

Minutes of the  
**EMPOWER NORTH DAKOTA COMMISSION**

February 13<sup>th</sup>, 2014  
ND Department of Mineral Resources Oil and Gas Division  
1000 East Calgary Avenue  
Bismarck, ND 58503

**Members present:**

Al Anderson, Ron Ness, Mark Nisbet, Ron Day,  
Mike Rud, Terry Goerger, Randy Schneider, Dale  
Niezwaag, David Straley.

**Ex Officio Members:**

Julie Voeck, proxy for John DiDonato  
Sandi Tabor  
Margaret Hodnik

**Others present:**

Justin Dever, Department of Commerce  
Sherri Frieze, Department of Commerce  
Mike Fladeland, Department of Commerce  
Karlene Fine, Industrial Commission  
Julie Fedorchak, Public Service Commission  
Brian Kalk, Public Service Commission  
Ryan Rauschenberger, Tax Department  
Allison Ritter, Department of Mineral Resources  
Todd Kranda, Kelsch, Kelsch, Ruff & Kranda Law  
Firm  
Mike Jones, Lignite Energy Council  
John Olson, John M. Olson, P.C.  
Deana Wiese, ND Ethanol Council  
Cory Fong, Odney Advertising  
Don Boehm, Basin Electric Power Coop.  
Don Bari, IHS, via phone  
Ed Glatzer, IHS, via phone

**CALL TO ORDER/WELCOME**

Chairman Anderson called the meeting to  
order at 10:00 a.m. and welcomed Commission  
members and guests.

**APPROVAL OF MINUTES**

**A motion was made by Schneider and  
seconded by Day to approve the minutes of  
December 11<sup>th</sup>, 2013. Motion carried  
unanimously.**

**Production Tax Credits Discussion**

Ryan Rauschenberger, Tax Commissioner,  
discussed Tax Incentives for Wind Generation.  
These included Sales Tax Exemption, Income Tax  
Credit for Biomass, Geothermal, Solar, or Wind  
Energy Credit, Property Tax Reduction, and  
Capacity and Generation Tax. [Appendix A](#)

**ND Petroleum Council Flaring Task Force  
Report**

Ron Ness, Petroleum Council presented the  
results of the study that the Task Force has been  
working with since last September 2013. He  
mentioned that flaring on the Reservations is  
significantly greater than the statewide average.

[Appendix B](#)

**Public Service Commission (PSC)  
Right of Way and Eminent Domain**

Brian Kalk, Commissioner, opened the  
conversation with Right of Way and the Eminent  
Domain Process. Kalk said the PSC, when holding  
their Public Hearings, do not make decisions  
based on the number of easements a person may  
have. It will not become a factor in their decision  
making process.

Kalk then talked about the Pipeline Safety  
challenge and the need for additional natural gas  
inspectors in the state.

Discussion ensued regarding the regulations of  
the Pipeline and Hazardous Materials Safety  
Administration (PHMSA). It was questioned if  
PHMSA inspectors should continue inspecting  
pipelines within the state vs. now having a North  
Dakota PSC inspector.

Julie Fedorchak, Commissioner, handed out a  
spreadsheet of Government Agency Oversight of  
Energy Pipelines in ND [Appendix C](#)

**Interim Progress Report – Ethanol and  
NGL Studies**

Don Bari and Ed Glatzer, IHS gave an  
overview of the progress on the Interim Report on  
the Ethanol and NGL Studies. The study is 1/3  
complete, in a draft form, so a copy is not attached.

**ADJOURNMENT**

The Chairman adjourned the meeting at 2:30  
p.m. The meeting was adjourned unanimously.

