Overview

At the request of the North Dakota Industrial Commission, the Sixtieth Legislature passed House Bill 1128 authorizing the North Dakota Pipeline Authority. Governor John Hoeven signed it into law on April 11, 2007. The statutory mission of the Pipeline Authority is “to diversify and expand the North Dakota economy by facilitating development of pipeline facilities to support the production, transportation, and utilization of North Dakota energy-related commodities, thereby increasing employment, stimulating economic activity, augmenting sources of tax revenue, fostering economic stability and improving the State’s economy”. As established by the Legislature the Pipeline Authority is a builder of last resort, meaning private business would have the first opportunity to invest in and/or build additional needed pipeline infrastructure.

By law the Pipeline Authority membership is comprised of the members of the North Dakota Industrial Commission. Upon the recommendation of the Oil and Gas Research Council, the Industrial Commission authorized the expenditure of up to $300,000 during the 2009-2011 biennium for the Pipeline Authority with funding being made available from the Oil and Gas Research Fund. On August 1, 2008 the Industrial Commission named Justin J. Kringstad, a consultant, to serve as Director of the North Dakota Pipeline Authority and contracted with him for his services. The North Dakota Pipeline Authority Director works closely with Lynn Helms, Department of Mineral Resources Director, Ron Ness, North Dakota Petroleum Council President and Karlene Fine, Industrial Commission Executive Director. The Pipeline Authority has no other staff and receives no direct General Fund appropriation. The Pipeline Authority Director reports to the Industrial Commission and the Oil and Gas Research Council on a regular basis.

Statutory Authority

Statutory authority for the Pipeline Authority is found in Chapter 54-17.7 of the North Dakota Century Code. Section 54-17.7-04 N.D.C.C. delineates the powers of the Authority including: 1) making grants or loans or to borrow money; 2) to issue up to $800 million in revenue bonds; 3) enter into lease-sale contracts; 4) own, purchase, lease, rent and dispose of pipeline facilities or the right to capacity in any pipeline system or systems within or without the State of North Dakota; 5) enter into contracts to construct, maintain and operate pipeline facilities; 6) investigate, plan, prioritize and propose transportation corridors; and 7) participate in regional pipeline organizations.
Before the Pipeline Authority may exercise its power to construct pipeline facilities, it must follow a process defined by statute to ensure public participation and comment. In particular, the Pipeline Authority must publish a notice describing the need for the pipeline project. Entities interested in constructing the facilities or furnishing services to satisfy the identified needs have 180 days to respond by filing a notice of intent. If the Pipeline Authority receives a notice of intent from an interested entity, it may not exercise its powers to construct unless the Authority makes a finding that doing so would be in the public interest. In making such a finding, the Pipeline Authority shall consider the economic impact to the state, economic feasibility, technical performance, reliability, past performance, and the likelihood of successful completion and ongoing operation.

Summary of Activities

As has been the case for the last several years, the 2009-2010 timeframe was filled with many exciting developments for producers in the oilfields of North Dakota. The addition of new drilling rigs and advances in drilling and completion techniques have taken North Dakota oil production to record highs. During the past year, the Pipeline Authority has been fully engaged in continuing efforts to convert production and development information into oil and natural gas transportation solutions. One of the most effective methods used during the year was to work alongside industry to produce crude oil production forecasts to quantify future pipeline needs and timeframes. Pipeline companies are conservative by nature and these forecasting exercises proved to be very beneficial in adding the confidence needed to move forward with expansion project planning.

