

Minutes of a Meeting of the Industrial Commission of North Dakota  
Held on January 17, 2017 beginning at 11:00 a.m.  
Governor's Conference Room  
State Capitol

Present: Governor Doug Burgum, Chairman  
Attorney General Wayne Stenehjem  
Agriculture Commissioner Doug Goehring

Also

Present: JoDee Hanson, Governor's Office  
Jodi Uecker, Governor's Office  
Leslie Oliver, Governor's Office  
Cassandra Torstenson, Governor's Office  
Andrea Pfennig, Department of Commerce  
Jolene Kline, Housing Finance Agency  
Max Wetz, Housing Finance Agency  
Members of the Press

Governor Burgum called the Industrial Commission meeting to order at 11:00 a.m. and the Commission took up Renewable Energy Program business.

Ms. Andrea Pfennig, Department of Commerce, presented a proposed amendment to Renewable Energy Program policies as follows:

RE: Renewable Energy Council Recommendation

At the Renewable Energy Council's December 21, 2016 meeting the Council, based on the recommendation of the staff, recommended the following change to the Commission's Renewable Energy Program policies:

**REC – 4.02 Application deadline.** Applications each calendar year must be delivered to the Industrial Commission or postmarked on or before ~~January 1, May 1 and September 1~~ February 1 and August 1. In addition to these ~~three~~ grant rounds, the Commission may establish additional grant rounds and set application deadlines for those rounds. The applicant may amend its application at any time before the application deadline. After the application deadline, the applicant may amend its application only upon the approval of the Commission.

The Council requests approval of this amendment.

**It was moved by Commissioner Goehring and seconded by Attorney General Stenehjem that the Industrial Commission accept the recommendation of the Renewable Energy Council and amend the Renewable Energy Program policies as follows:**

**REC – 4.02 Application deadline.** Applications each calendar year must be delivered to the Industrial Commission or postmarked on or before ~~January 1, May 1 and September 1~~ February 1 and August 1. In addition to these ~~three~~ grant rounds, the Commission may establish additional grant rounds and set application deadlines for those rounds. The applicant may amend its application at any time before the application deadline. After the application deadline, the applicant may amend its application only upon the approval of the Commission.

**On a roll call vote, Governor Burgum, Attorney General Stenehjem and Commissioner Goehring voted aye. The motion carried unanimously.**

Ms. Pfennig gave the legislative update. She indicated that she is aware of only one bill at this time that would impact the Renewable Energy Program. Senate Bill 2074 states that the Industrial Commission shall consider applications for funding from the Renewable Energy Fund for advanced energy technology development projects.

In response to a question, Ms. Fine stated Senate Bill 2074 is the Industrial Commission appropriation bill and the advanced technology being referred to involves lignite.

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January 17, 2017

Being no further Renewable Energy Program business, Governor Burgum adjourned this portion of the meeting at 11:03 a.m. and the Commission took up Housing Finance Agency business.

INDUSTRIAL COMMISSION OF NORTH DAKOTA

A handwritten signature in blue ink, appearing to read "Karlene Fine". The signature is fluid and cursive, with the first name "Karlene" written in a larger, more prominent script than the last name "Fine".

Karlene Fine, Executive Director and Secretary

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Max Wetz, Housing Finance Agency  
Vance Taylor, State Mill  
Ed Barchenger, State Mill  
Members of the Press

Governor Burgum called the Housing Finance Agency portion of the Industrial Commission meeting to order at 11:03 a.m. following completion of Renewable Energy Program business.

Ms. Jolene Kline, Housing Finance Agency Executive Director, gave a legislative update and discussed with the Commission the various bills that they are aware of at this time that would be impacting the Agency. They include SB 2014 (appropriation bill), SB 2074 (appropriation bill and reauthorization of the Housing Incentive Fund), SB 2192, HB 1251, HB 1297, HB 1162, and HB 1168.

She indicated that the Housing Incentive Fund sunsets on June 30, 2017 and if the program is not reauthorized with or without funding there is a concern about the outstanding obligations issued to projects and whether the Agency has the authority to draw down those funds after June 30. There would be a number of projects at risk across the state if that reauthorization did not take place. Unless directed otherwise she will be requesting reauthorization of the program so the Agency is able to fulfill the commitments it has made from the Housing Incentive Fund.

Ms. Kline stated that SB 2192 also contains reauthorization of the Housing Incentive Fund (HIF) and provides for additional funding for the next biennium--\$20 million in state income tax credits and \$20 million in General Fund dollars. She reviewed the sources of the funding for HIF in prior biennia. She and the Commission discussed the value of and need for the program but noted that with current budget constraints it will be a very tough battle to obtain any funding. The Commission indicated that there will probably be a number of scenarios discussed of how this program could be funded and at what level as legislation progresses during the session. The consensus of the Commission was that Ms. Kline could testify about how the program works and its successes and request support for some level of funding knowing that General Fund dollars are limited.

Ms. Kline thanked the Commission for allowing her to testify in support of the Housing Incentive Fund and some level of funding. It was important for the Agency to be able to speak on this issue especially as it relates to their partners who are advocating for ways to fund affordable housing.

Governor Burgum stated that he had visited with Ms. Kline regarding his position that any State subsidies to build things be used only in those areas of the State where there is existing infrastructure. His support on housing and HIF will be strictly limited to those projects being built where there is existing infrastructure. He noted that some of the projects Ms. Kline had mentioned during the meeting are all ones that represent infill construction. It is even better if they are mixed used infill projects. He suggested that if there are any modifications to how the Agency subsidizes projects that the spending goes towards mixed use infill, which he believes is the best economic use of the State's subsidy dollars.

Ms. Kline said she appreciated Governor Burgum's input. If there is any funding for HIF the Agency would need to have a public hearing on a new allocation plan and that directive could be included in that plan. Competition for the funds is strong enough that the Agency can drive the development for rehab or new construction to only infill projects. What she is hearing from their stakeholders is that the rehab of existing affordable housing projects has risen to the top for funding because during the energy boom the Agency concentrated its efforts on new units to get more housing – house more workers in the State. Now there is a need to take a look at the older U.S.D.A. financed and HUD financed projects from the 1970's and 1980's that may be the only affordable housing in some of our rural communities and figure out a way to make those remain viable going forward - to keep those projects in the inventory so we don't lose not only the units but the rental assistance that is attached to them.

Commissioner Goehring said he supports that in our metropolitan areas where can do some of those things and it is a good use of those dollars. There continues to be some challenges in the energy producing counties and there may be some needs in those areas that should be considered. Affordable housing is needed everywhere across the state.

Ms. Kline said HB 1251 would authorize the Commission and the Department of Corrections and Rehabilitation to collaborate to establish a program where inmates construct homes for sale to low income buyers. She discussed how a similar program works in South Dakota. Because there were a number of questions about the bill the Commission indicated she should respond to questions about how the Agency could work with the proposed program but she should remain neutral. They requested that she keep them informed of how the legislation progresses through the session.

Ms. Kline said HB 1297 as submitted by Representative Vetter of Grand Forks, authorizes BND to create a revolving loan fund with a transfer of \$5 million from the Housing Finance Agency into the fund for certified community land trusts. It names the Housing Finance Agency as the entity responsible for taking the application and certifying that they are a legitimate land community land trust and then forwarding the application onto BND for their loan processing and funding of that loan. She indicated that she had already visited with the bill sponsor and expressed her concerns about what was being proposed and explained what the Agency could already do without this legislative authority. The Commission indicated she should continue her discussions with the sponsor.

Ms. Kline said HB 1162 which deals with state agencies competing with the private sector had its first hearing yesterday. She updated the Commission on what happened at that hearing and indicated that she had not testified. She explained to the Commission how this legislation would impact their Agency. The Commission indicated that they should continue monitoring the bill and see how it progresses through the session.

Ms. Kline noted that they are also watching HB 1168 which prohibits state employees from being paid or reimbursed while attending legislative meetings without the express invitation from a legislator or taking annual leave.

Being no further Housing Finance Agency business, Governor Burgum adjourned this portion of the meeting at 11:31 a.m. and the Commission took up State Mill business.

INDUSTRIAL COMMISSION OF NORTH DAKOTA



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Governor Burgum called the State Mill portion of the Industrial Commission meeting to order at 11:31 a.m. following completion of Housing Finance Agency business.

Mr. Vance Taylor, North Dakota Mill General Manager, presented the North Dakota Mill Second Quarter Financial Report as follows:

North Dakota Mill  
Review of Operations  
2<sup>nd</sup> Quarter Ended 12/31/16

*SUMMARY*

Activities in the 2<sup>nd</sup> Quarter of the year resulted in a profit of \$3,205,885 compared to \$1,564,883 last year. For the six months ending December there is a profit of \$5,708,311 compared to \$4,955,843 last year.

	<u>Quarter</u>		<u>Year-to-Date</u>	
	<u>12/16</u>	<u>12/15</u>	<u>12/16</u>	<u>12/15</u>
Profits	3,205,885	1,564,883	5,708,311	4,955,843
Sales	77,306,164	71,550,047	141,858,876	140,975,134
Cwt. Shipped:				
Spring	3,598,601	3,102,993	6,561,580	6,029,665
% to Total	91.7%	91.3%	91.5%	92.1%
Durum	<u>326,523</u>	<u>293,901</u>	<u>608,626</u>	<u>513,703</u>
	<u>3,925,124</u>	<u>3,396,894</u>	<u>7,170,206</u>	<u>6,543,368</u>
Bag Shipments	714,317	688,205	1,417,893	1,344,002
% to Total	18.2%	20.3%	19.8%	20.5%
Tote Shipments	40,152	32,511	78,598	65,044
% to Total	1.0%	1.0%	1.1%	1.0%
Family Flour Shipments	78,562	76,808	154,834	153,695
Organic Flour Shipments	41,004	52,741	81,295	97,286

Wheat Purchased

Spring	8,299,108	6,366,911	13,836,632	12,037,811
Durum	<u>637,881</u>	<u>506,878</u>	<u>1,235,296</u>	<u>910,737</u>
Total	<u>8,936,989</u>	<u>6,873,789</u>	<u>15,071,928</u>	<u>12,948,548</u>

In response to a question regarding the increase in profits, Mr. Taylor said it is due to increased shipment volume made possible with the new G-Mill and higher basis gain.

In response to a question regarding the date the new mill unit came on line, Mr. Taylor said September 15 so they had use of it for most of the quarter.

In response to a question regarding if this new milling unit has allowed the Mill to access new markets or just more volume in the same markets, Mr. Taylor stated the Mill already ships nationwide, the Caribbean and a small bit to the Pacific Rim so they have not expanded beyond those markets. They have been able to meet the increasing demands of their existing customers and they have added new customers within their existing markets.

**SALES**

**2<sup>nd</sup> Quarter**

Sales for the 2<sup>nd</sup> Quarter were \$77,306,164 compared to \$71,550,047 last year. Shipments of 3,925,124 cwts. are 528,231 cwts. above last year, an increase of 13.5%. Bag shipments for the 2<sup>nd</sup> Quarter are 714,317 cwts., which is 3.8% above last year's 2<sup>nd</sup> Quarter. Tote shipments for the 2<sup>nd</sup> Quarter are 40,152 cwts., which is 23.5% above last year's 2<sup>nd</sup> Quarter. Family flour shipments of 78,562 cwts. is 2.3% above last year's 2<sup>nd</sup> Quarter. Organic flour shipments were 41,004 cwts., which is 22.3% below last year's 2<sup>nd</sup> Quarter.

**Year-to-Date**

Sales for the six months ended December were \$141,858,876 compared to \$140,975,134 last year, an increase of 0.6%. For the first six months the average settled price of grain is \$0.56 per bushel lower than last year. Shipments of 7,170,206 cwts. are 626,838 cwts. above last year, an increase of 9.6%. Year-to-date bag shipments are 1,417,893 cwts., an increase of 73,890 cwts. from last year. Tote shipments are 78,598 cwts., an increase of 13,554 cwts. from last year. Family flour shipments for the six months ending are 154,834 cwts., an increase of 0.7%. Organic flour shipments of 81,295 cwts. is a decrease of 16.4% from last year.

**OPERATING COSTS**

**2<sup>nd</sup> Quarter**

Operating costs for the 2<sup>nd</sup> Quarter were \$7,926,574 compared to \$6,649,748 last year, an increase of 19.2%. Operating cost per cwt. of production was \$2.04 compared to \$2.10 last year, a decrease of \$0.06 per cwt.

**Year-to-Date**

Year-to-date operating costs are \$15,009,869 compared to \$13,041,831 last year, an increase of 15.1%. Operating cost per cwt. of production for six months ending is \$2.16 compared to \$2.13 last year, an increase of \$0.03 per cwt.

**PROFITS**

**2<sup>nd</sup> Quarter**

Operating activity for the 2<sup>nd</sup> Quarter led to a profit of \$3,205,885 compared to a profit of \$1,564,883 last year. Gross margins as a percent of gross sales for the Quarter were 14.6% compared to 11.6% last year, an increase of 3.0%.

**Year-to-Date**

Operating activity for six months ending December led to a profit of \$5,708,311 compared to a profit of \$4,955,843 last year. Gross margins as a percent of gross sales for the year are 14.8% compared to 12.9% last year, an increase of 1.9%.

Mr. Taylor and Mr. Barchenger responded to a number of questions regarding Mill operations and the Mill's markets.

### **RISK MANAGEMENT POSITION**

The table below shows our hedge ratio by futures month going forward. While the mill does monitor and maintain the spring wheat hedges, it does remain at risk for fluctuations in the basis.

#### **Position Report 31-Dec-16**

<b>Period</b>	<b>Hedge Ratio</b>
Mar-17	1.0
May-17	1.0
Jul-17	0.9
Sep-17	1.0
Dec-17	1.0
Mar-18	1.2
Net Position	1.0

Mr. Taylor said going forward they expect third quarter volumes to stay very strong with the additional volume available from the new G-Mill. The Mill continues to have good rail service with some minor slowdowns due to an occasional snow storm either here or on the east coast. Mill management is anticipating that market conditions will most likely remain somewhat stable at least until spring planting of the next crop.

Mr. Taylor requested an amendment to the Hedging Strategies and Risk Policy to increase the explicit position limits for Spring Wheat bushels from 250,000 to 500,000.

#### Evolution:

In 2009 a major review of the hedging and risk strategies was conducted. This resulted in a comprehensive document for the Industrial Commission (IC) in addition to a specific Risk Policy. That policy has effectively guided risk management and reporting since 2009. Since then, each of futures, basis and spreads have become less volatile, thereby reducing risk somewhat.

With the expansion of the NDSME, it is important to revise the Risk Policy. That is the purpose of the following document.

The expansion effectively results in larger volumes of wheat being handled. Specifically, the expansion provides capacity to grind about 100,000 bushels of spring wheat a day and the G Mill will grind about 25,000 bushels per day. The increase did not change the durum capacity. Due to this increase in capacity, the position limits for spring wheat are increased to accommodate the increased volume, and managerial and operational flexibility.

**It was moved by Commissioner Goehring and seconded by Attorney General Stenehjem that the Industrial Commission adopt the amended Hedging Strategies and Risk Policy as follows:**

#### **ND State Mill and Elevator Hedging Strategies and Risk Policy January 2017**

The hedging strategies and risk policy at the North Dakota State Mill and Elevator (NDSME) are described in this document.

### **Objective of Hedging Policy and Price Risk Management**

The purpose of this policy is to establish an understanding of the philosophy and objectives for commodity price risk management. Broadly, the organization of risk management involves:

- Approval of the hedging and risk strategy policy by the Industrial Commission;
- On a routine basis, risk is managed internally. This includes: 1) covering of positions through use of approved mechanisms and limits; 2) a prescribed organizational structure; 3) reporting of risk positions and 4) controls;
- Reporting will be derived on a routine basis and summarized through time for both internal control and management as well as reporting to the IC as appropriate;
- The General Manager will provide summary measures of risk positions and a brief discussion of issues impacting risk to the Industrial Commission as appropriate.

**Objective of Risk Management:** The objective of risk management at the North Dakota State Mill and Elevator (NDSME) is to reduce the exposure to losses using appropriate mechanisms for transactions being consummated. A multitude of mechanisms will be pursued simultaneously recognizing that the goal is to manage risk as a fairly risk averse enterprise.

### **Internal organization and strategies for risk management and hedging**

**Overall Strategy** Wheat trading, flour selling and hedging should be managed with three goals. These include being hedged as much as possible, seeking coverage in appropriate months as practical, and finally, to strategically pursue opportunities in the cash market in response to expectations about changes in relative prices. Specifically, these goals can be interpreted as:

- 1) Use contract types on flour sales/wheat purchases that reduce exposure to risk (formula pricing; back to back transactions);
- 2) the hedge ratio (i.e. defined in aggregate of the size across all futures months relative to the underlying net cash position—details of this definition are provided below) should be near one on a continuous basis;
- 3) the target hedge ratio for individual months is also 1.0. However, there are practical considerations which may preclude this from being achieved in all instances;
- 4) the quantity of futures taken to offset the underlying futures position would be adjusted through time to reflect actual conversion rates.<sup>1</sup> To preclude over or under hedging, the actual conversion rates would be used to determine the quantity of futures bought or sold; and
- 5) cash trading should be managed with the following guidelines:
  - Accumulate inventories routinely to offset current and anticipated forward flour sales
  - The cash wheat position should be aggressively managed in response to the relationship between basis values and the cost of owning inventories.

The overall strategy is to take and manage positions to reduce the exposure of risk, and to provide flexibility to the grain buyer regarding the types of positions that can be taken.

Explicit position limits are defined as:

- Spring wheat—No more than 500,000 bushels uncovered
- Durum- Target 500,000 bushels long or short with some tolerance allowed for new customer business or larger booking of sales.

Open positions on wheat should fall within these guidelines by the close of the future market each trading day.

Further, the overall strategy is to seek an overall hedge ratio equal 1, and over time, the hedge ratio for individual months should gravitate towards 1 with some flexibility. Intermittently, the hedge ratios by month may deviate within reason

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<sup>1</sup> Conventionally, many mills use the industry standard of 2.3 b/cwt of flour. However, these vary through time depending on crop quality and mill efficiency.

and with explanation/justification. In either case, deviating from these would be allowed but only with approval from the General Manager.

From a Mill management perspective, the controls about risk exposure involves:

- 1) Concurrence that the goal of risk management is as stated above;
- 2) through time, varying measures (as defined below but to include hedge ratios, basis and spread risk or positions) will be reported routinely to the General Manager and Controller; and
- 3) then, risk management should seek to conform to these guidelines. Any deviations would require justification and review by the General Manager.

***Approved Strategies and Mechanisms:*** The strategy is to use mechanisms that would minimize risk exposure to the Mill. This generally means greater use of mechanisms that eliminate risks of cash price changes. Acceptable positions are defined that can be used without purview of the General Manager. Others can be used, but, only with review, justification and approval by the General Manager.

***Hedging Flour Sales:*** Hedging of forward flour sales is relatively straightforward. In most cases hedging flour sales is simplified by the fact that the quantity and timing of the transaction are known. Alternatives include

- 1) Buy wheat futures for a concurrent period with forward flour sale—with the intention of buying cash wheat for on a flat price of basis contract prior to needing the grain;
- 2) Formula pricing (flour prices are determined by a formula involving futures prices and/or basis, conversion margins, etc, and to be determined at a later time by the buyer);
- 3) Buy and store wheat inventories to offset flour sales;
- 4) Buy cash wheat inventories for concurrent period with the forward flour sale;
- 5) Buy wheat futures contracts without a basis; and
- 6) Buy wheat on a basis contract.

More risky and/or costly strategies include the below and would not be generally approved without explanation. These include:

- 7) Buy futures at Kansas City or Chicago;
- 8) Buy options (puts or calls);
- 9) Long futures/short puts or Long futures/short calls.

Use of these should be managed carefully due to the possibility of increasing the exposure to risk and/or cost relative to alternatives.