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Al Anderson  
Chairman

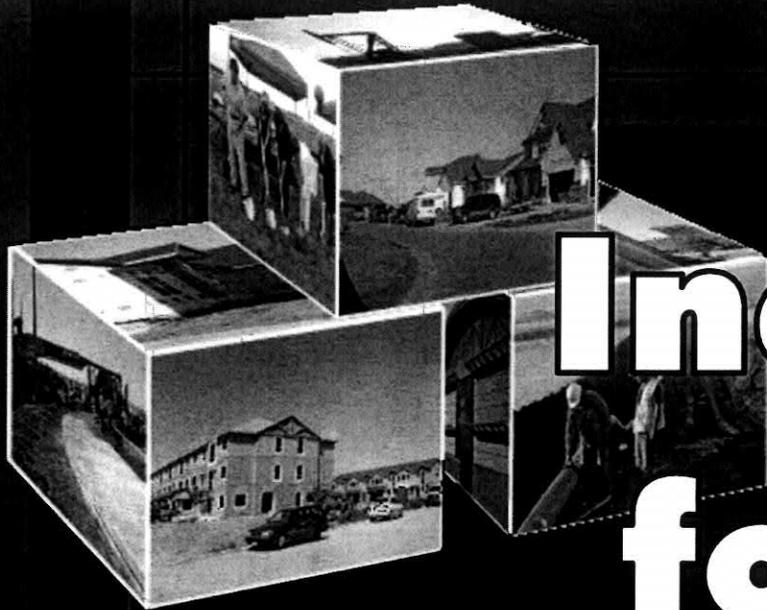
Date

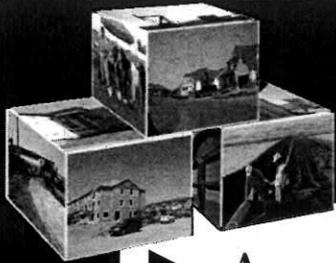
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Sherri Frieze  
Recording Secretary

Date

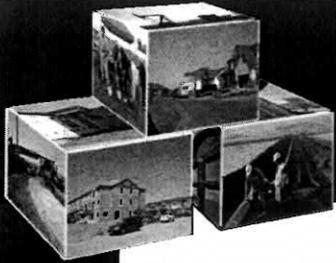
# Tax Incentives for Wind Generation





# Sales Tax Exemption

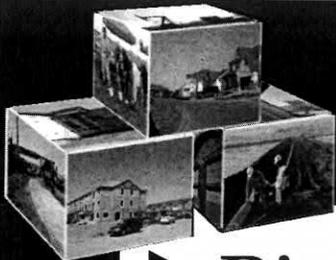
- ▶ Applies to building A sales and use tax exemption is allowed for purchasing building materials, production equipment, and other tangible personal property used in the construction or expansion of wind-powered electrical generating facilities before July 1, 2017.
- ▶ To be eligible, a facility must have at least one single electrical energy generation unit with a nameplate capacity of 100 kilowatts or more. *[Reference: N.D.C.C. §§ 57-39.2-04.2 and 57-40.2-04.2]*



# Income Tax Credit

## ► Biomass, Geothermal, Solar, or Wind Energy Credit

- A corporation is allowed an income tax credit for installing a biomass, geothermal, solar, or wind energy device in a building or on property owned or leased in North Dakota.
- credit is equal to 3% of the cost of acquisition and installation and is allowed in each of the first five tax years, starting with the year in which installation is completed. (Equal to a 15% credit in total)

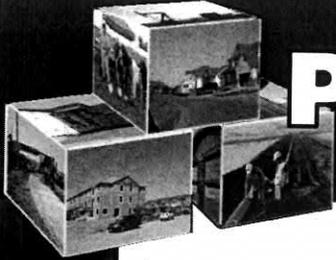


# Income Tax Credit

## ► Biomass, Geothermal, Solar, or Wind Energy Credit

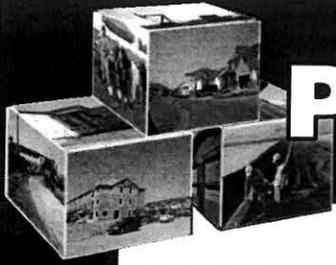
- For devices installed after September 30, 2008, an unused credit may be carried forward up to ten tax years; however, the carryforward period is twenty tax years for a wind device installed after September 30, 2009 and before January 1, 2012.
- If ownership of a device is transferred immediately upon completion of installation, and the device is fully operational, the credit transfers to and may be claimed by the purchaser of the device.
- Credit is not allowed for devices installed on or after January 1, 2015.