During the year the Pipeline Authority contacted, met with, and shared information with numerous companies including the following:

- Enbridge Pipeline
- Hess Corporation
- Alliance Pipeline, Inc.
- Williston Basin Interstate Pipeline
- EOG Resources, Inc.
- Pecan Pipeline
- US Development Group
- Rangeland Energy
- Pecan Pipeline
- Denbury Resources
- Tesoro
- Bear Paw/ONEOK
- Northern Border Pipeline
- Kinder Morgan
- Spotted Hawk Development
- BNSF Railway
- Saddle Butte Pipeline
- TransCanada
- Permian Crude Transport
- Quintana Capital Group
- Corval Group
- Blaise Energy
- True Oil, LLC
- Vantage Pipeline
- Major Pipeline
- JP Morgan
- Murex Petroleum Corporation
- Aux Sable Liquid Products
- Louis Dreyfus Highbridge Energy
- Canadian Pacific Railway
- NuStar Energy
In addition the Pipeline Authority worked with a number of state agencies to gather information and provide expertise on pipeline issues. Those agencies and entities included:

- North Dakota Public Service Commission
- North Dakota Department of Commerce
- North Dakota Tax Department
- Energy and Environmental Research Center
- Wyoming Pipeline Authority
- North Dakota Water Commission

The Director of the Pipeline Authority also worked with the following trade associations:

- Northern Alliance of Independent Producers
- North Dakota Petroleum Council
- North Dakota Petroleum Marketers Association

As noted above, the Pipeline Authority has been facilitating discussions between governmental agencies and companies interested in expanding North Dakota’s pipeline infrastructure. Where it has been appropriate, the Pipeline Authority has presented testimony and submitted letters of support.

In addition the Director of the Pipeline Authority provided information to citizens and news media on issues related to pipelines.

**Industry and Public Communications Activities**

**Pipeline Publication**
The Pipeline Authority continues the practice of issuing its quarterly newsletter, *Pipeline Publication*. The newsletter is designed to keep North Dakota policy makers and involved parties informed on current issues in the pipeline industry. Four newsletters (Appendix A) were published during the 2009-2010 fiscal year.

**An Update on North Dakota’s Natural Gas Infrastructure**
In May, the Pipeline Authority released a new natural gas pipeline and processing report titled, “An Update on North Dakota’s Natural Gas Infrastructure”. The report was designed to explain the pipeline and processing investments North Dakota has seen in the past several years, as well as highlight future projects that are in the development phase. The full report is available for download on the “Publications & Maps” page of the Pipeline Authority website.

**Pipeline Authority Website**
In an effort to provide industry and public users with the most timely and complete set of information, the Pipeline Authority continues to update the agency website as new information becomes available. The website allows the Authority to provide users with current Williston Basin oil production data,
Pipeline Presentations
Over the past year, the Pipeline Authority has had the opportunity to present at a variety of industry and public events. Those events included:

- American Petroleum Institute Chapter Press Conferences
- Great Plains Energy Expo Legislative Interim Committee Hearings
- NDPC Teachers Education Seminar NDPC CookFest Events
- NDPC Town Hall Meetings Williston Basin Petroleum Conference
- Mon-Dak Energy Alliance Plains CO₂ Reduction Partnership
- North Dakota EmPower Commission Energy Independence and Security Symposium

Williston Basin Crude Oil and Natural Gas Pipelines

*For reference, a series of North Dakota pipeline maps can be found in Appendix B*

**Crude Oil Pipeline and Rail Transportation**

**Enbridge Pipeline:** Enbridge’s Phase VI Expansion was completed during the first quarter of 2010 and increased the system capacity from the 110,000 barrels per day (BOPD) to 161,500 BOPD. In addition to Phase VI, Enbridge recently released information regarding a further expansion project called the “Bakken Expansion Program”. The first stage of the Bakken Expansion will come online the first quarter of 2011 and increase crude oil flows out of North Dakota by an additional 25,000 BOPD. The second stage of the expansion will come online during the first quarter of 2013 and add an additional 120,000 BOPD or more to the Enbridge takeaway capacity. The North Dakota portion of the Bakken Expansion Program is estimated to cost $370 million.

