**2021 SENATE ENERGY AND NATURAL RESOURCES** 

SB 2328

#### 2021 SENATE STANDING COMMITTEE MINUTES

#### **Energy and Natural Resources Committee**

Peace Garden Room, State Capitol

SB 2328 2/4/2021 AM

A BILL for an Act to create and enact a new section to chapter 57-51.1 of the North Dakota Century Code, relating to a credit for oil produced from a well site using an onsite flare mitigation system; to provide for application; and to provide an expiration date.

**Chairman Kreun** called the hearing to order at 9:26am Senators Kreun, Schaible, Patten, J. Roers, Piepkorn, and Bell present

#### **Discussion Topics:**

- Fiscal impacts of the bill
- Impacts on the oil and natural gas industry
- Flare Mitigation and environmental Significance

**Senator Patten,** District 39, introduced the bill and testified neutral #5305 (9:26am)

Ron Ness, President, North Dakota Petroleum Council, testified in favor #5312 (9:30am)

**Charles Cavness,** Crusoe Energy Systems, President, testified in favor #5278 (9:37am)

**James Haider,** GTUIT, Chief Technology Officer, testified in favor #5303 (9:59am)

Additional written testimony:

Justin Kringstad, North Dakota Pipeline Authority, Director, testified in favor #5236

**Chairman Kreun** closed the hearing on SB 2328 at (10:23am)

Dave Owen, Committee Clerk

## Testimony ID#5305

21.0935.02000

#### PROPOSED AMENDMENTS TO SENATE BILL NO. 2328

Page 3, line 5, after "<u>flare</u>" insert "<u>mitigation</u>"

Page 3, line 22, replace "production" with "flare mitigation"

Renumber accordingly



#### Senate Bill 2328

#### **Testimony of Ron Ness**

## Senate Energy and Natural Resources Committee February 4, 2021

Chairman Kreun and members of the Committee, my name is Ron Ness, president of the North Dakota Petroleum Council. The North Dakota Petroleum Council represents more than 650 companies in all aspects of the oil and gas industry, including oil and gas production, refining, pipeline, transportation, mineral leasing, consulting, legal work, and oilfield service activities in North Dakota. I appear before you today in support of Senate Bill 2328.

Senate Bill 2328 is a strong message from the State of North Dakota in support of continued efforts to reduce flaring with innovation and technology. The Bakken is, first and foremost, an oil play. The abundant rich natural gas that is produced along with the oil has been a challenge for producers since the first big Bakken well was drilled in Parshall field in late 2006. We lacked the infrastructure necessary to capture the gas and our location, in the middle of the continent and far from the marketplace, made for challenging economics in managing the gas we were producing.

On top of that, the North Dakota Industrial Commission took steps to require oil operators to capture a specified percentage of their gas or face production restrictions. This was an additional challenge for operators and midstream developers, now with a deadline attached, to not only build processing plants but also get easements and pipelines built to every well site.

Fifteen years and \$20 billion dollars later, the industry has finally built the infrastructure to now capture 93% of the natural gas produced each day. This is a huge achievement given the stubborn trend of low natural gas prices and the huge investments required to build the complex infrastructure related to handling and processing the Bakken's rich natural gas. Frankly, it's an amazing accomplishment and an applaudable solution to a highly publicized and controversial issue.

So, what else can be done to capture even more of the natural gas that might be stranded, either waiting for the pipeline to arrive or another plant to be expanded. Over the past decade, I've heard from around 250 entrepreneurs from all over the world promoting new ideas for remote well site technologies to help solve our state's natural gas flaring challenge and to find value for the gas until a pipeline arrives. My message has always been we hope you have the answer! However, that solution must be able to operate on a paper-thin margin, it must operate efficiently at sub-zero temperatures, be portable and fit on the well pad, and not hurt the economics of the well.

This, along with the unpopularity of the deducts on gas production costs as well as climate and other concerns, have made this a tough business model. However, today, I have two NDPC members that will testify in support of this bill. They have met these challenges head-on and made remote capture technologies successful in the Bakken. SB 2328 will assist additional companies and technologies in overcoming the economic hurdles of remote gas capture in the Bakken.

First to testify will be Cully Cavness with Crusoe Energy Services followed by Jim Haider with GTUIT. We have worked on this bill concept for nearly a year and a lot of thought has gone into the right type of incentive that helps the oil producer reduce the costs of trying these new technologies. The bill also keeps intact the acknowledgement that midstream companies have invested billions of dollars to gather, transport, process, and export this gas and the fact that in most cases those entities have a legal right to this gas when their infrastructure is capable and ready to take it. The language in this bill makes that clear and with that the industry is supportive of every effort to reduce as much of the flaring as possible in the Bakken.

We therefore urge a **Do Pass** recommendation on Senate Bill 2328. I would be happy to answer any questions.

## A New Technology For Flare Mitigation Testimony ID#5278

Crusoe Energy Systems Inc.