***Hedging Inventories:*** Hedging wheat inventories is more complicated, and more strategic. There are three routine mechanisms to offset risks involving these transactions. These include:

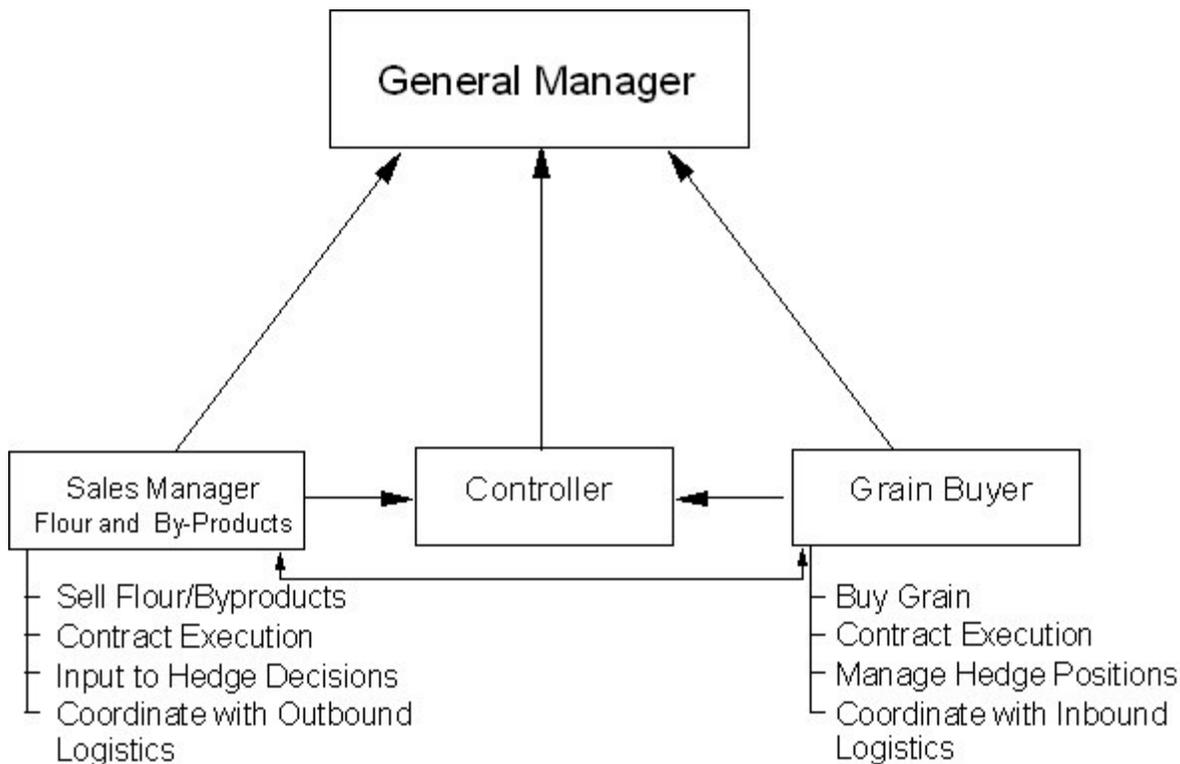
- 1) Selling futures to offset accumulated inventories.

As inventories are accumulated, futures should be used to offset these cash position, during the month of the anticipated cash transaction (i.e. flour sale). Both of these expose the mill to greater risks than other hedging decisions and these can be managed, but, should be subject to more scrutiny and control.

- 2) Sell flour concurrently. Simply accumulating inventories and making flour sales concurrently and for the same period;

#### ***Organization Structure for Managing Risk***

Organizational responsibilities have been defined at the Mill for purposes of risk management and reporting. These include defined individual responsibilities, organizational responsibilities and reporting. These are depicted below:



The organization of purchasing and risk management includes:

- Buying wheat, managing inventories and selling flour: On an on-going basis wheat is bought for near-by and deferred positions, using a multitude of mechanisms as well as inventories. Flour is sold for forward shipping periods, again, using varying mechanisms.

The timing and mechanisms generally reflect the interests of the buyers in the case of flour, and sellers in the case of wheat. The goal of the Mill is to accommodate these demands.

- Consultation with the General Manager: On a routine basis, whenever a larger position is taken, buyers and sellers confer with the General Manager. These are typically evaluated with regards to how the transaction impacts the overall exposure to the Mill from a risk, capacity and logistics perspective.
- Reporting and Reconciliation: Two key documents are prepared daily. One is the daily market close which reports market values for futures and cash values for varying time periods. Analysis of these provide guidance regarding market values, timing and attractiveness of sales and pricing for differing periods forward.

The second is the Daily Position Report (DPR) which reconciles all cash transactions in wheat and flour, as well as current processing and shipments, and summarizes the overall exposure of the mill.

It is these reports that should guide the grain buyers and flour sellers, as well as risk management decisions.

- Weekly Reporting: A more comprehensive meeting amongst department heads occurs weekly. At that meeting, there is a reporting and discussion of: 1) position reports and long/short reports; 2) futures positions; 3) quality distributions; 4) processing, etc; and any other factor that would impact trading positions and exposure to risks.

### **Measuring Risk Exposure and Reporting (INTERNAL REPORTING)**

There are two major elements that determine the risk exposure to the Mill. One is the risk in the underlying value of the price variable. Most important is the risk in the basis and intermonth spreads. Of course, there is risk in the underlying futures instrument but, if fully hedged, the financial implications of that risk is nil. The other is the size of the underlying positions. Reporting of data with respect to each of these is presented.

The risk in these measures can be quantified using a number of parameters.

Most common is to use:

- “Volatility” in the underlying futures prices (this is a calculation which can be derived, or, it can be extracted from [www.MGEX.com](http://www.MGEX.com);
- Basis risk is typically measured as the standard deviation of basis changes (changes are important since in a hedged position, it is the change in the basis that is critical) for different periods forward;
- Spread risk is measured the same as basis risk.

It is important that these measures of risk are not constant (i.e., the riskiness in the underlying component of the price varies through time). Hence, these need to be measured routinely, to keep track of them over time, and to report them (typically graphically) along with other risk documents.

The second document relates to the size of the underlying positions spread across the numerous instruments. There are a multitude of different ways this can be reported which are listed below. To be clear, it is important that 1) selected measures from these are measured; 2) these are measured and reported routinely; and 3) deviations from the underlying hedge policy should be justified.

There are several measures. For purposes of internal reporting, these include Daily Position Reports (DPR’s and in various forms).

**Daily Position Reports:** This is sometimes also referred to as a Long/short report and there are varying forms of this report. Information contained in these reports include for each time period forward (i.e., month, or week) the following: underlying flour sales, by type; underlying cash inventories and purchases by type; and the sizes of futures positions taken for each month.

Information that can and should be derived from these include the following that are very important in measuring risk exposure:

- **Hedge Ratios (aggregate).** Simply this is defined as the percent of the net cash position that is hedged in the future. Ideally, this should be equal to 1.0 on a regular basis, which simply means, the Mill is 100% hedged. Or, more specifically, its net inventory position is 100% hedged.
- **Hedge Ratios by period forward:** This is easily measured and indicates the percent of cash position hedged in each period forward. Ideally, these should equal 1.0 as well, but, there may be some practical or strategic considerations that may warrant slight deviations, though overtime, these should converge to 1.0. If not, the Mill would be exposed to more risk than would be minimal.
- **Basis risk:** This can be derived for each month, as well as in aggregate. Technically, this is the volume of grain to which there is risk associated with changes in the basis. Larger volumes means greater risk exposure. If the value is positive it means the positive net inventories will benefit with basis increases and *vice versa*. This is a crucial measure and should be monitored closely through time.

These reports are essential to the risk reporting and control. They are not without flaws, and several are mentioned. First, the hedge ratio is measured as the percent of the “net cash” position that is hedged. But, it does not deal with the means to which the net cash position is achieved. There is a major difference between covering all of a short cash position with a long

cash position, versus covering all of a short cash position with a long futures position. This distinction can only be acknowledged by measuring the basis risk.

Second, as noted above, evaluation of an aggregate Hedge Ratio=1 differs from requiring the HR=1 for each individual month. Indeed, it is possible to have an aggregate HR=1, but individual months not, which would suggest the Mill would be exposed to spread risk (i.e. the risk of changes in inter-month futures spreads prior to rolling or executing a position). Thus, each of these should be evaluated.

### **External reporting of risk positions: From Management to the Industrial Commission**

Three specific roles for the IC are identified as elements of the hedging policy and risk management protocols. These include:

- 1) The Industrial Commission should approve the document describing the hedging and risk management strategy. Ultimately, this would then become an element of standard operating procedure at the Mill;
- 2) The Industrial Commission should convey expectations that risk management at the Mill conforms to this policy; and
- 3) The third role would be to review varying measures of risk positions on a regular basis. This is not overly critical as if the above two roles are adhered to, the Industrial Commission should be assured that the Mill is conforming to the policy. Summary measures can be derived readily and shared to the Industrial Commission.

A set of measures about risk positions should be reported to the Industrial Commission on a regular basis including:

- **Hedge ratios should be reported.** The Controller will report monthly to the Industrial Commission the aggregate and individual futures month hedge ratios. Reporting these would retain autonomy to the Mill, but provide some indication to the Industrial Commission about the extent that the Mill is hedged;
- **Management discussion on its exposure to risk.** Management should provide a qualified discussion on its risk management strategy, as appropriate on an as needed basis. Management should identify any abnormalities regarding risk that would result in a deviation from the hedge policy.

In response to a question regarding if he had discussed this increase with Dr. Wilson, Mr. Taylor said he did. He worked with him over the last few weeks and settled on the number of 500,000 and Dr. Wilson agrees and thinks it is a good move.

In response to a question regarding if Dr. Wilson reviewed the entire policy for other modifications at this time, Mr. Taylor said he did and did not feel they needed any other changes at this time.

**On a roll call vote, Governor Burgum, Attorney General Stenehjem and Commissioner Goehring voted aye. The motion carried unanimously.**

Mr. Taylor gave the legislative update. He said they have their first meeting with the Senate Appropriations Committee on SB 2014/2074 on Thursday. He is requesting an increase in their budget to cover the additional expenses of operating the new G-Mill which is a thirty percent increase in capacity and the new wheat unloading pit coming on line. There are increased costs associated with the growing national emphasis on sanitation and food safety. They are requesting six new FTEs – two for the packing department, two for the grain terminal and one additional lab tech and one additional utility/food safety employee with the last two working mostly on food safety issues. They are also requesting that the annual transfer amounts remain at five percent of profits to the Ag Product Utilization Fund and fifty percent of remaining profits to the General Fund. He stated that keeping those transfers at that level would allow the Mill to reduce debt levels and fund additional capital projects that will increase overall profits. For example, the Mill has a packer project they hope to bring to the Commission in the next quarter for about \$1.5 million to give the Mill additional packing capacity – right now the packing capacity is

maxed up and the Mill is turning away business. They are also watching HB 1162 relating to state agencies competing with private industry. HB 1278 may be an issue as it relates to adding metal detectors on every door on every state building and if it applies to the State Mill they will be asking for an exemption.

Mr. Taylor updated the Commission on capital projects. He said work on the G-Mill which has been in operation since September is winding down and mostly consists of punch list items. Our new flour storage and loadout building is progressing nicely and should be up and running by the end of March. On the high speed grain unloading project all the concrete work has been completed and most of the unloading conveyers have been installed – working on the legs and leg towers and some conveyer work – hopefully that will be completed sometime in mid-Spring. There have been some delays due to the cold weather but it is progressing nicely.

Being no further State Mill business, Governor Burgum adjourned this portion of the meeting at 11:50 a.m. and the Commission took up Department of Mineral Resources business.

INDUSTRIAL COMMISSION OF NORTH DAKOTA

A handwritten signature in blue ink, appearing to read "Karlene Fine".

Karlene Fine, Executive Director and Secretary

Minutes of a Meeting of the Industrial Commission of North Dakota  
Held on January 17, 2017 beginning at 11:00 a.m.  
Governor's Conference Room  
State Capitol

Present: Governor Doug Burgum, Chairman  
Attorney General Wayne Stenehjem  
Agriculture Commissioner Doug Goehring

Also

Present: JoDee Hanson, Governor's Office  
Jodi Uecker, Governor's Office  
Leslie Oliver, Governor's Office  
Cassandra Torstenson, Governor's Office  
Lynn Helms, DMR  
Bruce Hicks, DMR – Oil and Gas Division  
Alison Ritter, DMR – Oil and Gas Division  
Hope Hogan, Attorney General's Office  
Ron Ness, ND Petroleum Council  
Danette Welsh, Oneok  
Jan Swenson, Badlands Alliance  
Brent Brannan, Oil and Gas Research Program  
Kevin Prames  
Lillian Crook  
Cory Bryson, LIUNA 563  
Pamela Link, Laborers 563  
Robert Fimbres, Tribal Safety Program  
Aron Abbey, TAT Tribal Safety Regulation and Compliance  
Travis Hallam, TAT Pipeline Authority  
Members of the Press

Governor Burgum called the Department of Mineral Resources portion of the Industrial Commission meeting to order at 11:50 a.m. following completion of State Mill business.

Mr. Lynn Helms, Department of Mineral Resources Director, discussed proposed amendments to the Delegation of Authority Resolution. He said the current one is two years old and he is proposing some rewording. (A copy of the marked up version of the Resolution is available in the Commission files.)

**It was moved by Attorney General Stenehjem and seconded by Commissioner Goehring that the Industrial Commission adopts the revised Delegation of Authority Resolution as stated below:**

**Resolution of the  
North Dakota Industrial Commission**

Whereas, The Industrial Commission ("Commission") has a range of responsibilities and broad authority under Title 38 of the North Dakota Century Code, titled "Mining and Gas and Oil Production" and Chapters 54-17.3 titled "Paleontological Resource Protection," 54-17.4 titled "Geological Survey" and 23-20.2 titled "Disposal of Nuclear & Other Waste Material." More particularly, the Commission has authority under North Dakota Century Code Chapters 38-08, "Control of Gas and Oil Resources;" 38-08.1, "Geophysical Exploration Requirements;" 38-12, "Regulation, Development, and Production of Subsurface Minerals;" 38-12.1, "Exploration Data;" 38-15, "Resolution of Conflicts in Subsurface Mineral Production;" 38-19, "Geothermal Resource Development Regulation;" 38-21, "Exploration Fund;" and 38-22, "Carbon Dioxide Underground Storage," as amended from time to time.

Whereas, The Commission has adopted administrative rules to implement Title 38, and Chapters 54-17.3, and 54-17.4.

Whereas, North Dakota Century Code Section 38-08-04.2 provides:

*The industrial commission is authorized to appoint a director of mineral resources who shall serve at the pleasure of the commission. The director of mineral resources shall carry out the duties of the director of oil and gas along with the duties of director of mineral resources. ...The commission may delegate to the director of oil and gas all powers the commission has under this title and under rules enacted under this title.*

Now, therefore, the Industrial Commission delegates to the Director of Mineral Resources the authority to carry out, on the Commission's behalf and in its name, all of the Commission's Title 38 and Chapters 54-17.3, 54-17.4 and 23-20.2 statutory and administrative rule authority and responsibility, as amended from time to time. This delegation of authority does not, however, include the following:

1. Executing final orders for cases dealing with creating and terminating secondary and tertiary recovery units;
2. Executing final orders for cases in which the person opposing the requested relief presents substantial or procedurally sound reasons for the opposition;
3. Executing final orders for cases in which the Director contemplates granting relief that substantially differs from that requested;
4. Initiating and settling litigation in the courts;
5. Executing final orders imposing a fine for administrative cases in which the person who is the subject of an administrative complaint opposes the proposed penalty and the Director cannot reach a negotiated settlement with such person;
6. Executing orders granting or denying a petition for reconsideration;
7. Executing final orders for cases dealing with carbon dioxide storage facility permits and certificates of carbon dioxide project completion; and
8. Executing final orders for cases dealing with the development or production of subsurface minerals.

**On a roll call vote, Governor Burgum, Attorney General Stenehjem and Commissioner Goehring voted aye. The motion carried unanimously.**

Mr. Helms recommended the extension of the Inactive Well Waiver and Non-Completed Well Waiver Programs through June 30, 2017 due to severe winter weather and persistent low oil prices. He said these programs were instituted a little over a year ago because of low oil prices. There are roughly 900 wells in the Bakken and Three Forks that have been drilled and not fractured and completed and almost 1,600 inactive wells, primarily legacy wells, that are marginal (ten barrels per day or less)--a total of 2,500 wells. The industry is still experiencing low oil prices, a longer period of time of prices above \$50.00 is needed in order for operators to hydraulic fracture the non-completed wells and the State is experiencing extreme weather this winter. There are a significant number of operators who are reporting they need to plow the snow, safely shut in their marginal wells and leave them shut in until Spring. Extending these programs will relieve the Agency and the industry of the burden of either temporarily abandoning those wells or plugging them or doing something that would remove the asset from the inventory. The Oil and Gas Division has developed a very detailed guidance for what their employees are supposed to look at and the industry understands what they need to do in order to safely idle a well or hold a well in non-completed status.

**It was moved by Commissioner Goehring and seconded by Attorney General Stenehjem that the Industrial Commission directs the Oil and Gas Division staff to extend the Inactive Well Waiver and Non-Completed**

**Well Waiver Programs according to the following guidance through June 30, 2017 due to severe winter weather and persistent low oil prices.**

### **General Guidelines for Inactive Well - Waiver**

#### **Policy Goal:**

The North Dakota Industrial Commission (NDIC) is charged with "fostering, ... encouraging, and ... promoting the development, production, and utilization of the *state's* natural resources of oil and gas in the state in such a manner as will prevent waste." The Commission is promulgating this Policy to prevent waste.

North Dakota Century Code (NDCC) § 38-08-04 (1) (1) and North Dakota Administrative Code (NDAC) § 43-02-03-55 (1) define what constitutes abandonment of a well and the operator's obligation to plug such a well and reclaim its site.

NDAC § 43-02-03-55 (3) was drafted to give the operator of an abandoned well sufficient time either to restore production or plug and reclaim the well.

*Inactive Well – Waiver (IAW) Status may only be given to wells that have met the following criteria.*

#### **1. Proposed IAW Approval Procedure**

1. The operator must submit a Sundry Notice – Form 4 intent to request a waiver to plug and reclaim an abandoned well pursuant to NDAC § 43-02-03-55 Part (3). The request must include:
  - a. Documentation of why the well is currently in an inactive or abandoned status.
  - b. A statement that the well is uneconomic to produce at current crude oil prices.
  - c. A statement that wellhead equipment complies with NDAC §§ 43-02-03-28 and 43-02-03-29 with regard to subsurface pressure control and well and lease equipment in good working order.
  - d. The current casing and tubing pressure.
  - e. If the well was in abandoned status (AB – had not produced for a continuous 12 month period) prior to January 1, 2016, document why the well was not brought into compliance prior to that date.
2. A file review and review of the field activity system must be performed.

#### **2. IAW Extension Requirements**

1. The operator must submit for approval an annual request to extend the IAW status by including an updated sundry with the information required above in items (a) through (d).

#### **3. Revocation of IAW Status**

1. Reason for IAW no longer valid.
2. Consideration of mineral/landowner/field inspector concerns.
3. Removal of any production or injection equipment.

#### **4. Access to Well Sites**

Reasonable access to IAW well sites must be maintained.

*Note: The foregoing are guidelines only and may be altered for good cause to meet specific conditions.*

#### **Reference**

##### **Requirements of NDAC § 43-02-03-55**

1. *The removal of production equipment or the failure to produce oil or gas, or the removal of production equipment or the failure to produce water from a source well, for one year constitutes abandonment of the well.*

*The removal of injection equipment or the failure to use an injection well for one year constitutes abandonment of the well. The failure to plug a stratigraphic test hole within one year of reaching total depth constitutes abandonment of the well. The removal of treating plant equipment or the failure to use a treating plant for one year constitutes abandonment of the treating plant. An abandoned well must be plugged and its site must be reclaimed and an abandoned treating plant must be removed and its site must be reclaimed, pursuant to sections 43-02-03-34 and 43-02-03-34.1.*

*3....the director may also waive the duty to plug and reclaim an abandoned well for any other good cause found by the director. If the director exercises this discretion, the director shall set a date or circumstance upon which the waiver expires.*

### **General Guidelines for Not Completed - Waiver of Wells**

#### **Policy Goal:**

The North Dakota Industrial Commission (NDIC) is charged with "fostering, ... encouraging, and ... promoting the development, production, and utilization of the *state's* natural resources of oil and gas in the state in such a manner as will prevent waste." The Commission is promulgating this Policy to prevent waste.