**True Companies:** During the 2009-2010 timeframe, capacity on the Butte Pipeline remained constant at 118,000 BOPD. In December of 2009, Bridger Pipeline made public plans for a new 80 mile, 10 inch, pipeline connecting production in Dunn and McKenzie Counties with existing pipelines at Bridger’s Fryburg station. A successful open season was held in early 2010 and the new $25 million pipeline is anticipated to be placed into service during late 2010 or early 2011.

**Quintana Capital Group:** On June 9, 2010, Quintana Capital Group filed a letter of intent with the ND Public Service Commission for a new pipeline project that would connect the major producing regions of the Williston Basin with TransCanada’s Keystone XL pipeline in Eastern Montana. The proposed pipeline would have an initial capacity of 100,000 BOPD and could be expanded to 120,000 BOPD. A pipeline consisting of 165 miles of 10 inch and 12 inch pipe would connect production in Williams, McKenzie, and Mountrail Counties to a 145 mile, 16 inch pipeline that would interconnect with the Keystone XL
pipeline near Baker, MT. At the end of June, Quintana held a non-binding expression of interest period for producers/shippers in the Williston Basin to gain the necessary support to move forward. An open season for the project is expected, but has not been scheduled. The pipeline has a proposed startup of March 2013 and is estimated to cost $250 million.

**Rail Loading Facilities:** North Dakota has had several crude oil rail loading facilities placed into service since the fall of 2008. The largest facility is operated by EOG Resources near Stanley, ND. The EOG facility began service in December 2009 and has the capability to transport 65,000 BOPD of crude oil utilizing unit trains, or 100 tank car trains. Hess has also announced that a new, $48 million, unit train facility will be constructed in Tioga, ND. The new facility is planned to begin operation in early 2012 and will be able to handle up to 120,000 BOPD using two unit trains. During 2009-2010, smaller rail facilities in North Dakota continued to operate and included locations in Minot, Dore, Donnybrook, and Stampede.

**Natural Gas Pipelines**

**Alliance Pipeline:** The Alliance Pipeline is a high pressure, large diameter natural gas pipeline that originates in British Colombia, Canada and terminates at the Aux Sable gas processing plant near Chicago, IL. The Alliance Pipeline transports “dense gas” or gas that still contains high BTU natural gas liquids, such as propane and butane. In February 2010, the Alliance Pipeline began transporting rich natural gas from North Dakota via a new interconnect with Pecan’s Prairie Rose Pipeline near Bantry, North Dakota. The 36 inch diameter United States portion of the pipeline has a certified capacity of 1.513 billion cubic feet per day (BCFD) and had 188 MMCFD of capacity available prior to the Prairie Rose Pipeline startup (Alliance, 2009). The Alliance Pipeline has one North Dakota delivery point in Hankinson.

**Northern Border:** The Northern Border Pipeline, owned by TC Pipelines and ONEOK Partners, is a 1,249 mile pipeline originating at the Port of Morgan in Montana and terminating near North Hayden, Indiana. The pipeline has a system receipt capacity of 2.37 BCFD, a large portion of which is supplied with Canadian natural gas through a receipt point with the Foothills Pipeline at the Port of Morgan. The Williston Basin Interstate Pipeline interconnects with the Northern Border Pipeline in North Dakota in three locations, Charbonneau, Manning, and Glen Ullin. The 42 inch diameter Northern Border Pipeline also receives gas deliveries in North Dakota from Bear Paw Energy at Ft. Buford, Hess at Watford City, and Dakota Gasification Co. at Hebron (Northern Border, 2010).