*\* discussion in session coming up to further this credit*



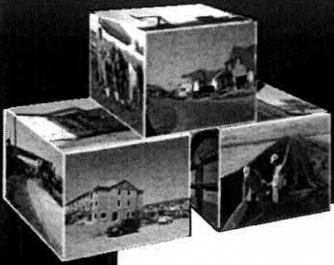
# Property Tax Reduction

- ▶ N.D.C.C. § 57-06-14.1 Centrally assessed wind turbine with capacity of 100 kilowatts or more with construction completed before January 1, 2015 valued at 3% of the assessed value.
  - Except projects with PPA's executed after April 30, 2005 and before July 1, 2006 valued at 1.5% of assessed value.
  - Except projects when construction is completed after June 30, 2006 and before January 1, 2015 valued at 1.5% of assessed value.



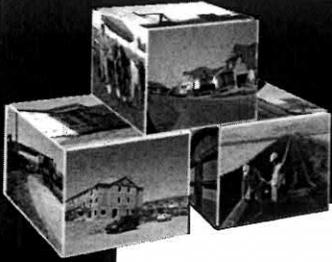
# Property Tax Reduction

- ▶ N.D.C.C. § 57-06-14.1 Any project with construction completed after January 1, 2015 will be valued at 10% of assessed value.
- ▶ Projects that received 1.5% with PPA's from April 30, 2005 to July 1, 2006 is for the duration of the PPA. When the PPA ends the value will be 3% of assessed value.
- ▶ Projects with 1.5% will not increase to 10% of assessed value.



# Payment in lieu

- ▶ Wind Projects may file an irrevocable election to be taxed under NDCC 57-33.2-04 by October 1, 2016.
- ▶ Capacity and Generation Tax
  - \$2.50 per kilowatt times the rated capacity of the wind generator
  - $\frac{1}{2}$  of one mill (.0005) per kilowatt-hour generated



# Questions?

## Contact us:

Office of State Tax Commissioner

Ryan Rauschenberger, Deputy Tax Commissioner

- ▶ *www.nd.gov/tax*
- ▶ E-mail: [rarauschenberger@nd.gov](mailto:rarauschenberger@nd.gov)
- ▶ Office of State Tax Commissioner  
600 E. Boulevard Avenue, Dept 127  
Bismarck ND 58505-0554
- ▶ Phone: 701.328.7088
- ▶ Fax: 701.328.3700



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# North Dakota Industrial Commission

## NDPC Flaring Task Force

January 29, 2014



# NDPC Flaring Task Force

- 500 member companies of NDPC
  - Responsible and efficient development of ND natural resources
- NDPC completely supports the State flaring goals
  - Reduce flare volumes
  - Reduce the number of wells flared, and
  - Reduce connect time period from first gas production to marketing gas sales



# Unique, Very Focused

- Unique for Industry to work holistically
  - Not normal, companies are fierce competitors – upstream and midstream
- Started the task force last September
- Consists of 35 Industry experts in natural gas gathering, processing, and transport
- Met over 20 times since Sept. – very focused
- Tribal subcommittee has met 8 times since Nov



# Key Factors for Flaring

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- Shale Oil production profile – high surge of initial production followed by steep declines
- Unique Liquids-Rich Gas
- Time Needed to Build Infrastructure & Weather Constraints
- Size of the Bakken
- Technology Outpaced Production Expectations
- Easements and ROWs are Challenging



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# Infrastructure and Investment



# Current Infrastructure Statistics

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## New Infrastructure Since 2006

