

I can defer to Mr. Koenecke as far as the contractual requirements and responsibilities of TransCanada relative to those. But I think in simplistic terms it is the same as if a TransCanada employee was executing the easement. You have those same alliance.

MS. LYNETTE NUTTER: Do you sign them?

MR. GRAY: I didn't hear you.

MS. LYNETTE NUTTER: But sign it. Do you actually sign it?

MR. GRAY: Yes. The land agent that you're doing business with will execute the easement as well.

MS. LYNETTE NUTTER: They do not.

MR. GRAY: But our binding construction binding agreement where maybe the restrictions are we will execute with you.

MS. LYNETTE NUTTER: So you will sign it?

MR. GRAY: There will not be a signature on the easement, but we need a signature on the binding agreement for construction. I'm sorry.

MS. LYNETTE NUTTER: So TransCanada is not actually

signing it?

MS. ROTH: Sandra Roth from the Land Department, U.S. land for TransCanada. TransCanada does not sign the easement, but there is language in the easement itself that does bind TransCanada to all of the terms in that easement. And once that easement is recorded at your local courthouse, all parties to that easement are bound by that agreement. TransCanada, Keystone Pipeline, just as well as the landowner.

The other agreement he's talking about that is signed is the construction restrictions agreement, which is where you're going to tell your agent any special provisions you want us to adhere to for construction, special needs, as in the lady there that needs fencing there for her cattle. Those are the types of things that will be listed on that agreement, and that will be signed also by the landowner that will bind us to serving you as to whatever you put in that construction contractual agreement. But the easement is not signed by TransCanada.

MS. LYNETTE NUTTER: I think you guys should really look at that, the PUC, because that is a binding contract. And normally you have two people sign it, and this is a big company. And I think you really should really look at that. Thank you.

MR. JONES: I just wanted to respond to your question about whether or not this is our first crude oil pipeline. TransCanada developed the Express Pipeline. That pipeline was

designed and constructed by TransCanada. We subsequently sold it.

We also owned and operated the Platte Pipeline. It was originally built by the Marathon company and owned by Marathon pipelines. We've also owned and operated pipelines outside of the United States as well.

MR. RICHARD SCHMIT: Richard Schmit, Howard. I'd just like to know when all of these promises that TransCanada are telling us tonight are going to be put into the easement so when we sign it we know they're there?

MR. GRAY: Is the easement document, if you've had the discussions, is I guess the legal instrument by which we want to take the right in the land for an easement. We do not typically see that the easement form would be expanded to cover all of the construction requirements on the particular project.

We have an agreement form called a construction restriction binding agreement that is a separate document that we would ask for those types of agreements or things to be incorporated in, not the easement document.

We believe that under the various permits and the construction mitigation plan and the various requirements that we have under our permit that we're bound by permits and laws to meet those without burdening all of the easement documents with that language in the document itself.

So what our preference is, is that we would deal with

this on a construction restriction binding agreement.

MR. RICHARD SCHMIT: But that's your belief. What about our belief?

MR. GRAY: It's certainly in the negotiation of an easement and the negotiation of one is any concerns, desires, and things that you have can be communicated with your land agents. And those issues will be discussed.

But at this point in time our policy is it's these types of requirements would reside on a binding agreement or a contract and not in the easement document itself.

MR. RICHARD SCHMIT: I'd like to comment to the PUC on that.

CHAIRMAN JOHNSON: I might just make a suggestion of TransCanada. This is somewhat outside of my area of expertise, but, I mean, we've heard this concern I think a number of times and at different locations. And I do understand easement can't contain all of the different federal laws and rules and state laws and state rules that govern TransCanada.

But I wonder if some information or some brochure can't be made available to land agents who can't make it available to landowners who are curious about what particular federal law might govern your activity in this area just so if people have questions, they can take it to an attorney or do some research on their own. I wonder if that wouldn't reduce some of these questions. Just a suggestion.

MR. CURT HOHN: Mr. Chairman, you're right. This has come up a number of times. A number of attorneys that I've talked to, one of them Reed Rasmussen who represented us at your hearing, have discussed the issue, the question of whether TransCanada's registered with the Secretary of State with South Dakota and whether that might not have some bearing on this issue of whether they should or shouldn't be signing the easement.

Web is registered obviously. So are these other companies. And it's a different situation there because we're recognizing the state. And this lady was unhappy -- there's legal significance to that. They may not need to do it in Canada, but you need to do it here.

So that's what little I know of it is it is an issue for some attorneys when they look at it because of a foreign company, with all due respect, coming into the state. My company's register may be handled differently than your easement.