**Williston Basin Interstate Pipeline:** The Williston Basin Interstate Pipeline Co. operates 3,367 miles of natural gas transmission pipelines throughout North Dakota, Montana, Wyoming, and South Dakota. This network of pipelines plays a vital role in North Dakota’s natural gas industry. It contains eleven interconnecting points with other regional pipelines and can also deliver natural gas to local distribution companies or natural gas storage fields. Well positioned throughout western North Dakota, the Williston Basin Interstate Pipeline has been able to expand its operating capabilities without needing to place new pipe in the ground. In December of 2008, Williston Basin Interstate Pipeline completed its “Bakken Expansion” which added an additional 32 MMCFD (expandable to 60 MMCFD) of capacity to
their North Dakota system by interconnecting to the Northern Border Pipeline at Charbonneau. Also in December 2008, the “Sheyenne Expansion” added an additional 10 MMCFD of capacity to their system by increasing compression and deliveries in eastern North Dakota. Finally, in February 2010, an open season was held to increase firm deliverability from its Baker gas storage field in eastern Montana. Along with the gas storage field upgrades, Williston Basin proposed a pipeline expansion to transport the increased firm storage volumes to the Manning interconnect with the Northern Border Pipeline. The project had an original in-service date of April 2012, but that timeline may be delayed as Williston Basin continues to work with interested parties.

**Pecan Pipeline:** While the North Dakota Public Service Commission determined Pecan’s Prairie Rose Pipeline to be a gathering pipeline, the Pipeline Authority believes the size, function, and location of the pipeline make it worth noting. The 75 mile, 12 inch pipeline went into service February 2010 and has the capability to transport over 100 MMCFD of unprocessed natural gas per day from Mountrail County to an interconnect with the Alliance Pipeline near Bantry, ND.

**Bison Pipeline:** TransCanada plans to begin construction of the 302 mile, 30 inch Bison Pipeline during the summer of 2010. The pipeline will be built to connect natural gas production in the Powder River Basin of Wyoming to the Northern Border Pipeline in Morton County North Dakota. The pipeline will have an initial capacity of 477 MMCFD and could be expanded to 1 BCFD. If the construction process proceeds as scheduled, the pipeline will begin operation in November 2010.
Natural Gas Processing

For reference, a North Dakota Gas Processing and Transportation map can be found in Appendix C

Natural Gas Processing, Million Cubic Feet Per Day (MMCFD)

<table>
<thead>
<tr>
<th>Owner Company</th>
<th>Facility</th>
<th>County</th>
<th>2006 Plant Capacity</th>
<th>2008 Plant Capacity</th>
<th>2010 Plant Capacity</th>
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<td>North Dakota</td>
<td></td>
<td></td>
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</tr>
<tr>
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<td>Burke</td>
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<tr>
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<td>Slope</td>
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<td>Mountrail</td>
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<tr>
<td>Summit Resources</td>
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<td>Billings</td>
<td>NA**</td>
<td>NA**</td>
<td>NA**</td>
</tr>
<tr>
<td>Aux Sable - Chicago, IL</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pecan Pipeline/Aux Sable</td>
<td>Stanley</td>
<td>Mountrail</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
</tr>
</tbody>
</table>

Total 227 380 490

*Stanley plant converted to a condensate removal facility on the Pecan Prairie Rose Pipeline
**Knutson facility operates a gas separation unit. All separated gas is returned to well site for fuel.

New or Expanding Natural Gas Plants

On April 13, 2010, Hess filed a letter of intent with the North Dakota Public Service Commission to expand the Tioga Gas Plant, currently the largest and oldest natural gas processing plant in the state. The plant expansion will more than double the current throughput with a new nameplate capacity of 250 MMCFD. Hess plans to begin construction in March 2011 and have the facility operational by December 2012. Hess anticipates the expansion to cost approximately $325 million.

On April 21, 2010, ONEOK Partners announced a new 100 MMCFD natural gas processing plant in eastern McKenzie County. The new “Garden Creek” plant will double ONEOK’s processing capacity in North Dakota and is expected to be complete in late 2011. ONEOK estimates the new processing plant will require an investment of $150 - $210 million. An additional $200 - $205 million is scheduled to be
invested in new gathering infrastructure during 2010 and 2011 to supply ONEOK’s gas processing facilities.