- 9,555 miles of gas gathering pipe
- 1.259 BCFD of gas processing
- Export capacity (downstream of plant)
  - Residue gas – 2.0+ BCFD
  - NGLs – 120-150,000 bbls/day



# Industry Investment to Date

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- Industry Investment in North Dakota
  - **Over \$6 Billion**
- Preliminary numbers since January 2006
  - Gas gathering – wellhead to plant
  - Plant Processing – stand alone
  - Export capacity for residue gas and natural gas liquids (NGLs)



# Future Investment

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- Approved, publically announced (approx.)
- 2014-2015
- Over \$1.7 Billion new infrastructure announced
- 1,000+ miles of gas gathering pipe
- 400 MMcfd gas processing
- 75,000 bbls NGL export
- 400 MMcfd gas export
- 400 miles of export pipe
- 375 miles of natural gas pipe





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# Flaring Statistics



# Entire State Flaring Statistics

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- North Dakota Pipeline Authority data (Nov)
- Entire State
  - Flaring 29%, 306 MMCFD of state gas production
    - Hess Tioga plant startup
  - 60% is from 216 well sites



# Non-FBIR/FBIR Flaring Statistics

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- Private and State Lands (excludes FBIR)
  - 238,228 MCFD
  - Flaring 27% of non-FBIR production
- Ft. Berthold Indian Reservation lands
  - 57,832 MCFD
  - Flaring 40% of FBIR production



# Unique challenges on the FBIR

- ROWs are very slow to get – consent from landowner, Tribe
- More permit scrutiny - 3 federal agencies must approve (BLM, BIA, USFWS)
- Tribal policies conflict with getting pipelines to well locations
  - Developing a conditionally-assignable ROW form – 13 pages long
  - 1/2 mile setback for all pipelines and compressors from any occupied structure
- Topography and Lake Sakakawea make gas gathering systems challenging to operate



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## Future Capture Targets



# 85% Capture in Two Years

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- **Capture 74% by 4<sup>th</sup> Qtr. 2014**
  - Recent processing expansion, BMPs
- **Capture 77% by 1<sup>st</sup> Qtr. 2015**
  - Continue capacity build out
  - Operational efficiencies
- **Capture 85% by 1<sup>st</sup> Qtr. 2016**
  - New recently announced processing plants
  - Value added North Dakota markets