Is TransCanada registered to do business in the state as a corporation and limited liability? Do you know, Mr. Jones?

MR. JONES: It's a legal question. We are definitely registered. Keystone, the company that's going to have the easement, is a U.S. company. TransCanada is traded at the New York Stock Exchange, by the way, so it is a U.S. company that will be doing easements. But the exact entity --

MS. SCOTT: I'm Jenny Scott, legal counsel with TransCanada. We're registered in all of the states that we pass through. TransCanada Keystone Pipeline, LP. Thank you.

MR. GARY NUTTER: Gary Nutter from Howard. What if I don't sign the easement? What happens then?

MR. GRAY: It is TransCanada's policy and it's our policy and implementation to try every means possible to acquire a voluntary ease -- an easement by voluntary means throughout the project. And it is the intention to negotiate to that end.

With most large utilities and projects we have the right of eminent domain. And if you -- and we cannot work out an easement agreement or terms that are accepted to you and ourselves, unfortunately that vehicle is what that laws are established for.

It is not the desire of the company. And we believe we can successfully and voluntarily acquire easements throughout the United States. But if we cannot, in all likelihood that is the vehicle that we would pursue.

MR. KEVIN KAYSER: Hello. My name is Kevin Kayser. I'm from Alex here. I have some concerns as far as the -- basically the fire, the response if you guys do have a problem. Are we as a small community, our fire department and our emergency management people, expected to participate or -- you know, the training involved and all of these other things that are involved with your pipeline, how do we deal with that?

And then also the expenses that are incurred for a piece of equipment we may need because of the pipeline in our area.

MR. THOMAS: Let me just start with the equipment needs and so on. Pardon me.

Within Keystone's emergency response plans -- you know, I mentioned previously about looking at the pipeline right-of-way and every -- basically every 100 feet looking at what sort of volume would potentially be spilled.

We will as part of the response plan to make sure we've got equipment in place to deal with spills of those volumes -- which again are very much a what-if scenario. Because we certainly don't expect this pipeline is going to spill.

The equipment that we will utilize to do this will be like a combination of equipment. It will be equipment that Keystone owns. It will be equipment that contractors can make available to us. And it will be equipment that we can contract from response organizations. So really with that equipment we'll ensure that we've got the resources that are necessary.

Now to answer your question with respect to the local emergency response area, typically in pipeline incidents the first to respond to an incident will be Keystone's first responders. In the event that there is a need, for example, to have a local firefighter or firefighting crew or police force

respond, Keystone would certainly do that. But those folks typically aren't going to be front line involved in the incident.

As an example, you may -- under certain circumstances wherever necessary to block a road or reroute or detour traffic, we would have the local police force look after that. Similarly, if we get into the very unlikely case that there is actually a fire associated with an incident, like local firefighters basically wouldn't be involved and certainly don't have the resources to fight a crude oil fire, and, you know, obviously wouldn't be expected to do so.

Their role would be one where if there were any sort of periphery fires, et cetera, that were capable of fighting we would certainly have them involved in that aspect. But certainly not in fighting a crude oil fire again under the most unlikely circumstances.

MS. JAN LEITHEISER: Jan Leitheiser from Emery, South Dakota. The proposed pipeline is going 700 feet from our house and just a few hundred feet from our feedlot. What are the criteria for distance from buildings and dwelling places?

MR. GRAY: The federal statute, the only statute that addresses setback -- I'll use that type of word -- is a distance of greater than 50 feet if we have -- I'm going to be sure I get the words right. I guess it's getting late, and I'm tired. Four feet of cover. As long as we have 4 feet of cover, we are

allowed to be even closer than 50 feet.

I think the thing that most folks are concerned with is indeed the proximity that you've describe. But any time that you route a pipeline 1,000 miles, proximity to residences or businesses or feedlots or things, it's just not avoidable in that length.

All I can suggest to you also is that pipeline exists in semi-urban and urban environments where truly we are neighbors with landowners, and we are indeed within 100 feet or even less to houses. But we do exist in those environments.

But in summary, there are no setback requirements other than the one that I just described.

MR. MIKE ROSTER: Mike Roster. I'm from Spencer, South Dakota. There was some reference made to the easements and the wording of it, and we've all received some mailings from different groups about a certain section of it that will release TransCanada from any liability as a -- when you grant the easement. Is that an accurate excerpt from the contract?

And the other thing is you certainly are willing to grant a lot of leeway on each individual contract according to your information tonight. Do we all kind of get to write our own check or -- I'm pretty sure it's not going to be that way. So I guess I'd really like to know whether or not you're released from any liability if we sign that contract.