**Planned Activities**

Over the past year, the Pipeline Authority has experienced great success by working with industry to quantify future crude oil production in order to provide the assurance needed to move forward with expansion projects. The forecasted oil production levels will require continuous updating and review over the next year as technology advances and market prices fluctuate. The Pipeline Authority plans to utilize new and existing development information to gain a deeper understanding of the crude oil, natural gas, and carbon dioxide pipeline needs in Williston Basin.

Industry and public information distribution will continue with the use of a quarterly newsletter and agency website. A new service will be added featuring monthly webinars on various topics of interest to area pipeline operators and producers. The Pipeline Authority will continue to conduct information presentations to public audiences, legislative groups, and industry representatives at various events throughout the coming year.
APPENDIX A

North Dakota Pipeline Authority’s *Pipeline Publication* Newsletter
Greetings

Greetings from the North Dakota Pipeline Authority! The Pipeline Authority is excited to be entering its second year of distributing The Pipeline Publication. In order to continue enhancing this publication, we welcome suggestions for improvement or new topics to be addressed. As always, regional project information, past newsletters, maps, reports, and more are available on the Pipeline Authority website, www.pipeline.nd.gov.

New Oil Production Record

The most recent Oil & Gas Division production numbers report that North Dakota was producing over 226,000 barrels of oil per day (BOPD) during July 2009. This level surpasses the previous production record of 215,717 BOPD set in November 2008. In all likelihood, this record will not stand for long, as all indications and forecasts point to increasing oil production for many years to come. The Pipeline Authority continues to work closely with the Oil & Gas Division and regional pipeline operators to build a better understanding of where oil production levels will be in the future, and what transportation options must be in place to meet North Dakota’s needs.

NuStar Pipeline Completes Expansion

On September 9, 2009, NuStar Energy announced it had completed a system expansion that will increase the ability of refined products to be delivered to North Dakota and other northern states during periods of high demand. The expansion work took place in Kansas and involved the construction of a short, ten inch diameter pipeline to alleviate a constrained portion of the NuStar system. As a result of the expansion work, an estimated 3,500 barrels per day of additional refined products could be delivered into North and South Dakota. The availability of the 3,500 barrels per day is not guaranteed and is dependent on numerous variables throughout the midcontinent products pipeline network.

The NuStar Pipeline enters North Dakota in Dickey County and interconnects with NuStar’s North Products Pipeline near Jamestown, ND. NuStar’s North Products Pipeline operates between Mandan’s Tesoro Refinery and Roseville, MN. NuStar’s full press release is available in the news section of the Pipeline Authority website.

North Dakota Products Pipelines

www.pipeline.nd.gov
Bear Paw Proposes New Gas Pipeline

North Dakota’s natural gas gathering operators have been working hard to keep up with the tremendous production growth seen over the past several years. Another such project was recently announced by Bear Paw Energy, a subsidiary of ONEOK Partners. The proposal is for a new 12-inch pipeline to connect the Ft. Berthold Reservation to Bear Paw’s Grasslands gathering and processing system. Bear Paw is currently applying for rights of way with the Three Affiliated Tribes and plans to have the pipeline operational by the fourth quarter 2010.

Bear Paw is not alone in their efforts to increase the amount of natural gas gathered and sold. In the past year, North Dakota has seen new and expanded natural gas facilities from Williston Basin Interstate Pipeline, Whiting, EOG Resources, Pecan Pipeline, Hess, Hiland Partners, and many others. For information on these and many other pipeline projects, please contact the Pipeline Authority or visit our website.

Kinder Morgan Open Season Complete

Kinder Morgan’s “Bakken Crude Project” open season officially ended July 17, 2009. At the time of publication, Kinder Morgan was still in communication with potential shippers and had not released any official results or future plans. The Pipeline Authority will continue to provide updates on this project as they become available.
Greetings

Season’s Greetings from the North Dakota Pipeline Authority! While the temperature in North Dakota is dropping fast, the activity in North Dakota’s oilfields is heating up. With more rigs moving into the basin, improved well completion techniques, and quicker spud to spud times, North Dakota petroleum production is expected to grow for many years to come. Along with the growing crude oil production, several exciting transportation expansion projects are very near completion, with many more in the works. For additional project information, past newsletters, maps, reports, and more please visit the Pipeline Authority website, www.pipeline.nd.gov.