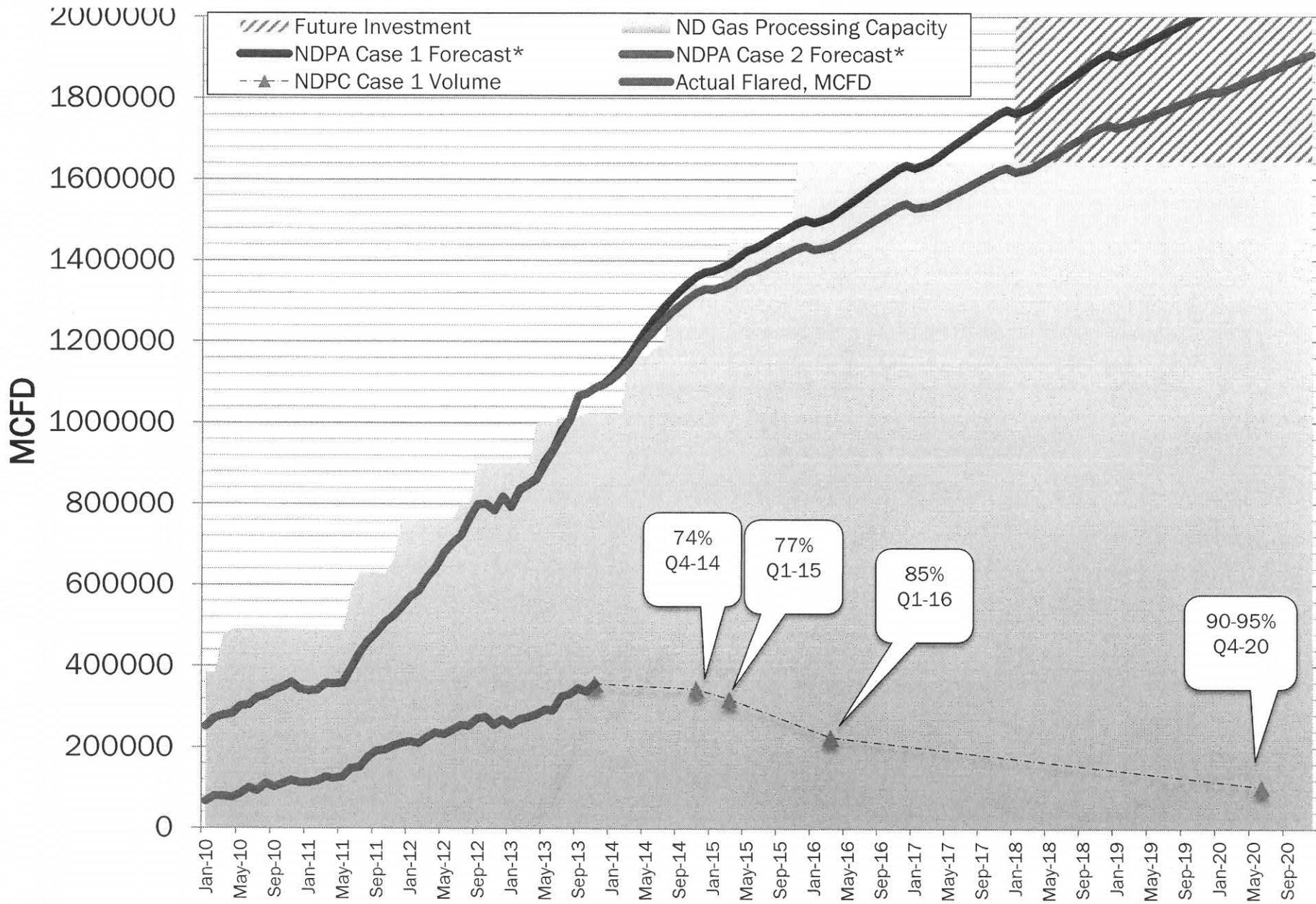


# 90% Capture by 2020

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.....with potential for 95% capture

- This plan allows for increased future oil production while reducing flaring
- Achieving this goal, requires full engagement by the industry, state, counties, NDIC, tribe, and landowners to implement this plan

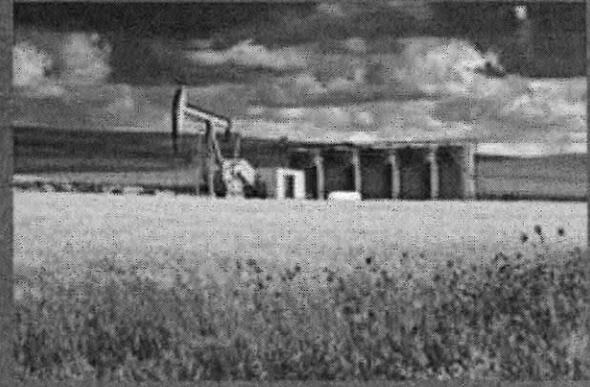


\* NDPA Production forecast is for visual demonstration purposes only and should not be considered accurate for any near or long term planning



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## Time Delays to Connect



# Example Connect Times

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- The typical process and time for connecting a well or multi-well pad to the gas plant is as follows:
  - Identify well(s), negotiate and execute gas processing agreement: **90 days** (try to negotiate the agreement before the well is spud and during drilling so facilities are ready to capture the first production after well stimulation)
  - Once agreement is executed, apply for county permit: **30 days**
  - Once permit is received, acquire right of way: **30-180 days**
  - Upon ROW acquisition, construct gathering lines and appurtenant facilities: **30 days**

Total time: up to **180 days**, if no problem with ROW.