And I'm specifically addressing the issue of spills on

adjacent land where it may affect or devalue that property and not necessarily within the right-of-way.

MR. GRAY: Is the easement document the discussion about indemnity and liability -- over the last few weeks we've heard concerns about the language in the easement document. And I use the word the "complexity" of it.

It's been interpreted by legal counsel for me is that unequivocally TransCanada is responsible for the damages and the things that it might cause either during construction or operation.

As I understand maybe even legal counsel, the landowners, the document's clarity, the complexity to those issues we've heard. We are revising that document as we speak. We will be what I call rolling out that document over the next week to 10 days where that language is put in less complex terms and is hopefully clear.

But I am advised by legal counsel that indeed the language concerning liabilities and responsibilities which we feel like already burdens TransCanada with those -- the standardness of that does not change in this new document. It just makes it easier to interpret.

Your question about the adjacent tract of land, I might -- Brett, I don't know if you helped address that one, if you could help me with that one. But I think it came up earlier today.

MR. KOENECKE: That is a question that came up earlier tonight about -- who asked that question? I think one of the Commissioners about liability between landowner A and landowner B. And I don't --

MR. MIKE ROSTER: I specifically want to know whether or not -- and I remember the question from earlier. I specifically want to know that if somebody 700 feet away from the pipeline that has no monetary compensation from you at this time is damaged -- say my adjacent property or one of my neighbors' property is damaged from your spill, I'm not worried about me. Are you going to take care of them?

MR. KOENECKE: Okay. I understand the question now. I appreciate it. We would have no contractual relationship. We've talked tonight about a number of different agreements and the privity of the contract between landowners and the pipeline. As far as people who are adjacent to the -- with whom we're not in privity of contract -- and please I'm not trying to give you legal advice. You need to go to your own lawyer and give you advice about legal matters, but to the extent I can answer your question, our liability, other people would be covered under general tort law and other state laws which govern petroleum releases, remediation, and those sorts of things.

So it wouldn't be contractually based because we don't have a contract with those people. It would be governed by other laws and responsibilities that the general civil law would

impose on you.

Does that help?

MR. MIKE ROSTER: You're required for remediation to reclaim the land. Say it's damaged -- and I don't anticipate it. You're required to restore the land. If it's damaged, can you -- if there's a possibility that potentially you couldn't restore it, is there something in court law that would compensate the landowner for their perpetual loss of their property's value?

MR. KOENECKE: Yes, there is. It's the general tort law. That would be committing a tort against somebody else, a wrong that would be committed that they would be entitled to go into court and pursue us for the damages should they be able to prove them.

I should just make clear we're responsible for the spills and the effects of them, whether they're in our reason or not our reason. I think your question was related to the mechanism. And if not, I want to talk with you about it later.

MR. MIKE SIBSON: Can everybody hear me? I'm Mike Sibson -- or greetings to the Public Utilities Commission. I'm Mike Sibson, address 23782 426th Avenue, Howard, South Dakota 57349. Phone number (605)772-5184. I lived in Miner County, Roswell (phonetic) Township, the legal description Southwest 2, Southwest 4, Section 28. And West 2, section 33 is where TransCanada wants to put the pipeline through our land.

We are lifetime South Dakota residents. I have wanted to farm since I was 5 years old. My parents purchased this farm in 1972. I moved there in 1977 and since then purchased the farm plus surrounding land. I raise cattle and grain, and this is my home section.

I also allow a lot of wildlife to live on this land and do things to enhance their life. I am clearly stating that I am against the TransCanada pipeline in this location. It's ironic that 20 years ago almost to the day and month I was protecting and fighting for my land. The super (Inaudible) was to be located near my farm, but thanks to Texas the project went there.

Eminent domain was going to be implemented. Fair market for the land at that time was $175. Now 20 years later we are facing the same nightmare. We are being offered fair market value on this land at 2,500 or more. This is an example of what happens to land prices in 20 years.

Where will the land prices be in another 20 years? My land is not for sale. This pipeline affects more than just my wife and me. We have children and grandchildren. I work closely with my brother-in-law and his family. My parents help when they can. We all work together. We work hard.

As the pipeline enters my land it crosses native grass, farm ground, a wetland, native grass, and ends up going through a wetland and a waterway. The pipeline is within one

quarter of a mile of our farm.

We plan to expand our cattle lots. Our children plan to return to the area. With their return we need to be diversified. Possible plans include new farmsteads with confinement cattle lots. The proposed pipeline will jeopardize future expansion plans. My primary and secondary water sources will be greatly affected with the pipeline so close to our farm.