Enbridge Phase VI Expansion Update

The much anticipated Enbridge Phase VI Expansion is nearly complete. Scheduled to be in service on January 1, 2010, the expansion will increase Enbridge’s mainline capacity to Clearbrook, MN from 110,000 barrels per day (BOPD) to 161,600 BOPD. Once complete, Enbridge North Dakota will have more than doubled its 2007 system capacity of 80,000 BOPD.

More good news is that Enbridge has no intentions of stopping at 161,600 BOPD and is actively working to gain support from interested shippers for the proposed Portal Reversal Expansion Project or PREP. As proposed, PREP would allow Enbridge to transport an additional 30,000 BOPD by 2011 and up to an additional 115,000 BOPD by 2013.

www.pipeline.nd.gov

Details of Enbridge’s Phase VI Expansion.
Source: Enbridge Pipelines LLC - www.enbridge-expansion.com

North Dakota Statistics

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<th>Aug-09</th>
<th>Sept-09</th>
<th>Oct-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Daily Oil Production, BOPD</td>
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<td>238,265</td>
<td>239,067</td>
</tr>
<tr>
<td>Average Daily Gas Production, MMCFD</td>
<td>266.66</td>
<td>259.76</td>
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<tr>
<td>Wells Producing</td>
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</tr>
<tr>
<td>Average Rig Count</td>
<td>45</td>
<td>51</td>
<td>56</td>
</tr>
</tbody>
</table>

As of December 16, 2009, there are 77 active rigs in North Dakota.

www.pipeline.nd.gov
Prairie Rose Pipeline Nears Completion

An unexpected construction specification change has delayed the startup of the Pecan Prairie Rose Pipeline until Mid-January, 2010. The new 75 mile, 12 inch pipeline is designed to transport up to 80 million cubic feet of unprocessed natural gas per day from Mountrail County to an interconnect with the Alliance Pipeline near Towner, ND.

Proposed Baker Storage Enhancement

Williston Basin Interstate Pipeline Company is developing a project to increase firm deliverability from its Baker gas storage field in eastern Montana. With current firm storage withdrawal rates of 115 million cubic feet per day (MMCFD), Williston Basin sees an opportunity to add an additional 125 MMCFD of firm withdrawal capacity, which would more than double the firm withdrawal rate from Baker. Along with the gas storage field upgrades, Williston Basin is planning a pipeline expansion to transport the increased, firm storage volumes to an interconnect with the Northern Border Pipeline in North Dakota. The project has a proposed in-service date of 2012 and an open season is expected in January 2010.

Natural Gas Storage Explained

During the mid 1900's, natural gas grew in popularity as a winter heating fuel. As a result, natural gas markets began experiencing seasonal demand swings that needed be managed using underground storage operations. Depleted natural gas fields are most often targeted for storage due to existing infrastructure and reservoir knowledge. During the summer months when demand is low, natural gas is injected into storage and when demand increases in the winter months, natural gas is withdrawn for consumer use.
Enbridge Determining Interest for Further Expansion

Throughout much of March, Enbridge Pipelines North Dakota is asking oil shippers to submit non-binding indications of interest for its Phase 7 Expansion. The proposed Phase 7 Expansion includes an additional 16 inch pipeline from Beaver Lodge to Berthold, as well as several gathering pipelines to feed the expansion. Crude oil that enters the new 16 inch pipeline would be transported north to Cromer, MB on the previously proposed “Bakken Pipeline Expansion Project” (BPEP). Once at Cromer, MB, the crude oil would be injected into the Enbridge Mainline for transportation south to Clearbrook, MN.

After the close of the Non-binding Indications of Interest period on March 26, Enbridge North Dakota will determine the level of interest and make the decision whether to proceed with a formal open season during the second quarter of 2010.