Note: Typically, can connect a well in 90 days (weather permitting) if the contract is already in place.



# Delays to Gas Connection

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- **Single Biggest Challenge to connect gas**
  - Securing landowner permission for connection activities
    - up to 180 days or longer
- **Biggest obstacles and time delays**
  - Delays in zoning by counties and townships for midstream facilities
  - Short construction season/weather
  - Limited number of available construction crews
  - Review of permits for natural gas fueled equipment



# New Focus on Flaring Reduction

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- Management focus to reduce flaring
- Focused internal effort to reduce flaring
  - Better drilling, completions, and facilities coordination to reduce flaring
  - Communication with midstream
  - Evaluation of gas utilization before midstream
  - Increased emphasis on obtaining ROW



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# Proposal to Meet Reduction Targets



# NDPC Flaring Reduction Recommendations

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- Gas Capture Plan
- Regulatory Consequences
- Midstream Planning and Tracking
- Gathering Line Oversight
- Rights of Way
- State Actions
- Remote Capture Technologies
- Monitoring and Reporting



# New Permit Requirement

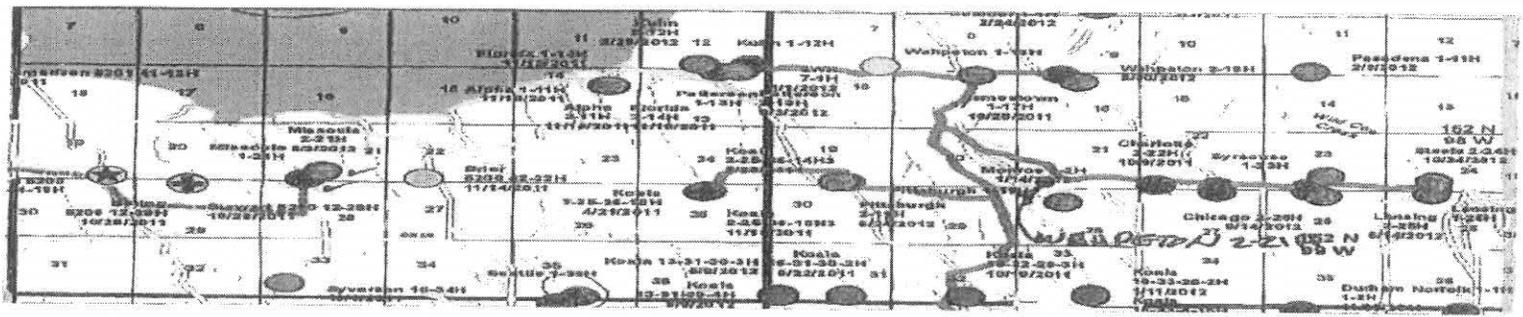
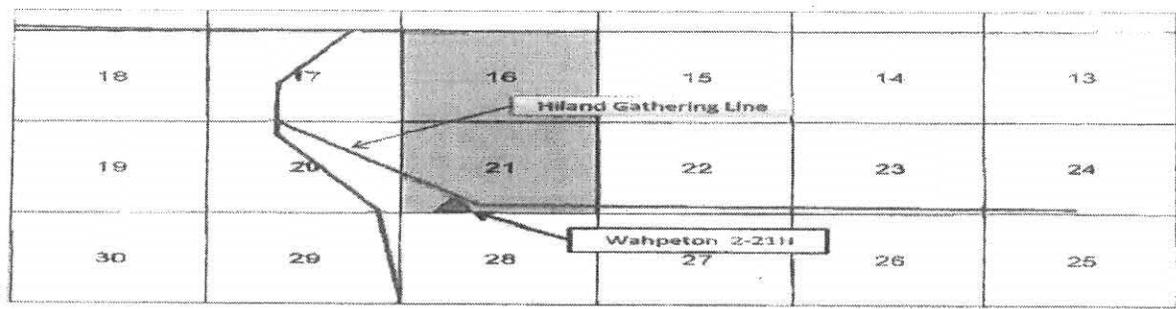
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- **Gas Capture Plan (GCP)**
  - Forces gas capture planning prior to drilling
  - GCP may include at the discretion of NDIC:
    - Location map gathering system connection, processing plant(s) identified
    - Flowback strategy (rate, duration, plan for multi-well start up)
    - Current system capacity and utilization
    - Time period for connection