With the feeder cattle operation water is very important. It's essential. For summer grazing my cattle use dugouts as their only water source. In the event of an oil spill I could have five dugouts affected.

I feel TransCanada needs to address this issue. I could lose hundreds of cattle from drinking contaminated water before it's detected that the water is poison. I could have that many lost.

The affected crop ground is vital as we produce all the feed for our cattle. A decrease in crop production is a big concern. My local fuel dealer has many regulations to follow. Does TransCanada have to have a secondary containment on their pipeline in the event of a leak? My local dealer does.

We hear a lot about tax money that will go to our local counties from the pipeline. But is this enough? Is 6.4 million for the State of South Dakota enough? We will need plenty of money for updating the railroads and fire departments. Our local fire departments at this time do not have adequate

equipment to fight oil spills or fire. Who is going to pick up the tab when our county runs out of money, the State or Federal Government?

June 23, 2007, we received easement and right-of-way agreement papers from TransCanada. How can the company get easements from landowners when the project is not approved yet? The land agent told us the answer. It's a done deal. All the land easements will be done by October, November. So why are we here to testify when it's a done deal?

Does the PUC know the land agent knows -- know what the land agent knows? We plan to contact an attorney for the easement papers. Also a copy will be sent to the Attorney General's Office. The easement agreement is one-sided. We feel the company could do a lot better. We do not want a perpetual easement. The company plans to make $26 million a day off our property. We feel we are entitled to more than a one-time payment.

We have been told that our companies do offer yearly -- or that other oil companies do offer yearly royalty to landowners. Why isn't TransCanada?

As we just received our easement papers, we have not had enough time to look through them. We plan to submit written testimony on the company's liability and compensation plans. I have a statement to all affected landowners. I feel this company is not treating us fair, especially their lopsided

easement agreements.

My plan is not to sign. We have to have an easement that is fair and balanced. We all need to stand together. The testimony I have given comes from a lifetime tax-paying, South Dakota resident, God-fearing, honest, hard-working, family-oriented. I care about others and their well-being. I love this land, and I plan to continue to protect and fight for it.

Economic development for TransCanada is certain economic disaster for me and all other South Dakota affected landowners. Thank you.

MR. CURT HOHN: Mr. Chairman, I'd like to show three drawings if that's okay. And I promise not to take too long. At midnight if I'm still here, I'll probably turn in to a Republican.

This photo is not something that TransCanada would show you, but it is a document that was prepared by the U.S. Geological Survey. It's part of a federal report independent of the oil companies. It's a report on the Internet that you can find very easily.

It was in Bemiji, Minnesota, a crude oil leak that failed. And you can see the oil line was about in this location. These are the leaks. You're free to come up and look at it after the meeting.

This is what the future could hold for some unlucky

person that wins the negative lottery and gets one of these leaks that aren't likely to happen.

This happened 28 years ago. This photo is taken. It's dated here I believe 1998. If you drive over there, which I have done, taken some ground photos, this is what it looks like. Nothing grows there 28 years later. I thought Kochia weed grew everywhere, but it doesn't grow where oil ends up.

The oil is migrating toward a lake. The spill is -- about half of the leak was cleaned up shortly after but not all of it. You can't get all of it out.

And so with what -- with due respect with what people said tonight, you get an oil leak on your land I'm sure all the efforts that can be made will be made to try to clean it up. But this is what you'll see in 28 years. And get in the car next Saturday and drive over to Bemiji and ask anyone in the local filling station. They'll guide you out to it.

An 84,000-gallon oil spill will put -- will damage 3 feet of soil on 400 acres. 3 feet of soil on 400 acres. That's not a fact that I dreamed up. That was filed by this company with the U.S. State Department as an example of what might happen and what might be required for remediation.

CHAIRMAN JOHNSON: Mr. Hohn, I know you're trying to move expeditiously through your information. We are allowing you a little bit of latitude here, but if you could make your comments to the point.

MR. CURT HOHN: I will. Thank you. This is a map, a TransCanada map. It shows the alternate route, the I-29 route. I'm the manager of the WEB rural water system in the Aberdeen area. We serve 17 counties. Our area will be crossed here. We support the I-29 route. It would put the pipe in the Interstate road ditch and can be installed.

We put a 30-inch pipe in a Highway 12 ditch for 75 miles. This could be installed in a road ditch. And look where it ends up? Elk Point. Perfect. Now that we know there's likely to be an oil refinery there.