Details of Enbridge’s Beaver Lodge Looping and Gathering Projects.
Source: Enbridge Pipelines North Dakota

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### North Dakota Production Numbers

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<th>Nov-09</th>
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<th>Jan-10</th>
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<tr>
<td>Average Daily Oil Production, BOPD</td>
<td>245,490</td>
<td>242,107</td>
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<tr>
<td>Average Daily Gas Production, MMCFD</td>
<td>267.09</td>
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<tr>
<td>Wells Producing</td>
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<tr>
<td>Average Rig Count</td>
<td>64</td>
<td>75</td>
<td>81</td>
</tr>
</tbody>
</table>

As of March 25, 2010, there are 104 active rigs in North Dakota.

www.pipeline.nd.gov
Four Bears Pipeline Open Season Underway

On February 27, 2010, Bridger Pipeline announced a binding open season for the 80-mile, Four Bears Pipeline. Bridger is seeking five year commitments from shippers on the new 12 inch line that would run from Eastern McKenzie County to Bridger’s Skunk Hill Junction or Fryburg Station. Bridger is targeting early 2011 for system startup with an initial capacity of 60,000 barrels per day. The open season is scheduled to end on April 30, 2010.

Prairie Rose Pipeline Begins Gas Transportation

On February 4, 2010, Pecan Pipeline commenced operation of the Prairie Rose Pipeline. The new 75 mile, 12 inch pipeline has the capacity to transport over 100 million cubic feet of unprocessed natural gas per day from Mountrail County to an interconnect with the Alliance Pipeline near Towner, ND.

Keystone Pipelines Open For Business

At a meeting hosted by Governor Hoeven and Governor Schweitzer on March 3, TransCanada reconfirmed that both the Keystone and Keystone XL pipelines are open for business for Williston Basin oil shippers. TransCanada’s next steps include identifying potential shippers, determining crude volumes, and discussing transportation terms.

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ND Pipeline Authority
State Capitol 14th Floor • 600 E. Boulevard Ave. Dept. 405
Bismarck, ND 58505-0840
Phone: (701) 220-6227 • Fax: (701) 328-2820
E-mail: jjkringstad@ndpipelines.com • www.pipeline.nd.gov
Updated Natural Gas Report

In May, the Pipeline Authority released a new natural gas pipeline and processing report titled, “An Update on North Dakota’s Natural Gas Infrastructure”. The report was designed to explain the pipeline and processing investments North Dakota has had in the past several years, as well as highlight future projects that are in the development phase. The full report is available for download on the “Publications & Maps” page of our website.

ONEOK Announces New Gas Plant

On April 21, 2010, ONEOK Partners announced a new 100 MMCFD natural gas processing plant in eastern McKenzie County. The new “Garden Creek” plant will double ONEOK’s processing capacity in North Dakota and is expected to be complete in late 2011. ONEOK estimates the new processing plant will require an investment of $150 - $210 million. An additional $200 - $205 million is scheduled to be invested in new gathering infrastructure during 2010 and 2011 to supply ONEOK’s gas processing facilities.

Open Season Held for the “Bakken Expansion Project”

Williston Basin Interstate Pipeline Co. recently held an open season for the “Bakken Expansion Project”. The project would allow Williston Basin the ability to inject up to an additional 30 million cubic feet per day (MMCFD) into the Northern Border Pipeline at the Charbonneau station. The open season was held from May 19 – June 2. Williston Basin is currently reviewing the results of the open season to determine the appropriate project scope and timing.