# Sample Gas Capture Plan

## Gas Pipeline Information Increase Density Sections 16 & 21 - 152N - 99W McKenzie County, North Dakota



Gas Gatherer: Hiland  
 Distance from Gas Gatherer to well: 0.25 miles  
 Anticipated date of 1<sup>st</sup> gas flow: First Production  
 Gas to be processed at: Watford City  
 Gathering pipeline capacity: 10,000 Mcfd  
 Current gathering pipeline throughput: 5,000 Mcfd



INDUSTRIAL COMMISSION  
 STATE OF NORTH DAKOTA  
 DATE 10-25-12 E 18946  
 Introduced By CRJ  
 Exhibit 12  
 Identified By Wilson



# Gas Capture Plan Milestones

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- June 1, 2014: All new APDs must have a GCP
- For all existing flaring wells, the producer will submit a GCP
  - September 1, 2014: large volume wells (based on Nov NDPA data) 60% is from 216 wells >300 MCFD, 50% connected to sales
  - March 1, 2015: all other wells flaring longer than 90-days, excluding marginal wells



# Regulatory Consequences

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- At the discretion of NDIC, penalty for failure to comply
  - Failure to submit GCP
    - New wells – suspension or denial of permit
    - Existing wells – curtail production where no detriment to well or reservoir
  - Failure to comply with GCP
    - Curtail production
    - Not meeting flowback strategy
    - Mitigating circumstances may allow extension (i.e., economic evaluation, operator's overall capture rate, ROW, safety, weather, work crews, etc.)



# Midstream Planning and Tracking

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- Midstream companies meet with NDIC on a regular basis (i.e., annual, bi-annual) to status operations and updates
- Suggested reporting to include:
  - Percent gas captured by gathering system
  - Gathering forecast by gathering system
  - Status plant processing capacity and gathering capacity with future obligations and capture targets
  - Utilization and downtime/interruptions of service
    - Field compression downtime / Plant downtime/maintenance



# Gathering Line Oversight

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- North Dakota will be the first in the nation to regulate gathering systems, effective April 1, 2014 (House Bill 1333)
  - 18,000 miles of existing gathering line will be regulated
  - New electronic mapping requirements
  - \$75 MM cleanup fund
  - Pipeline mediation



# Pipeline Hotline

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- NDIC develop and manage “hotline” for reporting surface owner issue related to pipelines
- Establish follow-up mechanism with company and surface owner to ensure quality control
- Provide landowner with easy notification system for problems and concerns



# ROW Task Force

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- ROW Task Force to address biggest time delay challenge
  - Discuss and review potential energy corridors, section line easements, legislation to improve ROW access to reduce flaring
  - Stakeholders to include:
    - NDIC, North Dakota Pipeline Authority
    - Attorney General due to legal issues
    - State Energy Impact Coordinator
    - Counties
    - Landowners groups
    - Industry members, both upstream and midstream



# State Actions

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- Incentivize rapid build out capacity for gas infrastructure
  - Property tax incentive, payment in lieu of taxes
  - Low interest loans (electrical transmission), etc.
  - Production tax credits for producers
- Incentivize intrastate value added markets
  - LNG, CNG, petrochemical, fertilizer plants, technology innovation
- Support dense phase, high pressure export pipeline
  - Major investment – approximately \$3 billion
  - Long lead time – approximately 3 years construction time to mid-continent markets
  - NDPA is authorized by statute to take up to 10% of firm capacity