North Dakota Century Code (NDCC) § 38-08-04 (1) (1) and North Dakota Administrative Code (NDAC) § 43-02-03-55 (1) define what constitutes abandonment of a well and the operator's obligation to plug such a well and reclaim its site.

NDAC § 43-02-03-55 (2) was drafted to give the operator of an abandoned well sufficient time either to restore production or plug and reclaim the well.

This Policy does nothing to change the existing text or application of NDAC § 43-02-03-55 (2) to a well which has previously produced oil or gas.

NDAC § 43-02-03-55 (3) and this policy are drafted to eliminate the waste which would otherwise occur by application of NDAC § 43-02-03-55 (2) to horizontal Bakken wells for which completions have been deferred.

*Not Completed – Waiver (NCW) Status may only be given to wells that have been drilled but whose casing has not yet been perforated (i.e. the well is incapable of producing oil or gas because completion operations have not yet been performed).*

#### **1. Proposed NCW Approval Procedure**

1. The operator must submit a Sundry Notice – Form 4 intent to request a waiver to plug and reclaim an abandoned well pursuant to NDAC § 43-02-03-55 Part (3). The request must include:
  - a. A current well bore schematic that identifies the dimensions and depths of casing, tubing, liner(s) and frac string installed in the well; completion design for the well; type and density of all fluids in the well in the intermediate casing and frac string; and wellhead equipment.
  - b. Documentation that a successful pressure test was performed which adequately tested the integrity of the intermediate casing and packer element utilized to isolate the intermediate casing-production liner annulus from the intermediate casing to a minimum pressure of one thousand five hundred pounds per square inch [10,342 kilopascals] gauge.
  - c. Documentation that a successful negative pressure test of the production liner was performed. The pressure must have been bled off and a flow check performed. If no flow was observed the integrity of the liner below the liner hanger will be considered proven.
  - d. A cement evaluation log or the intermediate casing cementing job report.
  - e. Statement that wellhead equipment complies with NDAC §§ 43-02-03-28 and 43-02-03-29.
  - f. Proposed procedure to perform a NDIC witnessed surface pressure/flow test on the surface casing, the intermediate casing and frac string. Operator must notify the NDIC Field Inspector 48 hours prior to performing test. If pressure is present, the operator must relieve the pressure and install gauges. The operator must re-check the pressure gauges within 48 hours for pressure buildup.

2. The Field Inspector should witness and document the initial surface pressure/flow test in the database and notify the Bismarck office via email of failed tests. The operator is required to file a sundry notice reporting the work done.
3. A file review must be performed.

## **2. Subsequent Report of NCW Procedures**

1. The operator must submit for approval a subsequent report of the NCW procedures and request for a waiver to plug and reclaim an abandoned well pursuant to NDAC § 43-02-03-55 (3) being sure to include date and results of flow test.
2. Ensure NDIC Field Inspector was properly notified of surface pressure/flow test.
3. NCW status approved for one year. The director may extend a well's NCW status beyond one year.
4. A file review must be performed.

## **3. NCW Extension Requirements**

1. The operator must submit for approval an annual request to extend the NCW status. The director may extend a well's NCW status beyond one year.  
An annual surface pressure/flow test should be witnessed by a NDIC Field Inspector. The operator must notify the NDIC Field Inspector 48 hours prior to performing test. If pressure is present, the operator must relieve the pressure and install gauges. The operator must re-check the pressure gauges within 48 hours for pressure buildup.
2. The NDIC Field Inspector must witness and document the annual surface pressure/flow test in the database and notify the Bismarck office via email of failed tests.
3. Documentation of quarterly inspections and surface pressure/flow tests with results. If no such tests were performed, that should be indicated also. Operator must provide the name of the NDIC Field Inspector and date notified of unwitnessed flow tests.
4. A file review must be performed.

## **4. Inspections & Monitoring Requirements**

1. The NDIC Field Inspector must witness and document the initial surface pressure/flow test in the database and notify the Bismarck office via email of failed tests.
2. Well must be inspected by the operator at least once per quarter for pressure or leakage on the surface casing, the intermediate casing and frac string. If pressure is present, the operator must notify the NDIC immediately, relieve the pressure and install gauges. The operator must re-check the pressure gauges within 48 hours for pressure buildup. If the NDIC Field Inspector is unable to witness the test, the operator must notify the NDIC Field Inspector of the results of the test and the NDIC Field Inspector will document the results in the database. If the NDIC Field Inspector witnesses the surface pressure/flow test, it should be documented in the database and the Bismarck office notified via email of failed tests. Note the operator must report the results and the respective inspection dates from the inspections and flow tests on any request to extend the NCW status.
3. Operator must perform an annual NDIC witnessed surface pressure/flow test on the surface casing, the intermediate casing and frac string. Operator must notify the NDIC Field Inspector 48 hours prior to performing test. If pressure is present, the operator must relieve the pressure and install gauges. The operator must re-check the pressure gauges within 48 hours for pressure buildup.
4. The NDIC Field Inspector must witness and document the annual surface pressure/flow test in the database and notify the Bismarck office via email of failed tests.
5. Any pressure or leakage discovered by the operator must be reported to the NDIC immediately.

## **5. Revocation of NCW Status**

1. Failure of surface pressure/flow test.
2. Fails inspection and monitoring requirements in part 4 above.
3. Reason for NCW no longer valid.

4. Consideration of mineral/landowner/field inspector concerns that are in the well file and field inspector notes in RBDMS.

## **6. Access to Well Sites**

Reasonable access to NCW well sites must be maintained.

## **7. Other**

Upon notice from the NDIC that a well drilled on a multi-well pad has met the definition of what constitutes abandonment of the well, the operator may apply for additional time to NCW or TA the well by documenting the date that each well drilled on the multi-well pad during continuous drilling operations reached total depth. The commission may grant an extension of the Not Completed (NC) well status to one year following the date the last well drilled on the multi-well pad during continuous drilling operations reached total depth.

*Note: The foregoing are guidelines only and may be altered for good cause to meet specific conditions.*

## **Reference**

### **Requirements of NDAC § 43-02-03-55**

1. *The removal of production equipment or the failure to produce oil or gas, or the removal of production equipment or the failure to produce water from a source well, for one year constitutes abandonment of the well. The removal of injection equipment or the failure to use an injection well for one year constitutes abandonment of the well. The failure to plug a stratigraphic test hole within one year of reaching total depth constitutes abandonment of the well. The removal of treating plant equipment or the failure to use a treating plant for one year constitutes abandonment of the treating plant. An abandoned well must be plugged and its site must be reclaimed and an abandoned treating plant must be removed and its site must be reclaimed, pursuant to sections 43-02-03-34 and 43-02-03-34.1.*

3....*the director may also waive the duty to plug and reclaim an abandoned well for any other good cause found by the director. If the director exercises this discretion, the director shall set a date or circumstance upon which the waiver expires.*

**On a roll call vote, Governor Dalrymple, Attorney General Stenehjem and Commissioner Goehring voted aye. The motion carried unanimously.**

In response to a question regarding if the waiver is well by well or a blanket, Mr. Helms said the Commission would be allowing the Division staff to grant waivers or extensions that are different from the rule. The rule says an operator has one year and then the operator must do something with the well – plug it or put it on production. If the Commission approves these programs the Division staff can extend or waive the requirement to plug or return a well to production a year at a time. The staff would continue issuing the one year waivers for the next six months.

In response to a question regarding whether there is any risk associated environmentally or otherwise with the status of these wells with this waiver, Mr. Helms said there is no risk if the operator follows the guidance provided by the Division. The wells shouldn't represent a health, safety or environmental risk if they are properly idled or non-completed. It would be safe to leave them in that condition for a year.

**On a roll call vote, Governor Burgum, Attorney General Stenehjem and Commissioner Goehring voted aye. The motion carried unanimously.**

**It was moved by Attorney General Stenehjem and seconded by Commissioner Goehring that under the authority of North Dakota Century Code Sections 44-04-19.1 and 44-04-19.2 the Industrial Commission close the meeting to the public and enter executive session for the purpose of attorney consultation. The purpose of the executive session will be to consult with the Commission's attorney regarding the following pending adversarial administrative proceedings:**

**Case 25462**

**Case 25517**

**On a roll call vote, Governor Burgum, Attorney General Stenehjem and Commissioner Goehring voted aye. The motion carried unanimously.**

Governor Burgum stated: *I remind the Commission members and those present in the executive session that the discussion during executive session must be limited to the announced purpose for entering into executive session which is anticipated to last approximately 15-20 minutes.*

*The Commission is meeting in executive session to consult with the Commission's attorney(s) regarding the previously identified adversarial administrative proceedings. Any formal action by the Commission will occur after it reconvenes in open session.*

*Commission members, their staff, employees of the Department of Mineral Resources and counsel with the Attorney General staff will remain but the public is asked to leave the room.*

*The executive session will begin at 11:56 a.m. When the executive session ends the Commission will reconvene in open session.*

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Governor Burgum stated: *The Industrial Commission meeting is reconvened at 12:22 p.m. and the public has been invited to return to the meeting room. During its executive session the Commission consulted with its attorney regarding the following pending adversarial administrative proceedings in Cases 25462 and 25517. No final action will be taken by the Commission at this time as a result of the executive session discussion on these cases.*

Mr. Helms reported on consent decree approved December 28, 2016 by U.S. District Judge John D. Bates regarding the appeal of Environmental Integrity Project et al. v. Gina McCarthy, Case Number 1:16-cv-00842, in the U.S. District Court for the District of Columbia. He said this could potentially impact all North Dakota's solid waste programs. The State moved to intervene in the case and the State's motion was denied by Judge Bates on Friday, December 18 and ten days later, December 28 during the holiday period Judge Bates approved the consent agreement between the Environmental Integrity Project and EPA. The deadline to file an appeal was prior to this meeting and so he consulted with Attorney General Stenehjem and went ahead and filed the appeal of the consent agreement that will block it from taking affect and also block them from recovering their attorney's fees until it can be heard by another court. The concern is that the RCRA Law itself laid out a framework for EPA to review its solid waste rules and then potentially recommend changes. This consent decree sets hard dates. It could threaten every landfill in North Dakota, every special waste landfill, every drill cuttings pit, salt water handling, salt water hauling – everything is up for grabs in this Consent Agreement and so he is just reporting that he did go ahead and file an appeal and that will move forward.

Mr. Helms reported on legislation impacting the Department of Mineral Resources. (A handout is available in the Commission files.) He discussed each of the eight bills--HB 1015, HB 1075 (OMB bills), SB 2014, SB 2074 (Industrial Commission appropriation bills), HB 1151, HB 1200, HB 1243, HB1257.

Mr. Helms stated that HB 1151 is the “spill bill”. He requested permission from the Commission to work with the committee to draft amendments to improve it. Mr. Helms and the Commission discussed a number of provisions that the committee might want to consider. He indicated that the current bill isn’t changing anything in regards to the requirement that the spill must be cleaned up. It is also talking only about the reporting of spills on wellsites--spills off of well sites would still be reported at any volume.

In response to a question regarding if the companies keep track of what is spilled on their own sites no matter how much it is, Mr. Helms said they do and the Division staff can access that information when they do their inspections. The operator is required to keep those records for six years.

Mr. Helms noted that one initiative that has been discussed is having the four or five agencies that deal with spills including Disaster Emergency Services, coming up with a better system of a single reporting place and a committee, that looks at spill data, putting out an annual report that provides information to the public as opposed to a press release on every spill for some arbitrary amount as determined by each agency.

Mr. Helms said he told the committee that one of the outgrowths of this legislation would be that at the time of reclamation there will be significantly more surveillance of the wellsite – after the operator removes the gravel or scoria the Division is going to have to require an electro conductivity survey or something similar and an onsite by the field inspector to make sure there isn’t some unreported spill damage that needs to be reclaimed.

Governor Burgum said he was supportive of the unified spill reporting of the data bases that currently are not interconnected. In a world where data helps us solve problems and protect the environment, there must be data that is uniform, accessible and transparent. This is something the State can make happen but there will be a need to spend some IT dollars to get this information all unified.

It was the consensus of the Commission that Mr. Helms should work with the committee on HB 1151.

Mr. Helms stated that HB 1243 would allow the Administrative Rules Committee to void any rule that had more than a \$500,000 impact on the oil and gas industry. It would also require that the Commission explicitly vote knowing that impact. He requested permission to oppose this bill on the basis that it is bad policy to single out an industry and say this is the only industry in North Dakota that gets this treatment--if it was applied to every industry from every agency in North Dakota that would be something different to consider. Because this committee does not allow anyone to testify in a neutral position he requested permission to oppose the bill and point out the potential constitutional issues, and a potential conflict with the Administrative Rules Committee statute. It was the consensus of the Commission that Mr. Helms could proceed as requested.

Mr. Helms stated that he has been asked to provide factual testimony on HB 1257 which deals with unitization to make sure everyone on the committee understands how unitization works, what the long term impacts are and some of the pros and cons, benefits and risks of unitization and in particular to talk about the Corral Creek Unit – why that was done and how that benefited the Little Missouri State Park and the Badlands.

Mr. Helms said PHMSA just released a rule which would override the Commission’s oil conditioning order. He intends to bring the Commission comments on the proposed rule for their consideration at their February meeting.

Mr. Helms reported that the State was unsuccessful in getting a preliminary injunction on the BLM Venting and Flaring Rule and the Rule will take effect today. It is the State’s intention to file briefs on the merits of its arguments and that whole process will last through the end of April if the parties agree to an expedited briefing schedule. In the Judge’s Order he ignored the State’s concern about the impacts on state and private mineral owners in spacing units that where the parties have committed their interests to a federal communitized agreement. It was never mentioned in the Judge’s Order so it is important that the State makes sure that argument

gets it into the merits of the case and is dealt with. Attorney General Stenehjem said this was unusual because it was the same Judge who granted an injunction against the other rule – the hydraulic fracturing rule -- and the State had many of the same arguments. Mr. Helms said in this case the BLM learned from the hydraulic fracturing rule and between the proposed rule and the final rule they have rolled those impacts back to where they stated explicitly in this final rule they wouldn't require a federal drilling permit for non-federal minerals and they would not require a waste minimization plan on an existing approved permit and they delayed implementation of the rule until a year from today so it was hard to argue real and immediate harm which is something you need for an injunction. In his opinion the State still needs to argue the merits of the case.

Being no further Department of Mineral Resources business, Governor Burgum adjourned this portion of the meeting at 12:39 p.m. and the Commission took up Oil and Gas Research Program business.

INDUSTRIAL COMMISSION OF NORTH DAKOTA



Karlene Fine, Executive Director and Secretary

Minutes of a Meeting of the Industrial Commission of North Dakota  
Held on January 17, 2017 beginning at 11:00 a.m.  
Governor's Conference Room  
State Capitol

Present: Governor Doug Burgum, Chairman  
Attorney General Wayne Stenehjem  
Agriculture Commissioner Doug Goehring

Also

Present: JoDee Hanson, Governor's Office  
Jodi Uecker, Governor's Office  
Leslie Oliver, Governor's Office  
Cassandra Torstenson, Governor's Office  
Lynn Helms, DMR  
Bruce Hicks, DMR – Oil and Gas Division  
Alison Ritter, DMR – Oil and Gas Division  
John Harju, EERC  
Ron Ness, ND Petroleum Council  
Danette Welsh, Oneok  
Jan Swenson, Badlands Alliance  
Brent Brannan, Oil and Gas Research Program  
Kevin Prames  
Lillian Crook  
Cory Bryson, LIUNA 563  
Pamela Link, Laborers 563  
Robert Fimbres, Tribal Safety Program  
Aron Abbey, TAT Tribal Safety Regulation and Compliance  
Travis Hallam, TAT Pipeline Authority  
Members of the Press

Governor Burgum called the Oil and Gas Research Program portion of the Industrial Commission meeting to order at 12:39 p.m. following completion of Department of Mineral Resources business.

Ms. Karlene Fine, Industrial Commission Executive Director/Secretary presented the financial report as follows:

**REVISED - 12/10/2016**  
Oil and Gas Research Fund  
Financial Statement  
**2015-2017 Biennium**  
December 12, 2016

	<u>Cash Balance</u>
July 1, 2015 Balance	\$ 4,419,836.98
Revenues through July 31, 2016 (2% State's share of oil taxes)	\$10,000,000.00
Revenues from Abandoned Well Fund	\$ 2,000,000.00
Revenues from interest income & grant applications	\$ 7,459.35
Transfer to the Pipeline Authority Fund	\$ (200,400.00)
Expenditures through October 31, 2016	<u>\$(5,499,791.85)</u>
	<b>\$10,727,104.48</b>
Outstanding Administration Commitment as of October 31, 2016	\$ (846,021.61)
Outstanding Commitments on Legislative Studies	\$ (475,000.00)
Outstanding Project Commitments as of October 31, 2016**	<u>\$(7,998,962.93)</u>
Balance	<b>\$ 1,407,119.94</b>

Oil and Gas Research Fund  
Continuing Appropriation Authority  
2015-2017 Biennium

Uncommitted Balance July 1, 2015	\$ 759,360.59
Carried Over Unused Administration Allocation	\$ 72,009.72
Projected Income from Project Applications & Interest	\$ 20,000.00
Returned Commitments	\$ 148,559.00
Revenues (2% of State's Share of Oil Tax Revenues)	\$10,000,000.00
Transfer from the Abandoned Well Fund for two studies	<u>\$ 2,000,000.00</u>
	\$12,999,929.31
Transfer to Pipeline Authority	\$ (200,400.00)
Administration Commitment*/****	\$ (1,022,909.72)
Approved Project Commitments 2015-2017**	\$ (3,560,019.00)
Legislative Mandated Studies	\$ (2,000,000.00)
Carried over Project Commitments for 2015-2017***	<u>\$ (4,796,940.00)</u>
<b>Available Funding</b>	<b>\$ 1,419,660.59</b>

**57-51.1-07.3. Oil and gas research fund - Deposits - Continuing appropriation.**

*There is established a special fund in the state treasury to be known as the oil and gas research fund. Before depositing oil and gas gross production tax and oil extraction tax revenues in the general fund, property tax relief sustainability, strategic investment and improvements fund or the state disaster relief fund, two percent of the revenues must be deposited monthly into the oil and gas research fund, up to ten million dollars per biennium. All moneys deposited in the oil and gas research fund and interest on all such moneys are appropriated as a continuing appropriation to the council to be used for purposes stated in chapter 54-17.6.*

\*This includes the remaining amount of \$39,356.50 owed on the NDSU Workforce Study and Legislative Mandated \$100,000 Natural Gas Study

\*\*This includes \$1,100,000 of the \$6,000,000 commitment to Contract G-040-080 (Bakken Optimization 2.0). The remaining \$4,900,000 is to be expended in the 2017-2019 and 2019-2021 biennia.

\*\*\*This amount includes research/education funding carried over from prior biennia for:

Contract G-028-058 with \$1,100,000 to be expended in the 2015-2017 biennium;

Contract G-030-060 with \$3,027,250 to be expended in the 2015-2017 biennium;

Contract G-034-065 with \$669,690 to be expended in the 2015-2017 biennium.

\*\*\*\*Includes Contract G-000-004 with the EERC for 3 years for non-match emerging issues.

Mr. Brent Brannon, Oil and Gas Research Program Director, presented the Oil and Gas Research Council recommendations on the following two Grant Round 41 applications:

**G-041-01: Functional Nanoparticle-Augmented Surfactant Fluid for Enhanced Oil Recovery in Williston Basin;** Submitted by the Department of Petroleum Engineering, Department of Chemistry, Institute of Energy Studies-University of North Dakota; Principal Investigators: Hui Pu & Julia Xiaojun Zhao; Project Duration: 3 years; Total Project Cost \$1,724,006; Request for: \$769,134; Recommended Revised Total Project Cost \$1,439,810; Recommended Revised OGRP Project Funding \$678,932 (A copy of the application is available in the Commission files.) He said currently we are able to extract between five and ten percent of the original oil in place. This application looks to work through lab studies to increase each additional one percent recovery equating to 1.7 billion barrels. There were three technical reviewers with two recommending funding and one recommending consider funding. He made a recommendation to the Council to fund the direct expenses only in the amount of \$678,000, there was one conflict of interest and the vote was 6 to 0 to fund and 1 vacant position.