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<th>North Dakota Production Numbers</th>
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<tbody>
<tr>
<td><strong>Average Daily Oil Production, BOPD</strong></td>
<td>261,179</td>
<td>277,332</td>
<td>284,345</td>
</tr>
<tr>
<td><strong>Average Daily Gas Production, MMCFD</strong></td>
<td>281.977</td>
<td>277.967</td>
<td>280.422</td>
</tr>
<tr>
<td><strong>Average Rig Count</strong></td>
<td>93</td>
<td>102</td>
<td>107</td>
</tr>
<tr>
<td><strong>New Gas Gathering Connections</strong></td>
<td>38</td>
<td>48</td>
<td>47</td>
</tr>
</tbody>
</table>

As of June 28, 2010, there are 124 active rigs in North Dakota.
Hess Tioga Gas Plant Expansion

On April 13, 2010, Hess filed a letter of intent with the North Dakota Public Service Commission to expand the Tioga Gas Plant, currently the largest and oldest natural gas processing plant in the state. The plant expansion will more than double the current throughput with a new nameplate capacity of 250 MMCFD. Hess plans to begin construction in March 2011 and have the facility operational by December 2012. Hess anticipates the expansion to cost approximately $325 million.

Quintana Files Letter of Intent

On June 9, Quintana Capital Group filed a letter of intent with the ND Public Service Commission for a new pipeline project that would connect the major producing regions of the basin with TransCanada’s Keystone XL pipeline in Eastern Montana. The proposed $250 million pipeline would have an initial capacity of 100,000 barrels of oil per day (BOPD) and could be expanded to 120,000 BOPD. 165 miles of 10 inch and 12 inch pipeline would connect production in Williams, McKenzie, and Mountrail counties to a 145 mile, 16 inch pipeline that would interconnect with the Keystone XL pipeline near Baker, MT. The pipeline has a proposed startup of March 2013. Quintana is currently working with producers and shippers in the basin to gain the necessary support to move forward. An open season for the project is expected, but has not been scheduled.
APPENDIX B

North Dakota Pipeline Maps
North Dakota Crude Oil Pipelines

- Tesoro
- Bridger
- Enbridge
- Plains
- TransCanada
- Tesoro Mandan Refinery
- Belle Fourche
- Butte
- Little Missouri
- Grand Forks
- Billings
- Mountrail
- Burleigh
- Kidder
- Pembina
- Towner
- Rolette
- Ramsey
- Sargent
- McHenry
- McLean
- Logan
- Mountrail
- Ritchie
- Golden Valley
- Slope
- Bowman
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- Stark
- Ward
- Divide
- Bottineau
- Mountrail
- McHenry
- Mander
- Stutsman
- Kidder
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North Dakota CO₂ Pipeline

Map of North Dakota with counties labeled.

- Dakota Gas Pipeline
- Counties: Dunn, Divide, Baker, Mountrail, Golden Valley, Mountrail, Mckenzie, Kidder, Towner, Pembina, Mclean, Cavalier, Richland, Sargent, Ramsey, Wells, Pembina, Stutsman, Mountrail, Mercer, Mclean, Williston, Williams, Morton, Renville, Kidder, Towner, Pembina, Mountrail, Mckenzie, Kidder, Towner, Pembina, Mountrail, Mckenzie, Kidder, Towner, Pembina, Mountrail, Mckenzie, Kidder, Towner, Pembina, Mountrail, Mckenzie, Kidder, Towner, Pembina, Mountrail, Mckenzie, Kidder, Towner, Pembina, Mountrail, Mckenzie, Kidder, Towner, Pembina, Mountrail, Mckenzie, Kidder, Towner, Pembina, Mountrail, Mckenzie, Kidder, Towner, Pembina, Mountrail, Mckenzie, Kidder, Towner, Pembina, Mountrail, Mckenzie, Kidder, Towner, Pembina, Mountrail, Mckenzie, Kidder, Towner, Pembina, Mountrail, Mckenzie, Kidder, Towner, Pembina, Mountrail, Mckenzie, Kidder, Towner, Pembina, Mountrail, Mckenzie, Kidder, Towner, Pembina, Mountrail, Mckenzie, Kidder, Towner, Pembina, Mountrail, Mckenzie, Kidder, Towner, 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APPENDIX C

North Dakota Gas Processing and Transportation Map