# Incentivize Remote Capture Tech

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- EERC evaluation process
- EERC pilot and scalability testing
- Increase funding for the Oil & Gas Research Council, focus on value added markets
  - Utilize Empower Commission Value Added Natural Gas Study





# Flare Reporting and Monitoring

- Non-FBIR/FBIR flaring tracked separately
- Revise current NDIC gas production and sales report to include:
  - Non-routine flaring operations - safety, power outages, pressure control, pigging, etc.
  - Well testing and flowback operations
- NDPA report on target capture status to NDIC
  - 4<sup>rd</sup> Qtr. 2014
  - 2<sup>nd</sup> Qtr. 2015
  - 1<sup>st</sup> Qtr. 2016



# 90% Capture by 2020

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- This plan allows for increased oil production while reducing flaring
- Possible target of 95% capture



# Up To 95% Capture Possible

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However,

achieving these targets, requires full engagement by the state, counties, NDIC, tribe, landowners, and industry, to implement this plan

Linda Daugherty

Government Agency Oversight of Energy Pipelines in North Dakota

	Intrastate			Interstate	
	Gathering	Transmission	Distribution	Gathering	Transmission
<b>CO2</b>					
➤ Facility location		PSC <sup>4</sup>			PSC <sup>4</sup>
• Construction	DOH <sup>1</sup>	DOH <sup>1</sup> , PHMSA <sup>2</sup>	NA	DOH <sup>1</sup>	DOH <sup>1</sup> , PHMSA <sup>2</sup>
○ Operation & Safety	IC	PHMSA <sup>2</sup>	NA		PHMSA <sup>2</sup>
❖ Incident Response	DES, DOH, EPA, local responders	DES, DOH, EPA, local responders, PHMSA <sup>2</sup>	NA	DES, DOH, EPA, local responders	DES, DOH, EPA, local responders, PHMSA <sup>2</sup>
<b>Hazardous Liquids</b>					
➤ Facility location		PSC <sup>4</sup>			PSC <sup>4</sup>
• Construction	DOH <sup>1</sup> , IC <sup>1</sup>	DOH <sup>1</sup> , PHMSA <sup>2</sup> , PSC <sup>4</sup>	NA	DOH <sup>1</sup> , IC <sup>1</sup>	DOH <sup>1</sup> , PHMSA <sup>2</sup> , PSC <sup>4</sup>
○ Operation & Safety	IC	PHMSA <sup>2</sup>	NA		PHMSA <sup>2</sup>
❖ Incident Response	DES, DOH, EPA, local responders	DES, DOH, EPA, local responders, PHMSA <sup>2</sup>	NA	DES, DOH, EPA, local responders	DES, DOH, EPA, local responders, PHMSA <sup>2</sup>
<b>Natural Gas</b>					
➤ Facility location		PSC <sup>4</sup>			FERC
• Construction	DOH <sup>1</sup> , IC <sup>1</sup>	DOH <sup>1</sup> , IC <sup>1</sup> , PSC <sup>3,4</sup>	DOH <sup>1</sup> , PSC <sup>3</sup>	DOH <sup>1</sup> , IC <sup>1</sup>	DOH <sup>1</sup> , FERC <sup>1</sup> , PHMSA <sup>3</sup>
○ Operation & Safety	IC	PSC <sup>3</sup>	PSC <sup>3</sup>		PHMSA <sup>3</sup>
❖ Incident Response	DES, DOH, EPA, local responders	DES, DOH, EPA, local responders, PSC <sup>3</sup>	Local responders, PSC <sup>3</sup>	DES, DOH, EPA, local responders	DES, DOH, EPA, local responders, PHMSA <sup>3</sup>
<b>Saltwater or brine</b>					
➤ Facility location			NA	NA	NA
• Construction	IC <sup>1</sup>		NA	NA	NA
○ Operation & Safety	IC		NA	NA	NA
❖ Incident Response	DES, DOH, EPA, local responders	DES, DOH, EPA, local responders	NA	NA	NA