**It was moved by Commissioner Goehring and seconded by Attorney General Stenehjem that the Industrial Commission accepts the Oil and Gas Research Council's recommendation to fund the grant application**

**“Functional Nanoparticle-Augmented Surfactant Fluid for Enhanced Oil Recovery in the Williston Basin” and to authorize the Industrial Commission Executive Director and Secretary to execute a contract with the University of North Dakota to provide a total of \$678,932 in funding. On a roll call vote, Governor Burgum, Attorney General Stenehjem and Commissioner Goehring voted aye. The motion carried unanimously.**

**G-041-03: Effects of Cropping Sequence, Ripping, and Manure on Pipeline Reclamation in Western North Dakota;** Submitted by North Dakota State University - Williston Research Extension Center; Principal Investigator: Austin Link; Project Duration: 4 years; Total Project Cost \$1,305,280; Request for \$652,640; Recommended Revised Total Project Cost \$1,035,936; Recommended Revised OGRP Project Funding \$517,968 (A copy of the application is available in the Commission files.) He said the goal is to create a best practice document - looking at conducting a field based study at the Williston Research Center on some recently installed pipeline. They are looking at different soil characteristics and crop performance and will use the research and facilities they have to conduct the research. The technical reviewers: two recommended funding this project, one recommended consider funding the project and his recommendation to the Council was to fund all direct expenses in the amount of \$517,968 with contingencies. There were no conflicts of interest and the vote was 5 to 0 to fund with 1 absent and not voting and 1 vacant position.

**It was moved by Commissioner Goehring and seconded by Attorney General Stenehjem that the Industrial Commission accepts the Oil and Gas Research Council’s recommendation to fund the grant application “Effects of Cropping Sequence, Ripping, and Manure on Pipeline Reclamation in Western North Dakota” and to authorize the Industrial Commission Executive Director and Secretary to execute a contract with North Dakota State University - Williston Research Extension Center to provide a total of \$517,968 with the following conditions:**

- 1) Establishment of a task force with industry and Department of Mineral Resources representation to assist with the study process;**
- 2) Presentation made at the annual reclamation conference;**
- 3) Presentation of the Final report to industry representatives at the Williston Experiment Station.**

**On a roll call vote, Governor Burgum, Attorney General Stenehjem and Commissioner Goehring voted aye. The motion carried unanimously.**

Mr. John Harju, EERC, went through the following power point presentation on the Pipeline Leak Detection - Field Evaluation of Multiple Approaches for Liquids Gathering Pipelines report. (A copy of the full report is available in the Commission files.) He said the report had been published within the last few weeks. This is a follow up study to a companion report published one year ago that consisted of a comprehensive review of literature and known information on liquid gathering pipelines. The prior study resulted in an extensive list of recommendations, many of which were embodied in Industrial Commission rules that were drafted, evaluated over the past year, reviewed by the legislative Administrative Rules Committee and ultimately became effective January 1, 2017.



# Liquid Gathering Pipelines & Pipeline Leak Detection System Field Evaluation

North Dakota Industrial Commission  
Bismarck, ND  
January 17, 2017

John Harju  
Vice President for Strategic Partnerships

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## Project Prescribed by HB 1358

Project is focused on conducting analysis of crude oil and produced water (gathering) pipelines



### Phase I – Study

- Analyze existing regulations
- Determine feasibility and cost-effectiveness of leak detection technology
- Report to Industrial Commission and Legislature (December 2015)



### Phase II – Demonstration Project

- Evaluate pipeline leak detection and monitoring systems
- Report to Industrial Commission and Legislature (December 2016)

The image shows the cover of a report titled "Liquids Gathering Pipelines: A Comprehensive Analysis" on the left. The cover features a blue and orange abstract design with the title in white and orange text. It includes the EERC logo and the date "December 2015". To the right is a title slide with a dark blue background and white text that reads "Liquid Gathering Pipeline Study" and "Phase I". At the bottom right of the slide is the slogan "Critical Challenges. Practical Solutions." with a yellow box around "Practical Solutions."

## Study Components



## STAKEHOLDER INPUT



(Ombudsman Program)



### Industry

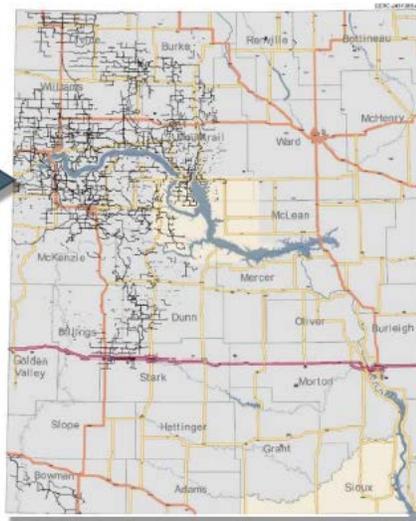
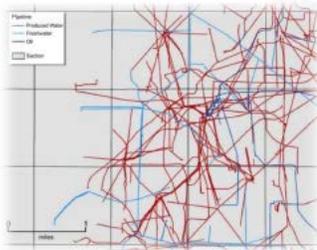
### Office of the Governor



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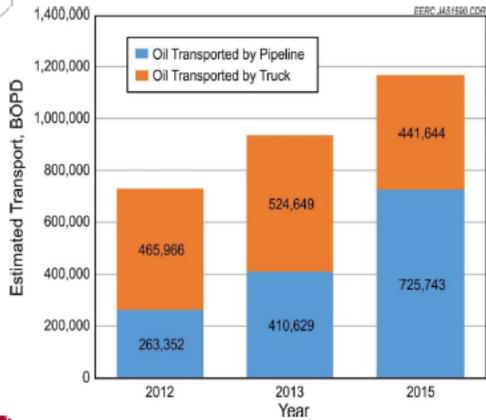
## Context on Gathering Pipelines – A Complex Web

Represents Less Than  
20% of Gathering  
Lines Installed



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## Context on Gathering Pipelines – Getting Product to Market



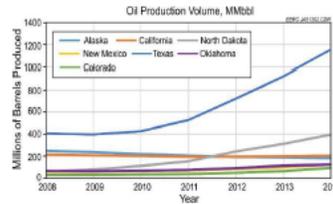
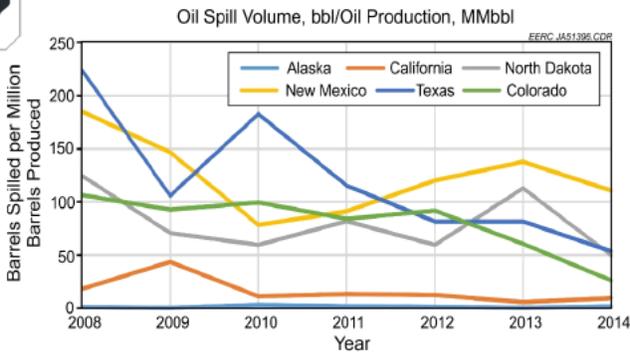
### Oil Gathering in ND

- Petroleum product must get to market:
  - Large fleets of trucks, or
  - Gathering pipelines
- Pipelines are considered:
  - Safer
  - More environmentally-friendly
  - More economical



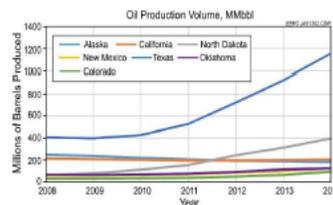
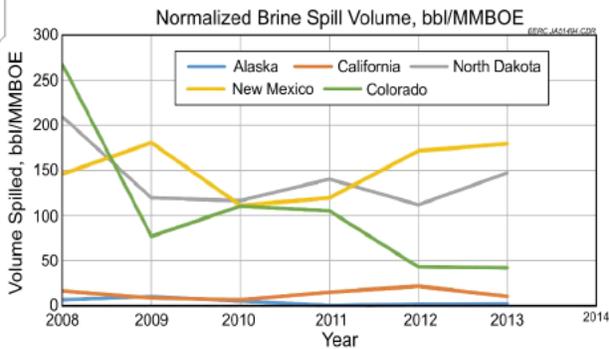
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## Oil Spills Normalized by Production



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## Brine Spills Normalized by Production



Critical Challenges. **Practical Solutions.**

## The Bottom Line

- 23 recommendations made in the study report were considered by ND DMR before issuing new rules in February 2016 (approved in December 2016)

*BOTTOM LINE: Better installations, more thorough inspections, and increased facilitation of learning from past incidents will do more to prevent future gathering pipeline leaks than any available leak detection system.*

Phase I

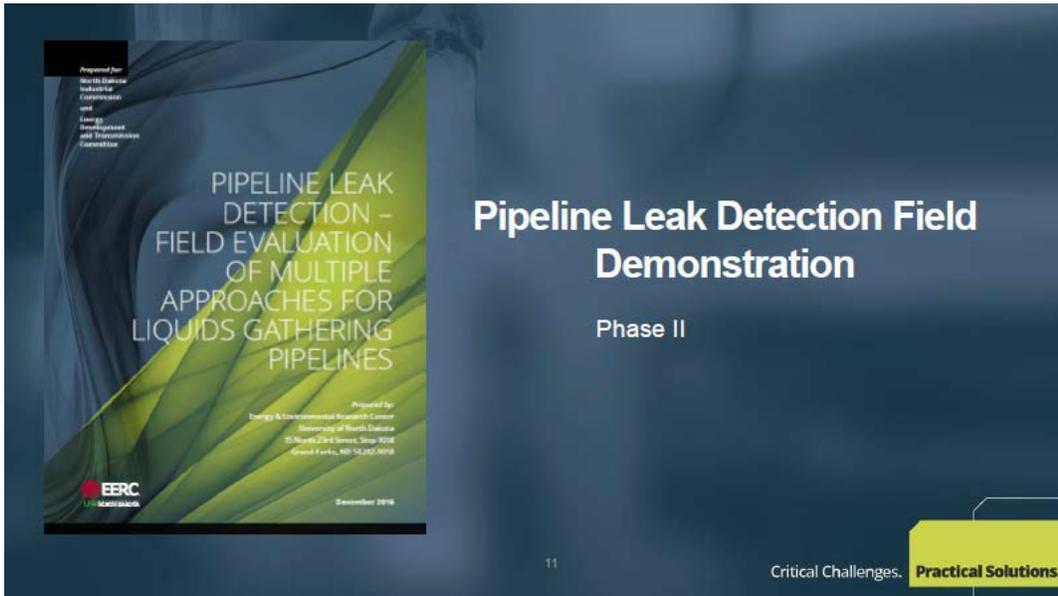
- The study report informed ND DMR and industry on actions they could take immediately to decrease spills and leaks.

Phase II

- Demonstrations of leak detection approaches will provide information on the performance of those technologies with greatest potential to lessen the severity of future spills and leaks.



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## Intent of Field Evaluation Phase

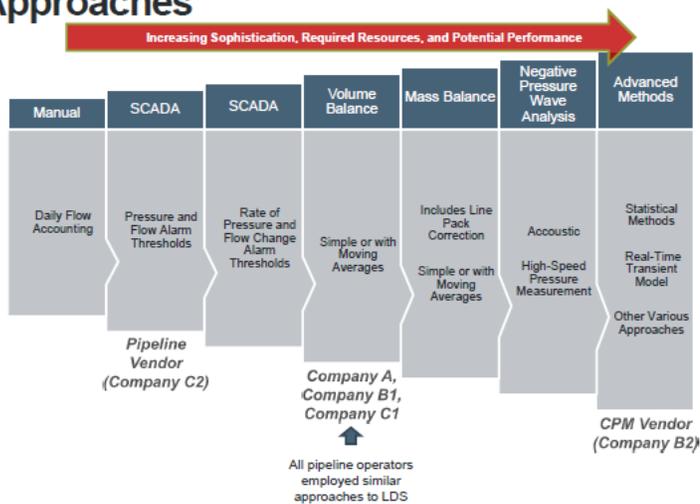
- HB 1358 stated the Legislature's wish to determine the "feasibility and cost-effectiveness" of leak detection systems applied to gathering pipeline systems
- Results of the field evaluation inform on a possible range of system performance to calibrate expectations
  - These results cannot be extrapolated to other pipeline systems because each set of design circumstances is unique.
  - Subsequently, costs to apply any particular LDS to various gathering systems vary widely

## Setting Expectations on Pipeline LDS

- LDS do not prevent leaks
- LDS require installation of significant infrastructure
- LDS performance degrades as operations and instrumentation deviate from design conditions
- LDS performance and optimal conditions vary from one detection approach to another
- LDS effectiveness has an important human component
- While LDS do find leaks, undetected leaks have occurred even in piping and LDS considered to be of the highest quality.



## LDS Approaches



## Volunteer Participants in LDS Evaluation Project

Partner	Sector	Fluid Carried	Pressurized Pipeline?	Pipeline Material	Leak Detection Technology
A	Oil producer and pipeline operator	Produced water	Yes	Fiberglas	In-house SCADA LDS
B1	Pipeline operator	Produced water	No	HDPE	In-house SCADA LDS
B2	CPM vendor	--	--	--	Parallel 3 <sup>rd</sup> -party CPM
C1	Pipeline operator	Produced water	Yes	Composite	3 <sup>rd</sup> -party SCADA LDS
C2	Pipeline vendor	--	--	Composite	Annular space leak detection



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## Field Evaluation Description

- Generalized test plan customized for each partner's situation
- Fluid withdrawal tests designed to simulate leaks of various sizes, but send withdrawn fluids to waiting tanker trucks
- Sudden withdrawal tests used to simulate abrupt ruptures

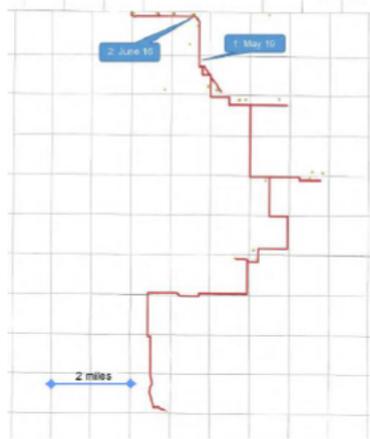


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## Company A's Gathering Pipeline System

Pipeline Material	Fiberglass
Fluid Pressure	300 psig
Topography	Relatively flat
# of Pumps	5
Pump Start/Stop	Automatic
Control Room	Permanently-staffed
LDS Developer	In-house
Communications Backbone	Fiber-optic cable



## Company B1's Gathering Pipeline Systems

Pipeline Material	HDPE	HDPE	HDPE
Fluid Pressure	Unpressurized	Unpressurized	Unpressurized
Topography	Relatively flat	Relatively flat	Relatively flat
# of Pumps	25	21	11
Pump Start/Stop	Manual	Manual	Manual
Control Room	Permanently-staffed, out-of-state	Permanently-staffed, out-of-state	Permanently-staffed, out-of-state
LDS Developer	In-house	In-house	In-house
Communication Backbone	Mixed radio and cellular	Mixed radio and cellular	Mixed radio and cellular



## Company C1's Gathering Pipeline System

Pipeline Material	Composite
Fluid Pressure	60 psig
Topography	Rugged hills
# of Pumps	2
Pump Start/Stop	Automatic
Control Room	Temporary, unstaffed
LDS Developer	Subcontractor
Communications Backbone	Radio



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## Summary of Fluid Withdrawal Test Results

Participating Company	LDS Characterization	Leak Rate, <i>bbl/hr</i>	Volume Withdrawn at Time of Alarm, <i>bbl</i>	Time to Detect, <i>hr</i>
Company A	Volume balancing and pressure rate of change monitoring	5.5–5.6	13.8–16.2	2.8–2.9
Company B1	Volume balancing over multiple moving time windows	21.2–49.9	11.6–121.3	0.29–5.71
Company B2	Statistical evaluation of flow balance and pressures with learning components	20.8–50.0	16.3–89.1	0.43–1.78
Company C1	Instantaneous flow balancing	8.4–14.0	0.1–0.94	0.07–0.96
Company C2	Annular space pressure measurement	No data		



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## Results (Cont'd)

	Overall		Constant Pressure	Unpressurized	
	No LDS	LDS	SCADA	SCADA	SCADA + CPM
Avg. Volume Released Before Alarm, <i>bbl</i>	676	75	47	107	38
Time to Detect, <i>hr</i>			1–3	1–6	1–2

- By participating in this field evaluation, pipeline operators discovered limitations in their LDS and improvements that could be made.
- Each operator adopted at least one of the following improvements:
  - Tightened alarm settings to increase sensitivity,
  - Additional leak detection techniques to compensate for limitations in existing techniques,
  - Increased resolution or sampling frequency of some measurements, and/or
  - Additional leak-indicating variables not currently tracked

## Key Conclusions of Field Evaluation

- The field evaluation led to specific improvements in LDS performance for each system tested
- LDS can improve response time and reduce magnitude of a spill, reducing spill remediation and associated costs
- Operating pipelines with consistent pressure can reduce slack and improve LDS performance
- Human response is an important component of leak detection and needs to be part of an effective pipeline performance management plan.
- No LDS will detect every leak under every condition
- The importance of LDS is secondary to high-quality construction \ inspection \ maintenance, and secondary to appropriate preparation and effective response to leaks that occur, but
  - However, LDS improves the timeliness of leak detection and reduces the volume of releases.
  - Therefore, operators should consider implementing LDS and demonstrate consideration by preparation and implementation of a formal leak detection plan.

## CONTACT INFORMATION

**Energy & Environmental Research Center**  
University of North Dakota  
15 North 23rd Street, Stop 9018  
Grand Forks, ND 58202-9018

[www.undeerc.org](http://www.undeerc.org)

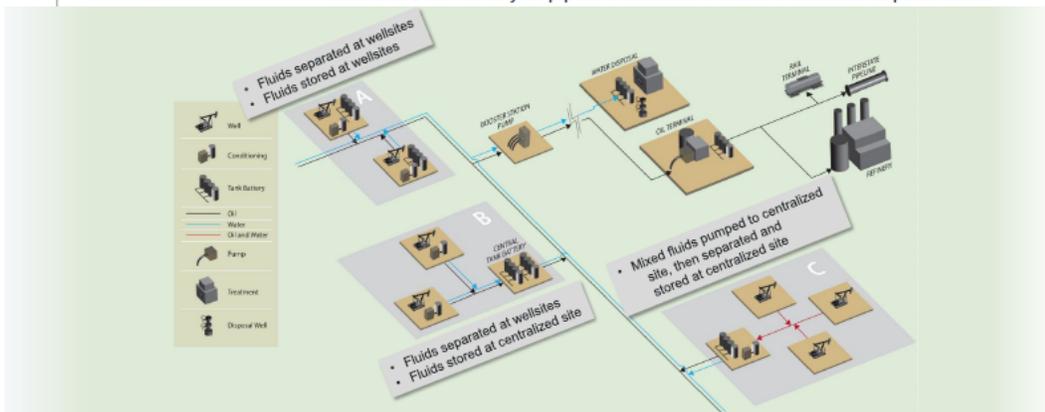
**John Harju**  
VP for Strategic Partnerships  
[jharju@undeerc.org](mailto:jharju@undeerc.org)  
701-777-5157



**Backup Slides**

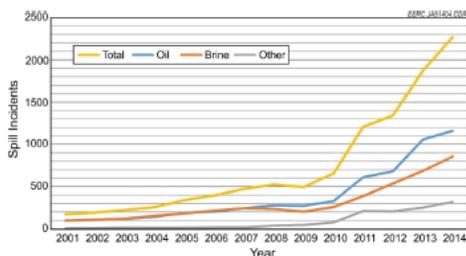
## OVERVIEW OF PRODUCED FLUID TRANSPORT

Study Focus: Pipelines that transport liquids from a wellsite to aggregation points such as a crude oil refinery or pipeline terminal or water treatment/disposal sites.