The other thing I wanted to show you, and this is the last thing, Mr. Chairman, the school district gave me this great mobile unit. You need to take a look at this close up. This is a piece of pipe that blew out in an explosion in Carlsbad, New Mexico. The pipe wall thickness was .35, I believe. It corroded down. All that was left in the corrosion area was .09. So two-thirds of the pipe was gone in that corrosion area. The example that I believe Mr. Gray left over on the table is .38, almost the same width thickness.

This happened for a number of reasons. National Transportation Safety Board investigated. This an 83-page report. When this pipe failed 12 people camping 675 feet from this gas line -- wasn't an oil line. It was a gas line. 12 people died. I don't think you want a pipe 50 feet from your home.

I would challenge Mr. Gray -- he ought to build a house right next to 50 feet from an oil line if it's that safe. If it was mine, my family, I think I'd want to be quite a bit further away.

What we're dealing with is something we're not used to. We're not used to seeing it. The maintenance of the oil lines and gas lines depends on the price of the fuel. The Northern Border Gas Line, which TransCanada is one of the partners of, goes through Brown County where I live. They've been laying off senior employees. The maintenance is declining.

I think the PUC needs to look at that. How much at risk are our communities because maintenance like this is ignored? How would anybody know?

That pipe company, Northern Border, when it was built 31 miles of pipe through Brown County had 40 leaks. Now they fixed them. But every 40 feet is a well, and every 40 feet is an opportunity for a leak.

And so I guess my advice to you folks and the reason I came down here is to let you know there's people in the northern part of the state that are not happy with this thing routed through their area. We'd just as soon see it on I-29.

If southeast South Dakota wants an oil refinery, they ought to take the oil pipe. Thank you.

CHAIRMAN JOHNSON: Maybe I might just ask for a show of hands of anybody who has additional comments that they wish

to make tonight so I can get a feel for the time limit if we need another break.

Okay. We have Mr. Kayser. Anyone else? Okay. Mr. Kayser, go ahead.

Before you get started, I do want to make it clear, listen, other things, other concerns, other questions are going to come up in the hours and days and weeks as we move past. Please don't hesitate to submit your comments in writing to the Public Utilities Commission, and they will be as much part of the record as your comment tonight.

MR. KAYSER: Thank you. I handed the Commission a paper. It wasn't all glamorous to the Commission so it probably is better done that way. But anyway thanks to the Commission. At least some of the thousand-page document came out.

I feel that we say it's too costly to put that down the 29 corridor. Why, they're going to pay for 100-bushel corn at $4 a bushel for three years. Come on. If they put that in the highway, it would eliminate all of that.

He said there's how many interchanges. Well, according to South Dakota map, there's I think it's 48 across South Dakota. Of course, there will be some overs but 48 interchanges. All right. That would probably be multiple bores, I would imagine.

But there's a line mile in this part of the country almost every mile. You get a little further north you probably

have some abandoned roads but darn few. So every mile they're going to disrupt, plow through. They say they're going to bore every primary gravel road. The oil roads, they probably will if they're in good shape.

But if they would weigh the consequences of what it's going to do to this part of the country and the corridor that is already open from -- clear from Canada to -- virtually to the Mexican border, why wouldn't they follow that corridor instead of zigzagging around.

As far as that Canadian line they're trying to use, that was a natural gas line pipe, well, abandon that and go down to the west of us how far in the uninhabited -- is it because we're trying to use a line up there? I think the mileage isn't much different. They can throw that line away.

There's a lot of -- we're accused of misinformation from our side. It's a lack of information from the other side. I have been told you shouldn't call anybody a liar, but it's all right to say they're untruthful.

With that, let's get that thing down Interstate 29 if it's got to come. Thank you, Commission.

CHAIRMAN JOHNSON: Any other final comments?

With that, we want to thank everybody for your patience and staying power, and we want to thank -- if you have any further comments, please let us know at the PUC.

Thanks.

STATE OF SOUTH DAKOTA)

:SS CERTIFICATE

COUNTY OF HUGHES)

I, CHERI MCCOMSEY WITTLER, a Registered Professional Reporter, Certified Realtime Reporter and Notary Public in and for the State of South Dakota:

DO HEREBY CERTIFY that as the duly-appointed shorthand reporter, I took in shorthand the proceedings had in the above-entitled matter on the 25th day of June 2007, and that the attached is a true and correct transcription of the proceedings so taken.

Dated at Pierre, South Dakota this 17th day of July 2007.

Cheri McComsey Wittler
Notary Public and
Registered Professional Reporter
Certified Realtime Reporter