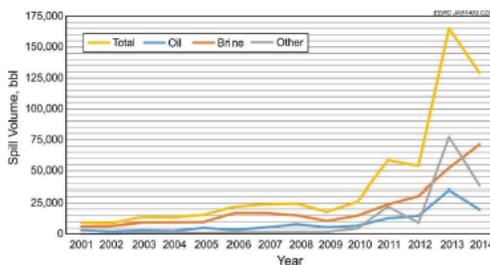
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## SUPERFICIAL REPORTING ON PIPELINE SPILLS



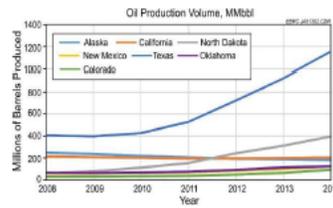
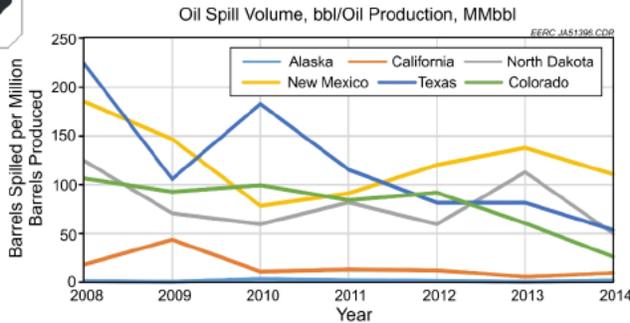
Volume

## Incidents



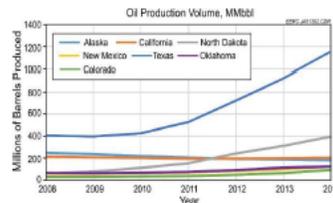
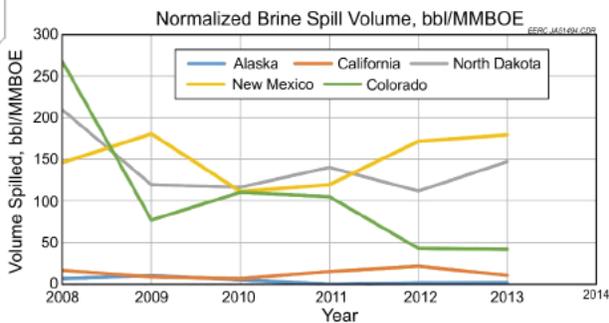
Critical Challenges. Practical Solutions.

## OIL SPILLS NORMALIZED BY PRODUCTION



Critical Challenges. **Practical Solutions.**

## BRINE SPILLS NORMALIZED BY PRODUCTION



Critical Challenges. **Practical Solutions.**

Mr. Harju noted in conclusion that leak detection systems are really secondary to high quality construction. The detection systems don't prevent leaks--they inform us of a leak and if there is a leak, then the operator can reduce the severity of that leak.

In response to a question regarding the designing of software to continually improve on the intelligence of these systems, Mr. Harju said what they are seeing is very encouraging. The EERC had a short window of opportunity to look at one of these systems and what they saw was encouraging. He indicated that under prior Commission action a project was initiated to set up a vendor supplied data repository. The EERC is developing a system wherein vendor data on all of these emerging technologies can be housed and allow potential users/installers to look across that entire spectrum of technology and try to more easily find technologies that can be readily utilized on their systems. This system is similar to the prior Commission work that focused on remote capture technology that was very helpful in trying to reduce flaring volume.

Governor Burgum said he fully acknowledges that this starts with great construction by great firms and good field inspection of the construction while it is happening. He was pleased to see that this leak detection study had been done. He noted this is an area that is being driven by digitization that is rapidly evolving and is doubling in power every two years. Digitization will generate results with precision and the ability to automatically generate data. This is something we have to keep monitoring especially as the costs are being reduced. He gave two examples of the work that is being done in agriculture with cattle and the medical field with patient care. He believes we could see a low cost, high value system that overcomes some of the challenges covered in this study in the near future.

Governor Burgum noted that the whole field of machine learning is one of the areas that the leading technology companies are investing in. This is an area that is going to revolutionize all the data analysis because the automatic collection systems are generating more data than humans can analyze. If machines are able to analyze that data then humans can more rapidly come to conclusions and build models and solutions around those conclusions. He indicated that the automatic collection of data and machine learning are two things that we have to keep on the horizon because we can't hire enough inspectors to monitor the miles and miles of pipe in the ground. Having an early warning detection system being the farmer or rancher is just not acceptable in our environment when these solutions are starting to become available.

Being no further Oil and Gas Research Program business, Governor Burgum adjourned this portion of the meeting at 1:00 p.m. and the Commission took up Pipeline Authority business.

INDUSTRIAL COMMISSION OF NORTH DAKOTA



Karlene Fine, Executive Director and Secretary

Minutes of a Meeting of the Industrial Commission of North Dakota  
Held on January 17, 2017 beginning at 11:00 a.m.  
Governor's Conference Room  
State Capitol

Present: Governor Doug Burgum, Chairman  
Attorney General Wayne Stenehjem  
Agriculture Commissioner Doug Goehring

Also

Present: JoDee Hanson, Governor's Office  
Jodi Uecker, Governor's Office  
Leslie Oliver, Governor's Office  
Cassandra Torstenson, Governor's Office  
Lynn Helms, DMR  
Bruce Hicks, DMR – Oil and Gas Division  
Alison Ritter, DMR – Oil and Gas Division  
Justin Kringstad, Pipeline Authority  
John Harju, EERC  
Ron Ness, ND Petroleum Council  
Danette Welsh, Oneok  
Jan Swenson, Badlands Alliance  
Kevin Prames  
Lillian Crook  
Cory Bryson, LIUNA 563  
Pamela Link, Laborers 563  
Robert Fimbres, Tribal Safety Program  
Aron Abbey, TAT Tribal Safety Regulation and Compliance  
Travis Hallam, TAT Pipeline Authority  
Members of the Press

Governor Burgum called the Pipeline Authority portion of the Industrial Commission meeting to order at 1:00 p.m. following completion of Oil and Gas Research Program business.

Mr. Justin Kringstad, Pipeline Authority Director, presented the Pipeline Authority 2016 Annual Report. (A copy of the report is available in the Commission files.) He stated that the report summarizes the activities of the Authority for that time period. He noted that the Pipeline Authority is not a regulatory agency. The Authority's work includes looking at data and trying to analyze future production trends, market conditions and then packaging that information into useful sources for industry, other state agencies and other interested parties to understand the current state of the transportation industry and what may be coming in the future. He said all the information in the Annual Report is on the Pipeline Authority website along with maps and updated presentations.

Ms. Karlene Fine, Industrial Commission Executive Director/Secretary, presented the Pipeline Authority Fund Annual Financial Report as follows:

**NORTH DAKOTA PIPELINE AUTHORITY  
BALANCE SHEET  
June 30, 2016**

**Assets**

Current Assets

Cash

203,762

Total assets

203,762

**Liabilities**

Current Liabilities

Accounts Payable

0

Total liabilities	<u>0</u>
<b>Net Position</b>	
Unrestricted	<u>203,762</u>
Total net position	<u>203,762</u>

Ms. Fine said one of the requirements by law is that the Commission receive this annual report and also a report on their balance sheet. The funding for the Pipeline Authority comes from the Oil and Gas Research Fund and is transferred over to the Pipeline Authority Fund. The balance at the end of the year was \$203,762.

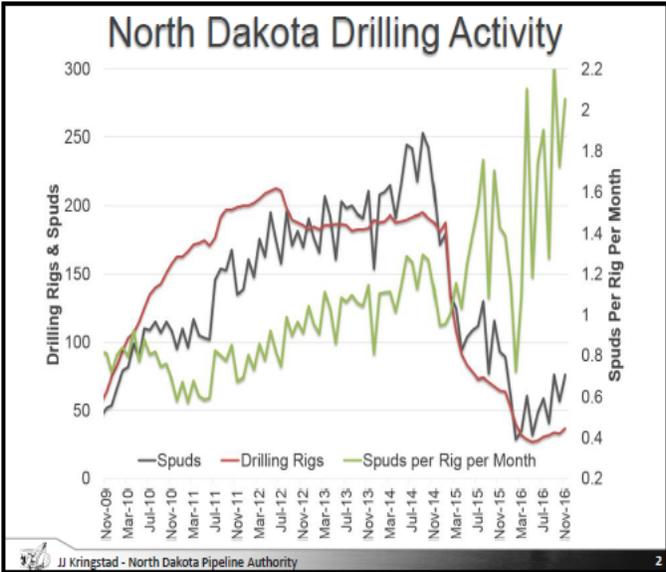
Mr. Kringstad presented the following quarterly Pipeline Authority Report. (A copy of the report is available in the Commission files.) During his presentation he responded to questions from the Commission members. A few of the points that he made were:

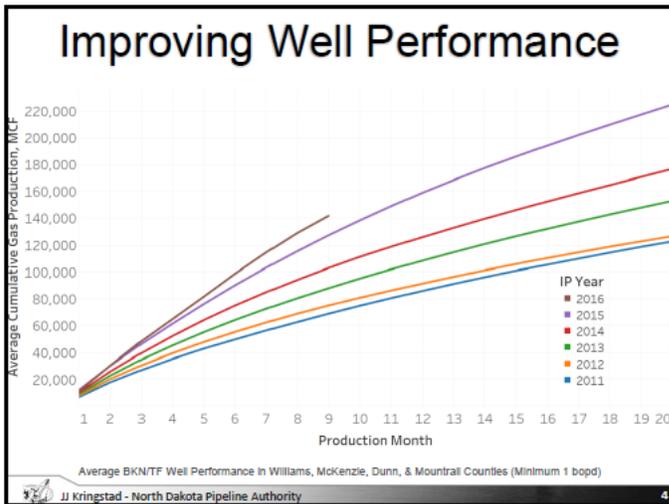
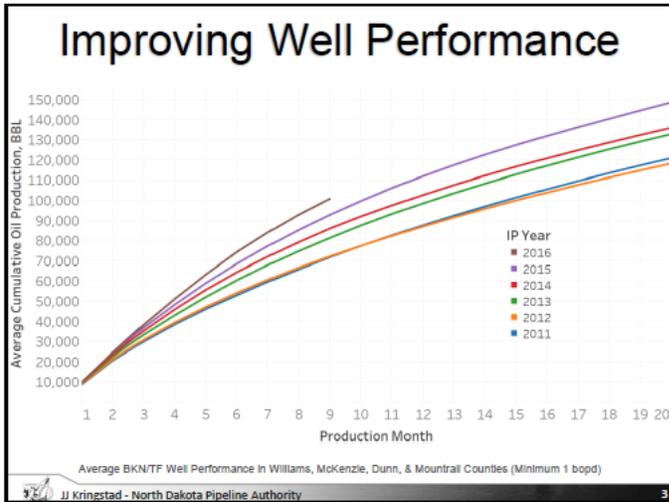
- In the four core counties more and more crude is being gathered by pipeline and less by truck.
- In the near term gas processing is not going to be the major constraint for getting gas captured and moved to market; the biggest constraint is going to continue to be on gas gathering pipelines themselves.
- In order for North Dakota to continue to meet the gas gathering goals over the long term in this play it will take around \$4 billion of additional gas gathering and processing investment in North Dakota and an additional 7,000 to 9,000 miles of a gas gathering pipeline system.

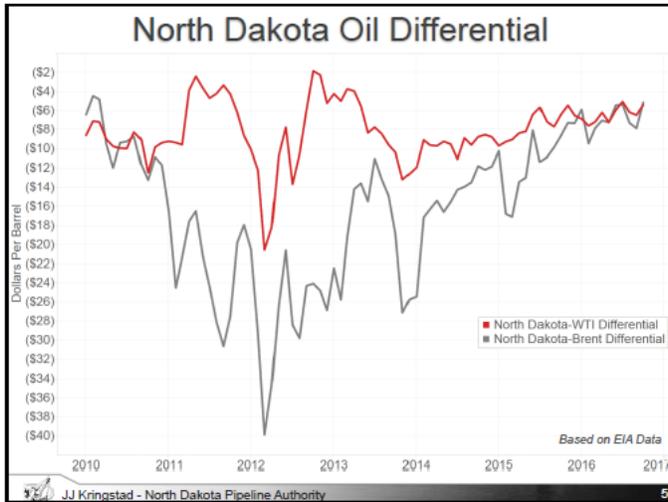
# North Dakota Pipeline Authority

## Industrial Commission Update

January 17, 2016

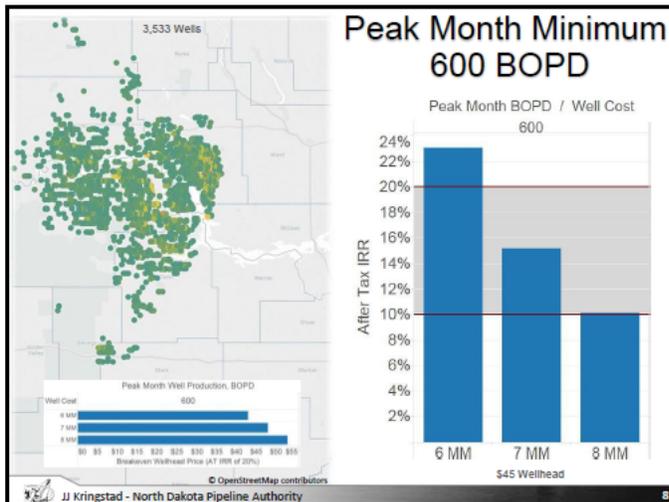
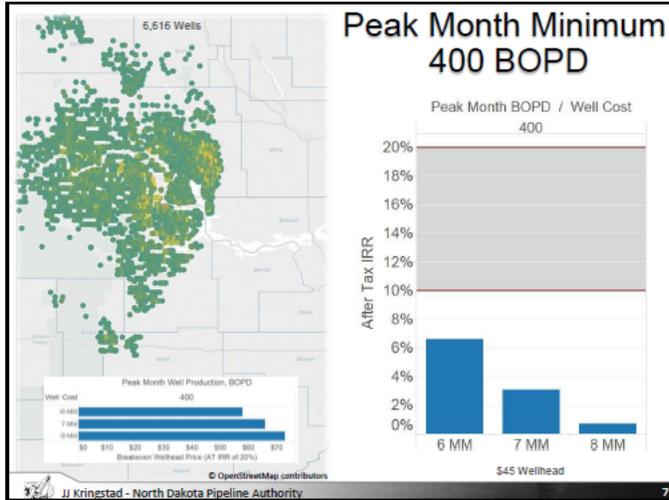


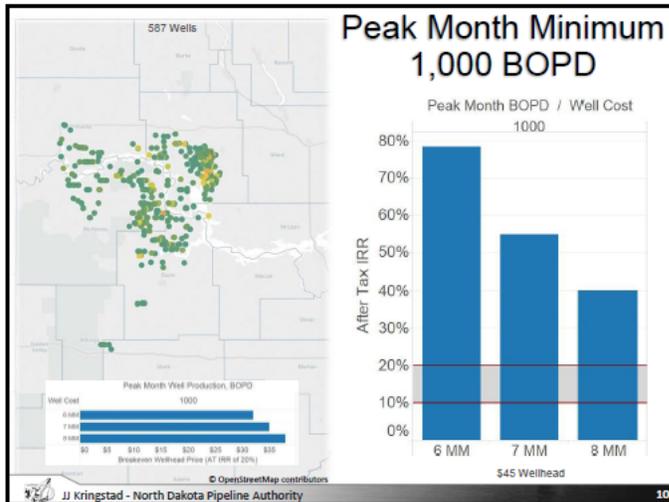
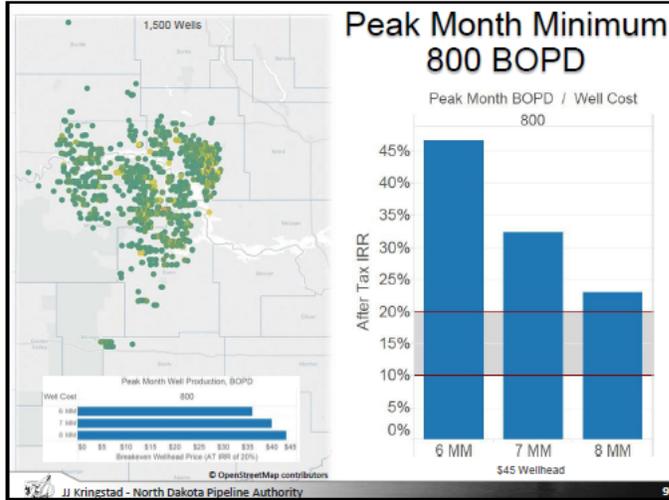


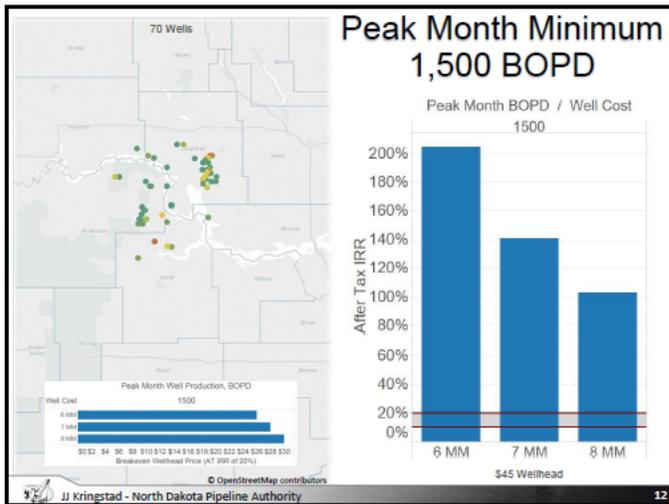
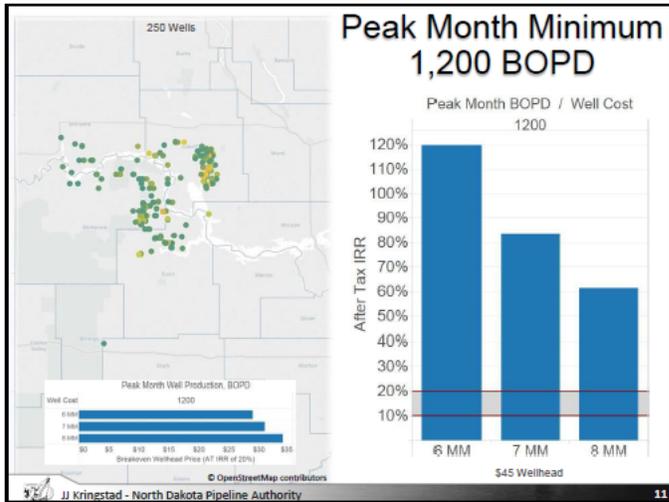


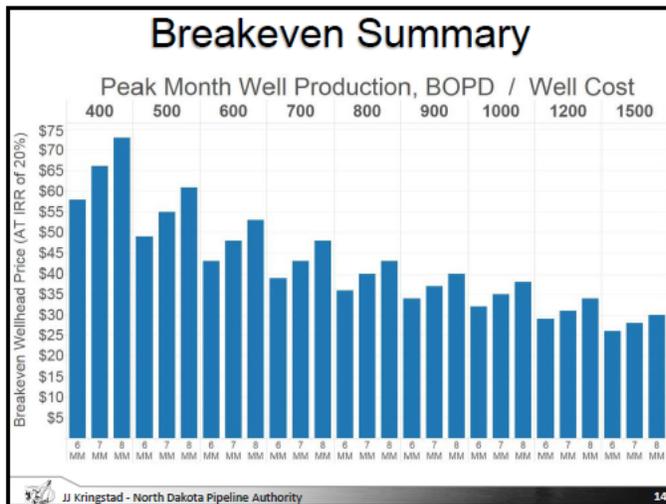
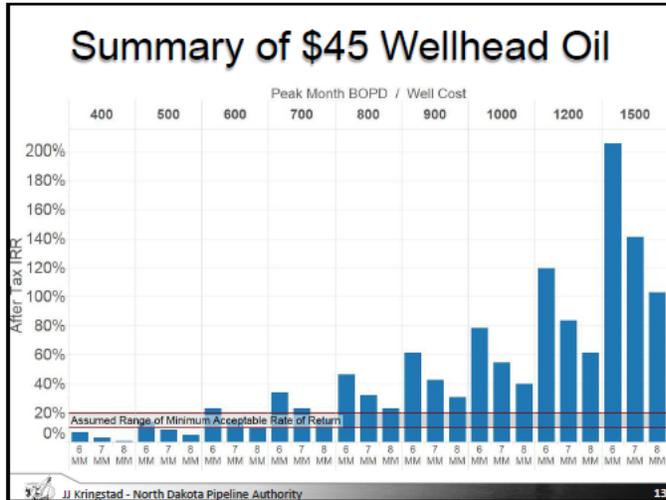
## Key Economic Assumptions

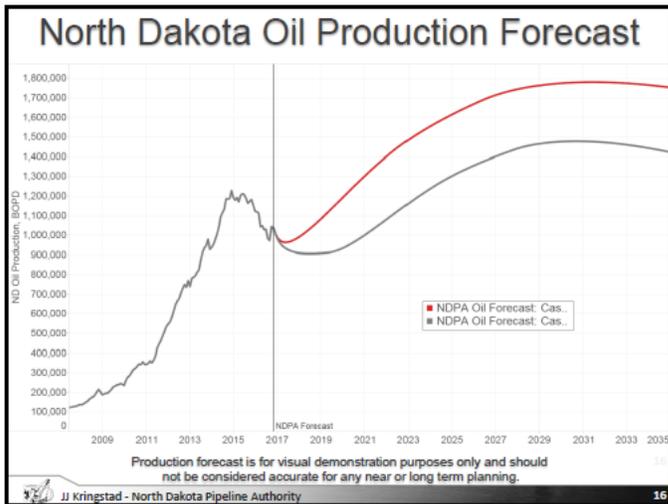
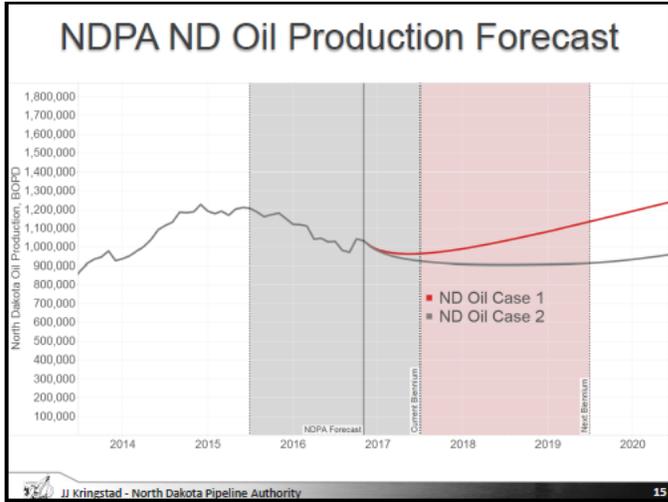
- \$6-\$8 Million Well Costs
- \$45/BBL & \$2.00/MCF Wellhead Pricing
- 1/6 Royalty
- Zero Flaring
- Assumed 10-20% IRR to drill (calculated after production taxes and royalties)
- No Tax Incentives Included
- Production rate is 30-day average
- All Bakken/Three Forks wells drilled in 2008+

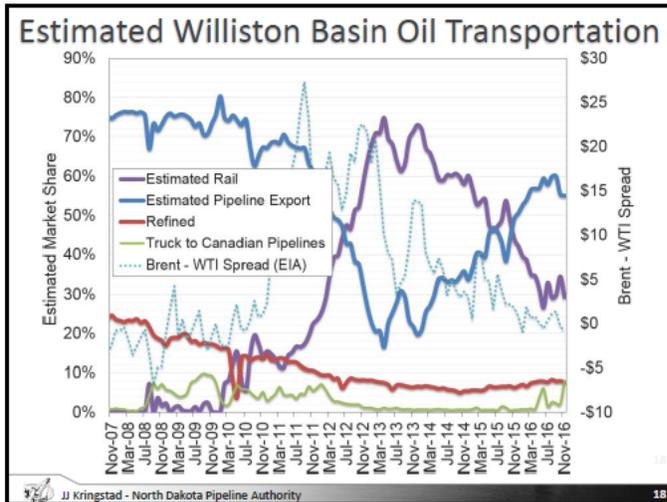
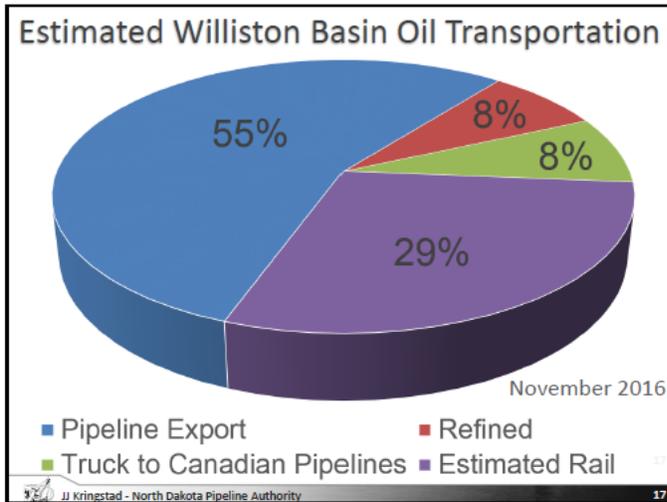


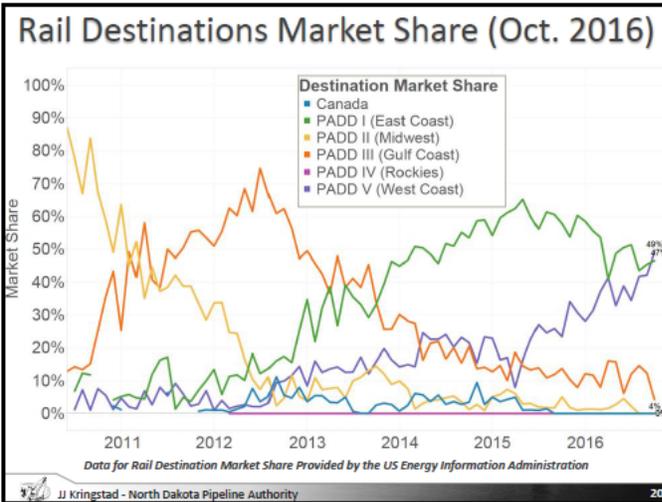
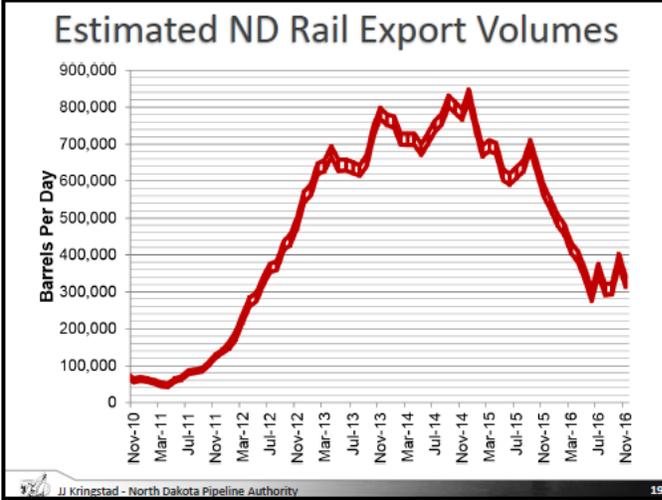


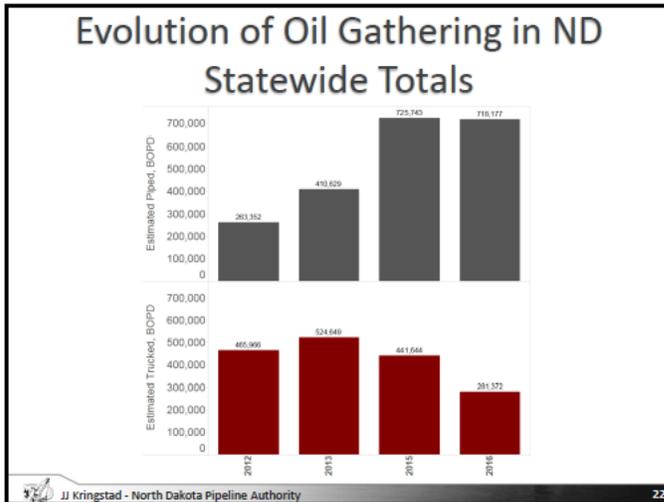
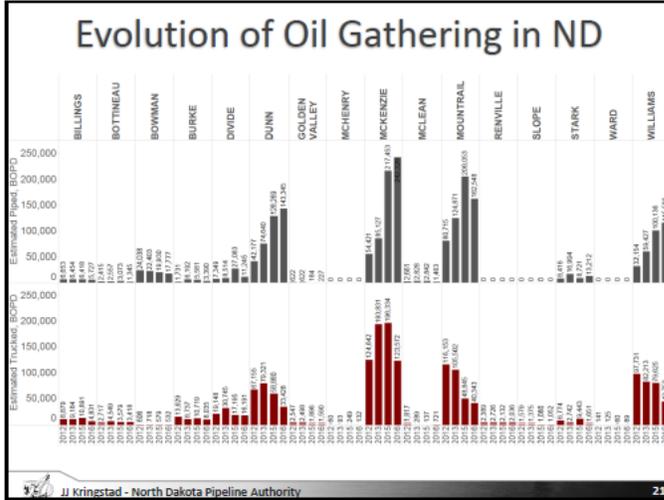


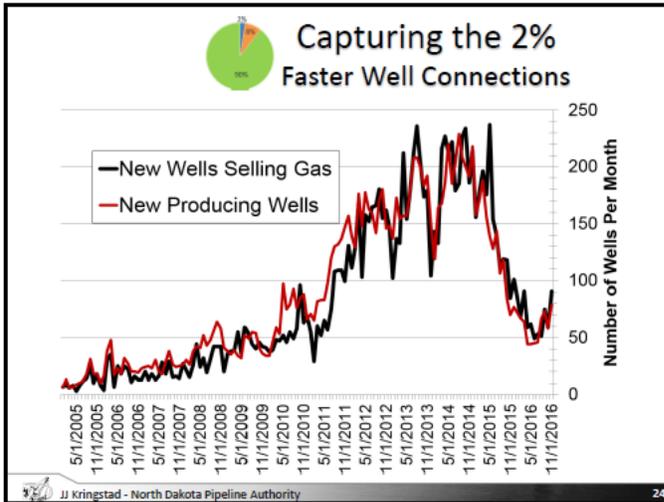
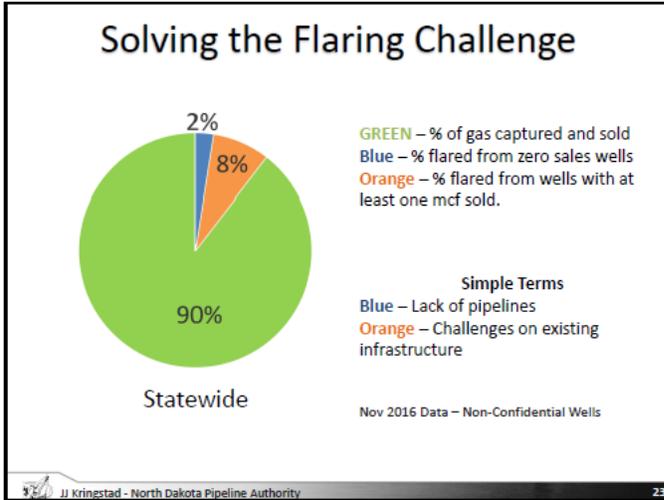


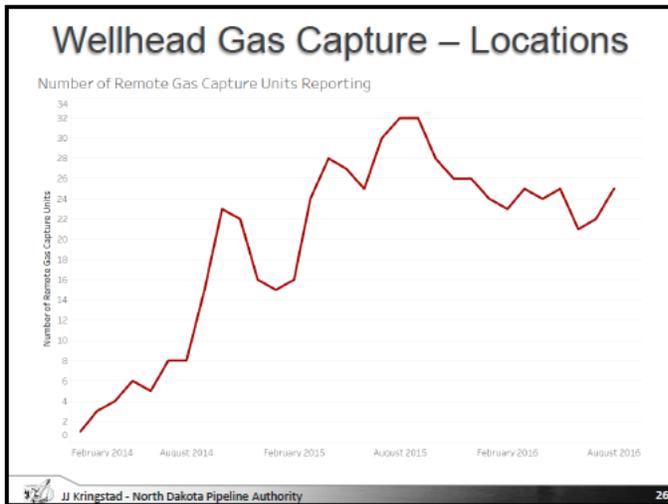
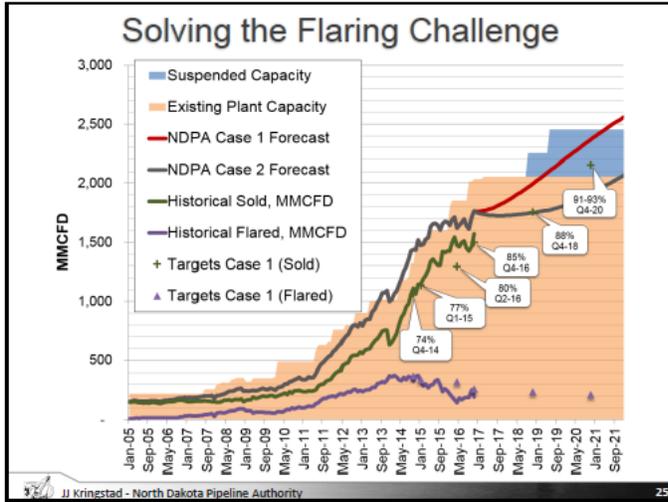


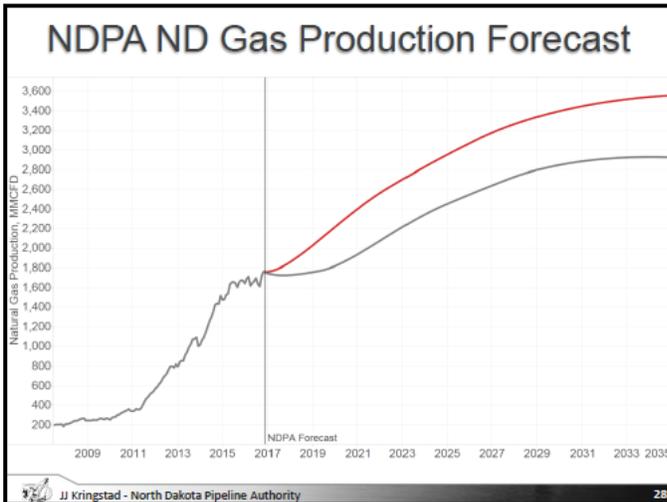
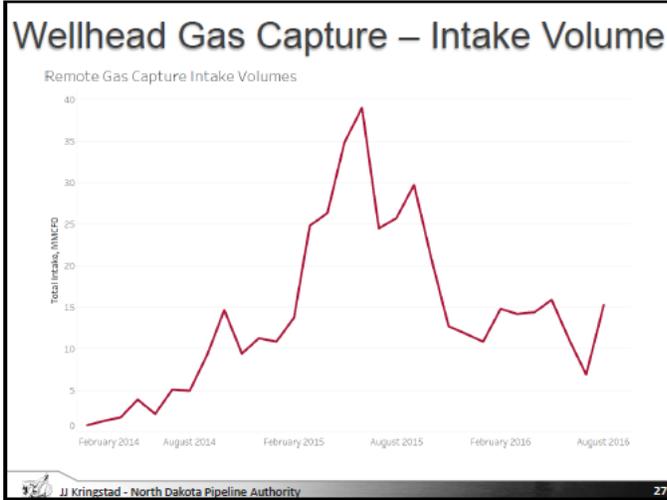


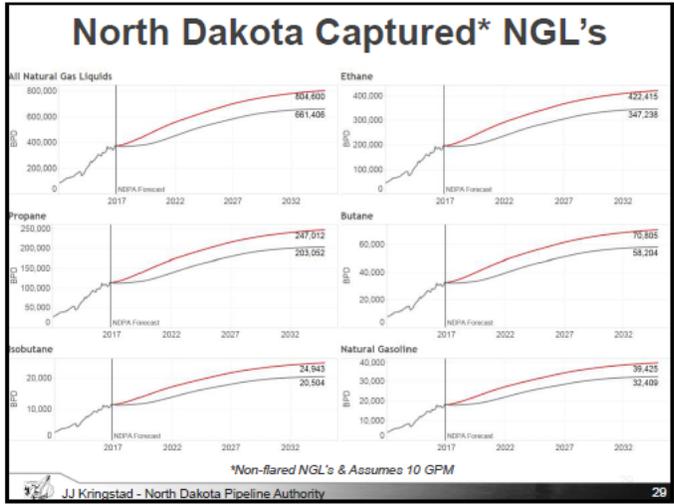






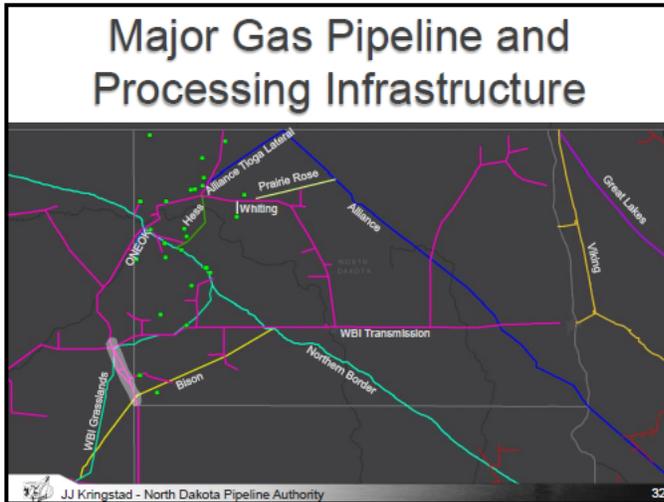
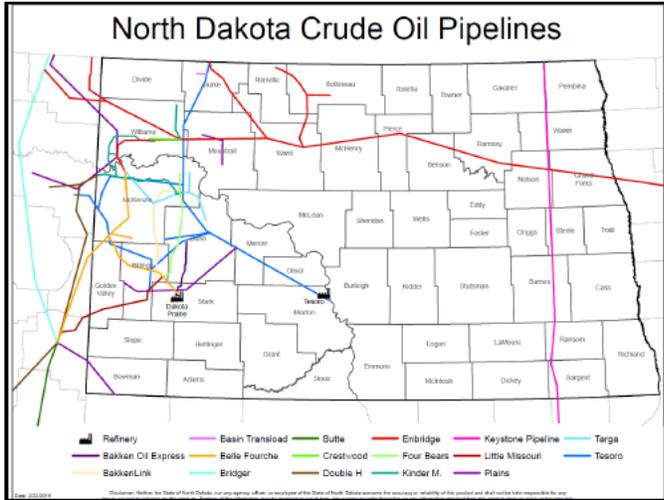


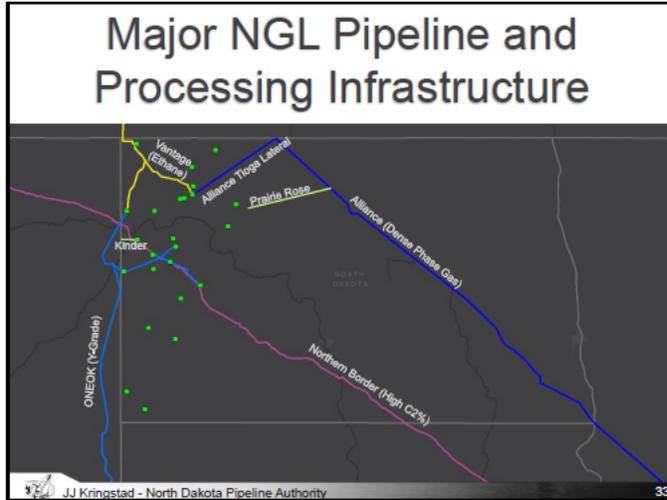




Reference Slides

JJ Kringstad - North Dakota Pipeline Authority 30





Being no further Pipeline Authority business, Governor Burgum adjourned this portion of the meeting at 1:20 p.m. and the Commission took up Outdoor Heritage Fund business.

INDUSTRIAL COMMISSION OF NORTH DAKOTA

Karlene Fine, Executive Director and Secretary

Minutes of a Meeting of the Industrial Commission of North Dakota  
Held on January 17, 2017 beginning at 11:00 a.m.  
Governor's Conference Room  
State Capitol

Present: Governor Doug Burgum, Chairman  
Attorney General Wayne Stenehjem  
Agriculture Commissioner Doug Goehring

Also  
Present: JoDee Hanson, Governor's Office  
Jodi Uecker, Governor's Office  
Leslie Oliver, Governor's Office  
Cassandra Torstenson, Governor's Office  
Jim Melchior, OHF  
Jesse Beckers, ND Natural Resources Trust  
Mary Bandlo, ND Natural Resources Trust  
Members of the Press

Governor Burgum called the Outdoor Heritage Fund portion of the Industrial Commission meeting to order at 1:20 p.m. following completion of Pipeline Authority business.

Ms. Karlene Fine, Industrial Commission Executive Director/Secretary, presented the Outdoor Heritage Fund (OHF) Financial Report as follows:

Outdoor Heritage Fund (294)  
Financial Statement - Cash Balance  
**2013-2015 Biennium**

	<u>Cash Balance</u>
July 1, 2013 Balance	\$ 0.00
Interest Revenue through June 30, 2015	\$ 8,181.72
Revenues through June 30, 2015	\$18,641,972.92
Grant Expenditures through June 30, 2015	\$(2,386,247.96)
Administrative Expenditures through June 30, 2015	\$ ( 90,034.88)
	<b>\$16,173,871.80</b>

Outdoor Heritage Fund (294)  
Financial Report - Cash Balance  
**2015-2017 Biennium**  
December 20, 2016 OHF Advisory Board Meeting

	<u>Cash Balance</u>
July 1, 2015 Balance	\$16,173,871.80
Interest Revenue through October 31, 2016	\$ 11,551.51
Revenues through December 16, 2016	\$13,867,163.55
Grant Expenditures through December 16, 2016	\$(6,564,316.95)
Administrative Expenditures through October 31, 2016	\$ ( 86,395.20)
	<b>\$23,401,874.71</b>
Outstanding Administrative Expenses	\$ (63,604.80)
Outstanding Project Commitments as of December 16, 2016	\$(18,988,554.90)
Balance	<b>\$ 4,349,715.01</b>

**54-17.8-02 North Dakota Outdoor Heritage Fund – Continuing appropriation**

*There is created a North Dakota Outdoor Heritage Fund that is governed by the Commission. Any money deposited in the Fund is appropriated on a continuing basis to the Commission for the purposes of this chapter. Interest earned by the Fund must be credited to the Fund. The Commission shall keep accurate records of all financial transactions performed under this chapter.*

**57-51-15. Outdoor Heritage Fund - Deposits.**

*First the tax revenue collected under this chapter equal to one percent of the gross value at the well of the oil and one-fifth of the tax on gas must be deposited with the State Treasurer who shall: ...*

*(f) Credit eight percent of the amount available under this subsection to the North Dakota Outdoor Heritage Fund, but not in an amount exceeding twenty million dollars in a state fiscal year and not in an amount exceeding forty million dollars per biennium; ...*

Mr. Jim Melchior, Outdoor Heritage Fund Advisory Board Chairman, discussed the Outdoor Heritage Fund Advisory Board's Grant Round 8 recommendations for seven projects in the total amount of \$1,031,822 as follows: (Copies of the applications are available in the Commission files.) He said the meeting was on December 20 and they considered twelve applications requesting just under \$3 million of funding.

1. GR8 - 004 - Trail Restoration and Improvement Program Part 2; Submitted by ND Parks and Recreation Department; Total Project Cost - \$441,870; OHF Funding Request - \$82,054; Board Recommendation: \$82,054. Duration 12 months – The project goal is to improve trail conditions on North Dakota grasslands including three individual projects. The Board put a condition on that ND Parks has the legislative authority to spend that money.
2. GR8 - 009 - Grasslands Enhancement Pilot Project; Submitted by Ducks Unlimited, Inc. ND Natural Resources Trust; Total Project Cost - \$438,681.40; OHF Funding Request - \$241,529.40; Board Recommendation: \$230,000. Duration 3 years – They placed some conditions on this one as well. It involves conservation practices on State School Trust Lands which he believes is a good place to concentrate those efforts. The conditions placed were that State Land Trust must take ownership of any cross fencing put on the property that is funded through the OHF and that the producer receive a credit for his share of the investments on an amortization schedule similar to how the Trust Department handles the amortization of water improvements put on over a ten year period. This would ensure that the first tenant would receive any unused amortization from the next tenant. There is also a condition that no OHF dollars should be used for salaries which is the reason the request was reduced from \$241,529 down to \$230,000.
3. GR8 - 012 - The Bee Integrated Demonstration Project; Submitted by Keystone Policy Center; Total Project Costs \$527,076; OHF Funding Request - \$94,768; Board Recommendation: \$94,768. Duration 3 years – The project is to work with landowners to demonstrate the best practices for bee forage, nutrition and pest control over a combined management program.
4. GR8 - 002 - Cass County Cover Crop Project; Submitted by Cass County Soil Conservation District; Total Project Cost - \$100,000; OHF Funding Request - \$60,000; Board Recommendation: \$60,000. Duration 2 years – The purpose is to provide financial and technical assistance for establishing conservation cover crops in Cass County. It is a pilot project on 2,500 acres for two years at \$20.00 an acre to be used for seed costs. The Board looked at this project and recommended approval with the condition that the funding only be used for first time conservation crop users. History has shown that once farmers start using these cover crops, they tend to stay with them.
5. GR8 - 008 - Logan County Natural Resource Program; Submitted by Logan County Soil Conservation District; Total Project Cost - \$700,000; OHF Funding Request - \$420,000; Board Recommendation: \$210,000. Duration 4 years – This is to provide technical and financial assistance for the implementation of conservation crop rotations with high residue crop seeding fall crops to increase nesting cover over the winter, planting season long cover crops and implementing grazing plans and converting croplands to grasslands, implementing conservation practices to

address cropland and grassland resource needs for the benefit of livestock, soil health and wildlife management. There were no conditions put on the request.

6. GR8 - 005 - Powers Lake Watershed Project - Lake Improvement Phase; Submitted by Powers Lake Watershed Management Committee/City of Powers Lake; Total Project Cost - \$571,500; OHF Funding Request - \$220,000. Board Recommendation \$220,000. Duration 10 years – The goal is to protect and restore the recreational and aquatic life beneficial uses. The grant dollars will be used to dredge and remove at least 150,000 cubic yards of sediment over the next ten years. No contingencies were placed on this project. This is a local community has really taken ownership into improving this lake. They scraped up enough money to buy their own dredger and much of the work is being done by volunteers. Based on information from the Board’s technical advisors, they are indeed improving the quality of the water.
7. GR8 - 006 - LaMoure County Dam Reparation Project; Submitted by LaMoure County Water Resource District; Total Project Cost - \$180,000; OHF Funding Request - \$135,000; Board Recommendation \$135,000. Duration 3 months – This is to repair three dams and the objective is to carry out the necessary repairs to the dam so they can continue to support a viable fishing population, provide habitat and recreational opportunities – basically, the old riser pipes put in many years ago are rusted out and need to be replaced before the dams rupture.

In response to a question regarding grant 006, Ms. Fine said the Water Commission did all the engineering and worked with the applicant in putting together the information for the application. The Water Commission was very aware this application would be coming to the OHF.

**It was moved by Attorney General Stenehjem and seconded by Commissioner Goehring that the Industrial Commission accepts the Outdoor Heritage Fund Advisory Board’s recommendations and approves the funding of the following seven projects in the total amount of \$1,031,822 and authorizes the Industrial Commission Executive Director and Secretary to enter into contracts with the applicants as noted below:**

1. **“Trail Restoration and Improvement Program Part 2” - North Dakota Parks and Recreation Department - \$82,054 with the contingency that the Department must have legislative authority to expend the Outdoor Heritage Fund dollars**
2. **“Grasslands Enhancement Pilot Project” - Ducks Unlimited, Inc., and ND Natural Resources Trust - \$230,000 with the contingencies that the State Land Trust must take ownership of the cross fencing (no boundary fencing) that is funded with Outdoor Heritage Fund dollars; the producer will receive an amortization credit for their portion of the fencing costs (same as what is done for the water infrastructure projects); and no Outdoor Heritage fund dollars are to be expended on salaries.**
3. **“The Bee Integrated Demonstration Project” - Keystone Policy Center - \$94,768**
4. **“Cass County Cover Crop Project - Cass County Soil Conservation District - \$60,000 with the contingency that the funding is only for first time applicants (users)**
5. **“Logan County Natural Resources Program” - Logan County Soil Conservation District - \$210,000**
6. **“Powers Lake Watershed Project - Lake Improvement Phase” - City of Powers Lake - \$220,000**
7. **“LaMoure County Dam Reparation Project” - LaMoure County Water Resource District - \$135,000**

**On a roll call vote, Governor Burgum, Attorney General Stenehjem and Commissioner Goehring voted aye. The motion carried unanimously.**

Governor Burgum thanked the OHF Advisory Board for all of their hard work.

Ms. Fine presented the legislative update as follows:

Outdoor Heritage Fund Legislation  
As of January 17, 2017

**HB 1075** - This is the Office of Management and Budget appropriation bill and includes in Section 13 language amending the disbursement of oil and gas tax revenues and limiting the amount of funding during the 2017-2019 biennium that goes into the Outdoor Heritage Fund at \$10,000,000. Based on the Governor's December forecast during the current 2015-2017 biennium it is anticipated that the Fund will receive approximately \$19.9 million.

**HB 1079** - This is the Department of Parks and Recreation appropriation bill and includes one section that states: "Any unexpended funds from the outdoor heritage grant is not subject to the provisions of section 54-44.1-11. Any unexpended funds from this appropriation may be expended during the biennium beginning July 1, 2017 and ending June 30, 2019. The Department of Parks and Recreation currently has 2 outstanding projects and had a project recommended for funding in Grant Round 8. The Grant Round 8 recommendation included a contingency that "must have legislative authority to expend the Outdoor Heritage Fund dollars"

**HB 1366** - This was introduced by Rep. Sukut and Senator Armstrong and relates to oil and gas gross production tax definitions and allocations; deals with hub cities; and then sets up how those tax revenues are to be distributed. Impact to OHF is a limit of \$10 million (same as the Governor Dalrymple budget) and it appears a change in the timing of when monies are received.

Being no further Outdoor Heritage Fund business, Governor Burgum adjourned this portion of the meeting at 1:34 p.m. and the Commission took up Public Finance Authority business.

INDUSTRIAL COMMISSION OF NORTH DAKOTA



Karlene Fine, Executive Director and Secretary

Minutes of a Meeting of the Industrial Commission of North Dakota  
Held on January 17, 2017 beginning at 11:00 a.m.  
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Present: Governor Doug Burgum, Chairman  
Attorney General Wayne Stenehjem  
Agriculture Commissioner Doug Goehring

Also

Present: JoDee Hanson, Governor's Office  
Jodi Uecker, Governor's Office  
Leslie Oliver, Governor's Office  
Cassandra Torstenson, Governor's Office  
DeAnn Ament, Public Finance Agency  
Members of the Press

Governor Burgum called the Public Finance Authority portion of the Industrial Commission meeting to order at 1:34 p.m. following completion of Outdoor Heritage Fund business.

Ms. DeAnn Ament, Public Finance Authority Executive Director, discussed the following Drinking Water State Revolving Fund loan requests:

City of Casselton - \$1,210,000 – She said the City is requesting \$1,210,000 to finance a new elevated 50,000 gallon water storage tank or water tower. The total project costs are \$2.4 million with MR&I grants of \$1.2 million providing the balance of the funding. They have requested a twenty year loan and the Advisory Committee, based on the projected net revenues, recommended approval.

**It was moved by Commissioner Goehring and seconded by Attorney General Stenehjem that the Industrial Commission approves the following resolution:**

RESOLUTION APPROVING  
LOAN FROM DRINKING WATER STATE REVOLVING FUND

WHEREAS, the Industrial Commission has heretofore authorized the creation of a Drinking Water State Revolving Fund Program (the "Program") pursuant to N.D.C.C. chs. 6-09.4, 61-28.1, and 61-28.2; and

WHEREAS, the State Revolving Fund is governed in part by the Master Trust Indenture dated as of July 1, 2011 (the "Indenture"), between the North Dakota Public Finance Authority (the "NDPFA") and the Bank of North Dakota (the "Trustee"); and

WHEREAS, the City of Casselton (the "Political Subdivision") has requested a loan in the amount of \$1,210,000 from the Program to finance water storage improvements; and

WHEREAS, NDPFA's Advisory Committee is recommending approval of the Loan; and

WHEREAS, there has been presented to this Commission a form of Loan Agreement proposed to be adopted by the Political Subdivision and entered into with the NDPFA;

NOW, THEREFORE, BE IT RESOLVED by the Industrial Commission of North Dakota as follows:

1. The Loan is hereby approved, as recommended by the Advisory Committee.
2. The form of Loan Agreement to be entered into with the Political Subdivision is hereby approved in substantially the form on file and the Executive Director is hereby authorized to execute the same with all such changes and revisions therein as the Executive Director shall approve.

3. The Executive Director is authorized to fund the Loan from funds on hand in the Drinking Water Loan Fund established under the Indenture upon receipt of the Municipal Securities described in the Political Subdivisions bond resolution, to submit to the Trustee a NDPFA Request pursuant to the Indenture, and to make such other determinations as are required under the Indenture.

4. The Commission declares its intent pursuant to Treasury Regulations §1.150-2 that any Loan funds advanced from the Federally Capitalized Loan Account shall be reimbursed from the proceeds of bonds issued by the NDPFA under the Indenture.

**On a roll call vote, Governor Burgum, Attorney General Stenehjem and Commissioner Goehring voted aye. The motion carried unanimously.**

R & T Commerce Authority - \$5,000,000 and Williams Rural Water District - \$5,000,000 - Ms. Ament said these two loans are similar. Western Area Water Supply Authority (WAWS) needs \$10 million of financing and they do not have traditional bonding authority. Two of their member entities have applied to the State Revolving Fund Program each for \$5 million. These loans were each reviewed on their own merit as if WAWS was not making the payments and the revenues of those entities were sufficient to support the debt. R&T will use the funding for construction of 28 miles of pipelines, 22 new customers, transmission lines and other water system expansion. Based on their current revenues, the Advisory Committee recommended approval.

**It was moved by Commissioner Goehring and seconded by Attorney General Stenehjem that the Industrial Commission approves the following resolution:**

RESOLUTION APPROVING  
LOAN FROM DRINKING WATER STATE REVOLVING FUND

WHEREAS, the Industrial Commission has heretofore authorized the creation of a Drinking Water State Revolving Fund Program (the "Program") pursuant to N.D.C.C. chs. 6-09.4, 61-28.1, and 61-28.2; and

WHEREAS, the State Revolving Fund is governed in part by the Master Trust Indenture dated as of July 1, 2011 (the "Indenture"), between the North Dakota Public Finance Authority (the "NDPFA") and the Bank of North Dakota (the "Trustee"); and

WHEREAS, the R & T Water Supply Commerce Authority (the "Political Subdivision") has requested a loan in the amount of \$5,000,000 from the Program to finance water system expansion; and

WHEREAS, NDPFA's Advisory Committee is recommending approval of the Loan; and

WHEREAS, there has been presented to this Commission a form of Loan Agreement proposed to be adopted by the Political Subdivision and entered into with the NDPFA;

NOW, THEREFORE, BE IT RESOLVED by the Industrial Commission of North Dakota as follows:

1. The Loan is hereby approved, as recommended by the Advisory Committee.
2. The form of Loan Agreement to be entered into with the Political Subdivision is hereby approved in substantially the form on file and the Executive Director is hereby authorized to execute the same with all such changes and revisions therein as the Executive Director shall approve.
3. The Executive Director is authorized to fund the Loan from funds on hand in the Drinking Water Loan Fund established under the Indenture upon receipt of the Municipal Securities described in the Political

Subdivisions bond resolution, to submit to the Trustee a NDPFA Request pursuant to the Indenture, and to make such other determinations as are required under the Indenture.

4. The Commission declares its intent pursuant to Treasury Regulations §1.150-2 that any Loan funds advanced from the Federally Capitalized Loan Account shall be reimbursed from the proceeds of bonds issued by the NDPFA under the Indenture.

There was a discussion about the roles the Industrial Commission has in regards to this financing -- the Industrial Commission setting the water price on industrial water, the Bank of North Dakota loaning money to WAWS and now the Public Finance Authority loaning money to WAWS member entities. In response to a question, Ms. Fine stated that the Bank of North Dakota is monitoring the total risk and the overall ability to pay the debt. Later in the meeting the Commission will receive a spreadsheet that includes information on the WAWS debt.

Ms. Ament indicated that the Bank of North Dakota had provided interim financing of \$10 million and if these two loans are approved the monies will be used to repay the Bank.

**On a roll call vote, Governor Burgum, Attorney General Stenehjem and Commissioner Goehring voted aye. The motion carried unanimously.**

Ms. Ament said Williams Rural Water District is the same story just in a different area of the WAWS system. It will be used to finance 66 miles of rural distribution pipeline and 49 new users. The Committee recommended approval.

**It was moved by Commissioner Goehring and seconded by Attorney General Stenehjem that the Industrial Commission approves the following resolution:**

RESOLUTION APPROVING  
LOAN FROM DRINKING WATER STATE REVOLVING FUND

WHEREAS, the Industrial Commission has heretofore authorized the creation of a Drinking Water State Revolving Fund Program (the "Program") pursuant to N.D.C.C. chs. 6-09.4, 61-28.1, and 61-28.2; and

WHEREAS, the State Revolving Fund is governed in part by the Master Trust Indenture dated as of July 1, 2011 (the "Indenture"), between the North Dakota Public Finance Authority (the "NDPFA") and the Bank of North Dakota (the "Trustee"); and

WHEREAS, Williams Rural Water District (the "Political Subdivision") has requested a loan in the amount of \$5,000,000 from the Program to finance water system expansion; and

WHEREAS, NDPFA's Advisory Committee is recommending approval of the Loan; and

WHEREAS, there has been presented to this Commission a form of Loan Agreement proposed to be adopted by the Political Subdivision and entered into with the NDPFA;

NOW, THEREFORE, BE IT RESOLVED by the Industrial Commission of North Dakota as follows:

1. The Loan is hereby approved, as recommended by the Advisory Committee.
2. The form of Loan Agreement to be entered into with the Political Subdivision is hereby approved in substantially the form on file and the Executive Director is hereby authorized to execute the same with all such changes and revisions therein as the Executive Director shall approve.

3. The Executive Director is authorized to fund the Loan from funds on hand in the Drinking Water Loan Fund established under the Indenture upon receipt of the Municipal Securities described in the Political Subdivisions bond resolution, to submit to the Trustee a NDPFA Request pursuant to the Indenture, and to make such other determinations as are required under the Indenture.

4. The Commission declares its intent pursuant to Treasury Regulations §1.150-2 that any Loan funds advanced from the Federally Capitalized Loan Account shall be reimbursed from the proceeds of bonds issued by the NDPFA under the Indenture.

**On a roll call vote, Governor Burgum, Attorney General Stenehjem and Commissioner Goehring voted aye. The motion carried unanimously.**

In response to a question regarding where the money comes from, Ms. Ament said the loans she brought today are all being financed through the State Revolving Fund and these three loans are all drinking water projects. The North Dakota Health Department receives federal dollars that requires a 20% match which is provided by the Public Finance Authority through the issuance of bonds. These are all special funds. The State Revolving Fund program s has not had any defaults on their loans.

Ms. Ament presented a memorandum on the Public Finance Authority Advisory Committee SRF Clean and Drinking Water loan approvals below \$1,000,000 for the entities as follows:

Re: Ward County Water Resource District, Clean Water State Revolving Fund  
Colfax, Clean Water State Revolving Fund  
Glenburn, Drinking Water State Revolving Fund  
Kindred, Drinking Water State Revolving Fund  
North Prairie Rural Water District, Drinking Water State Revolving Fund

Under current policy, the Public Finance Authority can make loans under the State Revolving Fund Program in an amount not to exceed \$1,000,000 and under the Capital Financing Program in an amount not to exceed \$500,000 without seeking the final approval of the Industrial Commission. Within this policy, once the loan has been funded, the Public Finance Authority is required to provide the details of the loan to the Industrial Commission. Accordingly, the Public Finance Authority and its Advisory Committee used this policy to approve the following loans.

The committee reviewed an application from Ward County Water Resource District (District) requesting an increase of \$213,978 to the previously approved \$2,564,022 loan (total \$2,778,000) under the Clean Water State Revolving Fund (CWSRF) to finance sanitary sewer to existing homes in rural Minot and connect to the City of Minot sewer trunk line. Total construction costs for this project will be \$3,279,000 with a \$500,000 grant from the State Water Commission and a local contribution of \$1,000 providing the balance of the funding. The requested term for the CWSRF loan is 20 years. The District will issue improvement bonds payable with special assessments. If the revenues from the collection of special assessments are not sufficient to pay the debt service on the improvement bonds, the County shall advance an amount sufficient to pay the deficiency. Advances made by the County shall be obligations of the District to be repaid in the future.

The committee reviewed an application from the City of Colfax requesting a \$555,000 loan under the CWSRF to finance the addition of a third cell to the current lagoon system. Total construction costs are estimated at \$555,000. The City will issue revenue and improvement bonds. The requested term for both bonds is 30 years. The City will issue \$277,500 of improvement bonds payable with special assessments. The improvement bonds will be a contingent general obligation of the City, backed by the statutory requirement that the City levy a general deficiency tax in the event that the revenues from the collection of special assessments are not sufficient to pay the debt service on the improvement bonds. The City will issue revenue bonds for the remaining \$277,500.

The committee reviewed an application for the City of Glenburn requesting a \$939,000 loan under the Drinking Water State Revolving Fund (DWSRF) Program to finance the construction of an elevated 150,000 gallon water

storage tank and water main looping in the distribution system. Total construction costs are estimated at \$2,176,500 with \$1,237,500 provided by a MR&I grant. The requested term for the DWSRF loan is 30 years. The City of Glenburn will issue revenue bonds payable with water user fees.

The committee reviewed an application for the City of Kindred requesting a loan of \$600,000 under the DWSRF to finance the construction of an elevated 100,000 gallon water storage tank and removal of the existing 50,000 gallon elevated water storage tank. Total construction costs are estimated at \$1,335,000 with \$735,000 provided by a MR&I grant. The requested term for the DWSRF loan is 20 years. The City of Kindred will issue revenue bonds payable with water user fees.

The committee reviewed an application from North Prairie Rural Water District requesting a \$175,000 loan under the DWSRF to finance the replacement of the elevated tower standpipe, paint repairs and safety enhancements. The entire project cost is \$175,000. The requested loan term is 30 years. The District will issue revenue bonds payable with user fees.

The Public Finance Authority's Advisory Committee approved the Ward County Water Resource District loan at their December 9, 2016 meeting and the other loans at their January 11, 2017 meeting.

Ms. Ament gave an update regarding bond counsel as follows:

RE: North Dakota Public Finance Authority Bond Counsel's New Employer

A Request for Proposal (RFP) for bond counsel services for up to a four-year engagement was distributed October 23, 2015 on behalf of you and the Industrial Commission, acting as the ND Public Finance Authority (PFA). Steve Rosholt with the firm Faegre Baker Daniels LLP was recommended by both the selection committee and the Attorney General; the appointment was approved by the Industrial Commission on January 9, 2016.

As of January 1, 2017, Mr. Rosholt is employed as an attorney by Kutak Rock LLP. We would like to continue our bond counsel engagement with him. Steve's extensive experience with the Public Finance Authority is valuable and we believe worthy of allowing for a period of transition with the Kutak Rock firm. He has served as bond counsel to the PFA for over twenty years and has provided invaluable service including having drafted most of the bond documents used in the PFA programs. He has also served as bond counsel to the South Dakota Conservancy District which administers the SD State Revolving Fund (SRF) programs. Their programs are very similar in structure to the ND SRF program.

Attorney General Stenehjem said the lawyer we approved moved to a different firm, we approve the firm but we wanted to make sure we keep the lawyer as bond counsel. We are just going to continue the same lawyer in a new firm.

Ms. Ament updated the Commission regarding legislation. (A copy of the update is available in the Commission files.) She indicated that legislation is going to be introduced that would allow Garrison Diversion Conservancy District and Lake Agassiz Water Authority to have authorization to borrow from the Public Finance Authority. The biggest reason was for irrigation loans. They would like to be able to access the Clean Water State Revolving Fund Program which provides 2% interest loans versus the current financing from other sources at 5%. She noted that this legislation relates only to authorization for these entities to borrow from the Public Finance Authority. It does not deal with any of the issues related to water supply. The purpose of the legislation is to provide a low interest financing option for irrigators in that area. Ms. Ament asked for authorization to support the bill.

In response to a question regarding if that purpose matches the mission of the Clean Water State Revolving Loan Fund, Ms. Ament said yes. She noted that something similar had been done in the early days of the Clean Water

Program through the Bank of North Dakota. Garrison Diversion has the experience to do this type of financing as they have done two or three loans thorough another financial source that involved the issuance of improvement bonds and having special assessments as security along with reserve funds, etc. This would be a good fit for the Program. The Program has the capacity to provide this financing – it is estimated that they would be requesting less than \$2 million.

It was the consensus of the Commission that she could appear in support of the legislation.

Governor Burgum briefly discussed the issue of water supply for the eastern part of the state and the discussions that are beginning at the federal level.

Being no further Public Finance Authority business, Governor Burgum adjourned this portion of the meeting at 1:46 p.m. and the Commission took up Lignite Research, Development and Marketing Program business.

INDUSTRIAL COMMISSION OF NORTH DAKOTA



Karlene Fine, Executive Director and Secretary

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Present: Governor Doug Burgum, Chairman  
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Agriculture Commissioner Doug Goehring

Also

Present: JoDee Hanson, Governor's Office  
Jodi Uecker, Governor's Office  
Leslie Oliver, Governor's Office  
Cassandra Torstenson, Governor's Office  
Jason Bohrer, Lignite Energy Council  
Mike Holmes, Lignite Research, Development and Marketing Program  
Members of the Press

Governor Burgum called the Lignite Research, Development and Marketing Program portion of the Industrial Commission meeting to order at 1:46 p.m. following completion of Public Finance Authority business.

Mr. Mike Holmes, Director of the Lignite Research Program and Technical Advisor to the Commission discussed a request for a special grant round from the Energy and Environmental Research Center (EERC). He reviewed what the purpose of the application "CarbonSafe Project" would be and highlighted why this research needed to begin as soon as possible. He went over the following points regarding the project and this request:

- Enabling a technology demonstration of North Dakota as a prime CCUS location, with greater than 10:1 leverage of funds
- Demonstration of geologic storage as an initial step
- Includes advanced measurement, analyses and outreach as critical elements of the demonstration
- Need to get non-federal support in place to allow DOE contracting and project initiation
- Two sites (Center Mine and outside of Beulah) -- Broom Creek Formation
- Geologic storage option provides confidence in the regional geology and provides intermediate storage when EOR is not an option
- Enables use of 45Q tax credits if passed as an option. (The 45A credit currently allows for \$10 per ton of stored industrial carbon dioxide used in enhanced oil recovery projects and \$20 per ton for carbon dioxide stored underground.)
- Strengthens the team and commitment between State, coal and utility industry and oil and gas
- Addresses roadmap goal of understanding the subsurface with respect to CO<sub>2</sub> storage.

Ms. Karlene Fine, Industrial Commission Executive Director/Secretary, distributed the request for a special grant round as follows:

RE: Additional Lignite Research Program Grant Round

The Industrial Commission is in receipt of a request from the Energy and Environmental Research Center (EERC) for the establishment of an additional grant round (Round LXXXII - 82). The Lignite Research Program policies allow for the establishment of additional grant rounds by the Industrial Commission.

The EERC has indicated that they have been selected as a recipient of funding as a part of the U.S. Department of Energy's CarbonSAFE Initiative. The CarbonSAFE project will be initiated in early February 2017 so an expedited request for matching funds is needed. I have consulted with Mike Holmes, Director of the Lignite Research Program and he is supportive of the Commission granting this additional grant round. Therefore, I am recommending the establishment of an additional grant round with a deadline submission date of January 31, 2017.

**It was moved by Attorney General Stenehjem and seconded by Commissioner Goehring that the Industrial Commission accept the recommendation of the Industrial Commission Executive Director/Secretary and establish an additional Lignite Research Program Grant Round (82) with a deadline submission date of January 31, 2017. On a roll call vote, Governor Burgum, Attorney General Stenehjem and Commissioner Goehring voted aye. The motion carried unanimously.**

In response to a question Mr. Jason Bohrer, President of the Lignite Energy Council and Chairman of the Lignite Research Council, said that he and Mr. Holmes have been looking at what resources are available from the Lignite Research Program for some of the innovative ideas such as CO<sub>2</sub> for greenhouses and other alternative uses for CO<sub>2</sub> that have been discussed. Studies have been done regarding the beneficial uses of CO<sub>2</sub> in the past but that was years ago.

Mr. Bohrer gave a legislative update on pending legislation related to the Lignite Research Fund. He provided a handout listing four bills that have been introduced that would impact the Fund and reviewed what the purpose was of each bill and the impact on the Fund. (A copy of the handout is available in the Commission files.) The four bills are SB 2031; SB 2133; SB 2074; and HB 1075.

Being no further Lignite Research, Development and Marketing Program business, Governor Burgum adjourned this portion of the meeting at 2:00 p.m. and the Commission took up Bank of North Dakota business.

INDUSTRIAL COMMISSION OF NORTH DAKOTA



Karlene Fine, Executive Director and Secretary

Minutes of a Meeting of the Industrial Commission of North Dakota  
Held on January 17, 2017 beginning at 11:00 a.m.  
Governor's Conference Room  
State Capitol

Present: Governor Doug Burgum, Chairman  
Attorney General Wayne Stenehjem  
Agriculture Commissioner Doug Goehring

Also

Present: JoDee Hanson, Governor's Office  
Jodi Uecker, Governor's Office  
Leslie Oliver, Governor's Office  
Cassandra Torstenson, Governor's Office  
Eric Hardmeyer, Bank of North Dakota  
Todd Steinwand, Bank of North Dakota  
Kelvin Hullet, Bank of North Dakota  
Craig Hanson, Bank of North Dakota  
Mitch Nelson, Bank of North Dakota  
Members of the Press

Governor Burgum called the Bank of North Dakota portion of the Industrial Commission meeting to order at 2:00 p.m. following completion of Lignite Research Program business.

Mr. Eric Hardmeyer, Bank of North Dakota President, presented the Fourth Quarter 2016 Bank of North Dakota Performance Highlights and responded to numerous questions from the Commission. (A copy of the Highlights is available in the Commission files.) He stated that the Bank ended the year at approximately \$7.3 billion in terms of total assets. He also noted that the Bank had \$875 million in capital which is a new record--a little over 12%. That amount will be adjusted downward as the Bank begins to fund the infrastructure program and continues to fund the economic development programs and then provides the transfer of \$100 million to the General Fund that was authorized in December. There will also be a reduction of whatever amount the Legislature authorizes to be transferred to the General Fund during the next biennium.

Mr. Hardmeyer noted that based on unaudited numbers the Bank had a profit of \$136 million in 2016 which is up from the prior year at \$130.6 million. This will be the 13<sup>th</sup> year of record profits. He noted that the Bank had also increased its loan loss reserve. He indicated the Bank was able to achieve these results with the good work by the Bank's employees who work hard to deliver services and loans to the Bank's customers.

As Mr. Hardmeyer went through the Highlights there was discussion about the Bank's mission, how it works with its partners -- the local banks, the Student Loan Program and the Bank's plans for that Program and all the other programs that are offered by the Bank.

Mr. Hardmeyer provided a legislative update and handed out a list of the bills Bank management is tracking -- currently 82 bills. (A copy of the list is available in the Commission files.) He specifically discussed the bills that were highlighted on the list and responded to questions from the Commission:

HB 1024 - deficiency appropriation bill;

HB 1251 - Inmate Construction Program for Low Income Buyers;

HB 1297 - Creation of the Affordable Housing Revolving Loan Fund/amendments are being drafted to change funding source;

HB 1303 - Prohibits State agencies from filling vacant full-time equivalent positions through 4/30/2017 - BND staff planning to testify against the bill - Consensus of the Commission was that it was okay for the Bank to oppose the bill;

HB 1353 - Creation of a a Senior Year Tuition Waiver Program for ND Students attending ND University System institutions/potential impact to the Bank's capital of \$30 to \$50 million/BND intends to appear and inform the committee of the financial impact but make no comment on the concept of the bill;

HB 1382 - Establishment of an education savings account program;

SB 2014/SB 2074 - Industrial Commission appropriation bills which includes appropriations for the Bank of North Dakota and transfers to the economic development programs and General Fund from the Bank totaling \$231 million dollars (Governor Dalrymple budget) or \$171 million (Governor Burgum budget);

SB 2036 - Matching grants for advancement of academics at higher education institutions - appropriate \$23.5 million from the Student Loan Trust;

SB 2063 - University System appropriation and includes transfers from the Student Loan Trust;

SB 2064 - Department of Health appropriation and includes transfer from the Student Loan Trust;

SB 2124 - BND sponsored bill pertaining to ND ABLE Plan;

SB 2130 - BND sponsored bill clarifying collection costs and the maximum amount that can be charged to a borrower who defaults on a student loan - amendments are being drafted;

SB 2162 - Professional Student Exchange program impacting dentistry, optometry and veterinary medicine;

SB 2174 - Adjutant General borrowing in the amount of \$8 million from BND for law enforcement costs related to DAPL;

SB 2178 - BND Infrastructure Revolving Loan Fund and essential infrastructure projects;

SB 2179 - Identifies eligible uses for BND's Infrastructure Revolving Loan Fund;

SB 2243 - Teacher Loan Forgiveness Program - appropriation from Student Loan Trust

SB 2272 - School Construction Loan Program - Consolidates BND School Construction Loan Programs with those administered by ND School Trust Lands and provides for additional monies from the Foundation Aid Stabilization Fund

In regards to SB 2272 there was discussion of the use of the loan dollars for schools (new construction and repairs), the process that is used in approving the funding and the criteria that is used in approving funding for school construction. Governor Burgum stated his concerns about where new schools are being located.

There was discussion regarding the marijuana bill – credit cards through BND, risk, etc. Mr. Hardmeyer said they would put the bill on their watch list.

Mr. Hardmeyer presented the non-confidential Bank of North Dakota Advisory Board November 17, 2016 meeting minutes.

Governor Burgum closed the meeting at 2:58 p.m. pursuant to North Dakota Century Code 6-09-35 to discuss the items on the agenda under Bank of North Dakota confidential business.

**Following the confidential portion of the meeting, the Commission reconvened in non-confidential session at 3:11 p.m. and it was noted that during the confidential portion of the meeting, it had been moved and seconded that the Bank of North Dakota be authorized to participate in one loan identified as Attachment 30. In non-confidential session, on a roll call vote, Governor Burgum, Attorney General Stenehjem and Commissioner Goehring voted aye. The motion carried unanimously.**

**It was moved by Commissioner Goehring and seconded by Attorney General Stenehjem that the Industrial Commission approve the Loan Charge-Offs totaling \$6,830,026.94 and Recoveries totaling \$283,366.95 for the period January 1, 2016 through December 31, 2016. (The \$6,830,026.94 includes the 2016 loan charge-offs that are deemed uncollectible.) on a roll call vote, Governor Burgum, Attorney General Stenehjem and Commissioner Goehring voted aye. The motion carried unanimously.**

**It was moved by Commissioner Goehring and seconded by Attorney General Stenehjem that the Industrial Commission make the determination that the following loan charged off in the year 2016 totaling \$228,835.11 is determined uncollectible:**

**2016 Loan Chargeoff Deemed Uncollectible\***

**GeoStar, LLC; Baron Energy, LLC; Tumblewood  
Energy LLC; and Dean S. Kinnischtzke** \$ 228,835.11

**TOTAL** \$ 228,835.11

**Also determined as uncollectible in 2016 are \$526,734.42 of student loans which are not reportable under GLB.**

**\*Uncollectible amounts are net of any recoveries received.**

**On a roll call vote, Governor Burgum, Attorney General Stenehjem and Commissioner Goehring voted aye. The motion carried unanimously.**

Being no further Bank of North Dakota business, Governor Burgum adjourned this portion of the meeting at 3:11 p.m. and the Commission took up Western Area Water Supply Authority business.

INDUSTRIAL COMMISSION OF NORTH DAKOTA



Karlene Fine, Executive Director and Secretary

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Present: Governor Doug Burgum, Chairman  
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Also

Present: JoDee Hanson, Governor's Office  
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Leslie Oliver, Governor's Office  
Cassandra Torstenson, Governor's Office  
Todd Steinwand, Bank of North Dakota  
Kelvin Hullet, Bank of North Dakota  
Craig Hanson, Bank of North Dakota  
Mitch Nelson, Bank of North Dakota  
Members of the Press

Governor Burgum called the Western Area Water Supply Authority portion of the Industrial Commission meeting to order at 3:12 p.m. following completion of Bank of North Dakota business.

Ms. Karlene Fine, Industrial Commission Executive Director/Secretary, presented the December Financial Report and Debt Reduction Report as follows: (A complete report is available in the Commission files.)

RE: Western Area Water Supply Authority - Industrial Sales - December, 2016 & Debt Repayment Report

Attached is the Western Area Water Supply Authority (WAWS) financial information for the month of December, 2016.

Page 1 prepared by the Bank of North Dakota, reflects debt service payments through the month of December, 2016. In December interest was paid on the two BND loans and two Water Commission loans and principal was paid on the \$40 million BND loan.

The next 3 pages (pages 2, 3 & 4) I prepared based on the information provided by WAWS staff reflecting December revenues and expenses and net income. There was one principal payment made in December that is highlighted in yellow. Net income for the month of December was **\$505,973.67** before making their principal payments. No baseline sales payments were paid and those deferred costs are reflected on the line item titled Deferred Expense Asset. (As you will recall from the overall Debt Service spread sheet the breakeven sales monthly number is \$871,750 without the baseline sales payments. With WAWS sales for the month of December being \$1,257,231.25 they were over that number by \$385,481.25.)

Page 5 is the balance sheet prepared by WAWS staff as of December 31, 2016. As noted on the Balance Sheet the Accounts Receivables are \$2,263,357.95 which is included in the assets of \$7,226,588.64 Note: The assets include a deferred expense line item which reflects the deferred expenses for the Baseline Sales.

If you have questions I will be available to review the numbers. Jaret Wirtz will also be available by phone at the meeting to respond to questions regarding the sales during the month of December.

Being no further Western Area Water Supply Authority business, Governor Burgum adjourned this portion of the meeting at 3:13 p.m. and the Commission took up Student Loan Trust business.

INDUSTRIAL COMMISSION OF NORTH DAKOTA



Karlene Fine, Executive Director and Secretary

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Present: JoDee Hanson, Governor's Office  
Jodi Uecker, Governor's Office  
Leslie Oliver, Governor's Office  
Cassandra Torstenson, Governor's Office  
Members of the Press

Governor Burgum called the Student Loan Trust portion of the Industrial Commission meeting to order at 3:13 p.m. following completion of Western Area Water Supply Authority business.

Ms. Karlene Fine, Student Loan Trust Authorized Officer, distributed a legislative update regarding the Student Loan Trust. (A copy of the update is available in the Commission files.) She noted that legislation has been introduced that would appropriate over \$30 million+ from the Student Loan Trust. The assets of the Trust are approximately \$17.4 million so there is a funding gap that will need to be dealt with during the session.

Being no further Student Loan Trust business, Governor Burgum adjourned the meeting at 3:14 p.m.

INDUSTRIAL COMMISSION OF NORTH DAKOTA



Karlene Fine, Executive Director and Secretary