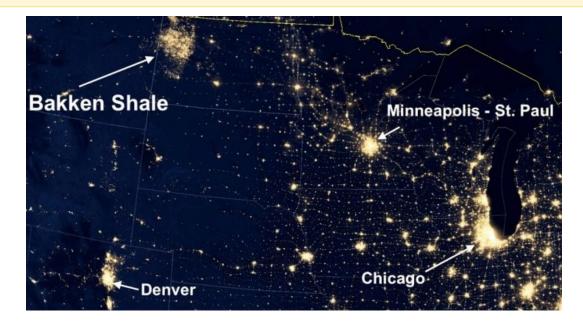
Cully Cavness
Co-Founder, President and COO







200-500 million cubic feet of gas flared daily in North Dakota





## The Digital Flare Mitigation Solution

- Crusoe converts "stranded" natural gas into electricity for energy-intensive computing at the well site
- Digital Flare Mitigation<sup>®</sup> solves critical regulatory and environmental challenges for oil and gas companies by achieving <u>beneficial use</u>, <u>reducing flaring</u> and <u>reducing emissions</u>

Crusoe's Objective: help operators solve the regulatory and environmental challenges of stranded and uneconomic gas



## Why Digital Flare Mitigation?

- ✓ Modular design allows for rapid turnkey deployment and mobilization
- ✓ Highly scalable up to many mmcfd
- ✓ High reliability with few failure points



## Digital Flare Mitigation







## **Energy-Intensive Computing**







- The Digital Flare Mitigation® system is a mobile and modular assembly of power generation, computing and remote telecommunications components optimized specifically for stranded gas resources
- Designed for portability, rapid commissioning, rugged oilfield conditions and modular scalability



## Easy Integration, Compact Footprint





## Step 1: Connection Point

Operator provides simple manifold and valve to existing gas line

Typically, manifold directly onto line leading to flare

#### Step 2: Generator

Crusoe provides generator system, delivered on portable trailer or skid

1 Day

#### Step 3: Compute Module

Computing modules delivered by truck

Satellite antennae installed and aligned after delivery

#### Step 4: Startup

Computers connected to generator

Generator start up

Flare becomes back-up gas plan

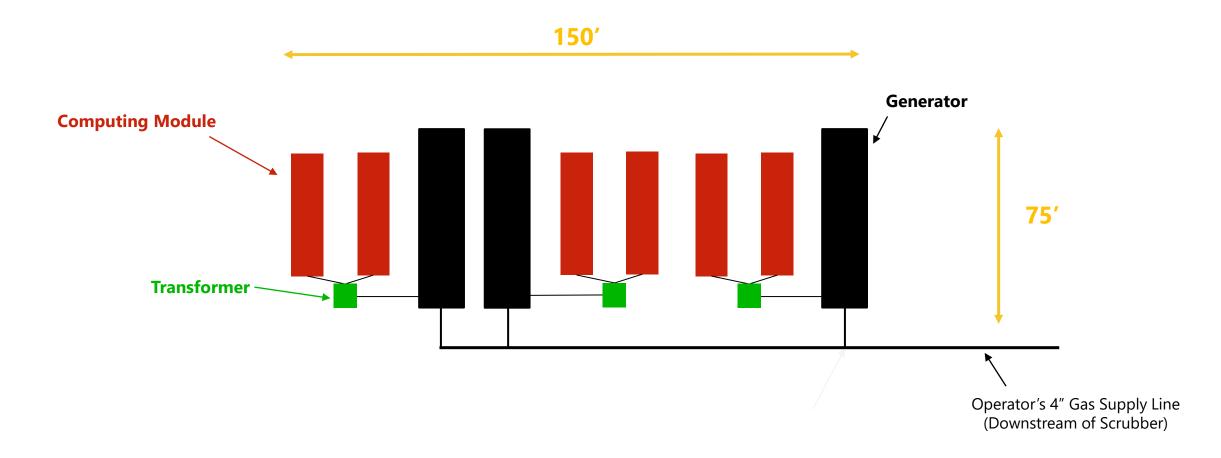
1-2 Days

1-5 Days

1 Day



## Site Diagram w/Skid Generators

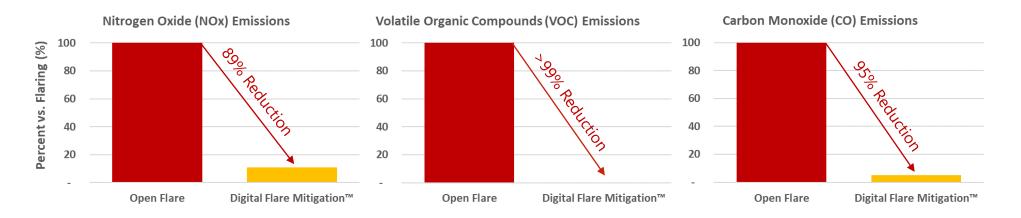


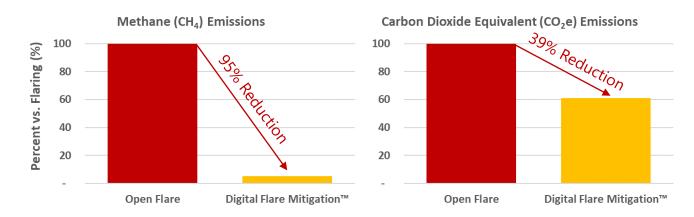
900 Mcfd total: each 300 Mcfd package requires 50' x 75'



## Crusoe Reduces Emissions

Relative to flaring, Crusoe's Digital Flare Mitigation® technology achieves deep reductions in emissions
of methane, volatile organic compounds (VOCs), nitrogen oxides (NOx), carbon monoxide (CO), smogforming compounds and CO2-equivalent greenhouse gasses.







## Crusoe Digital Pipeline™ Architecture

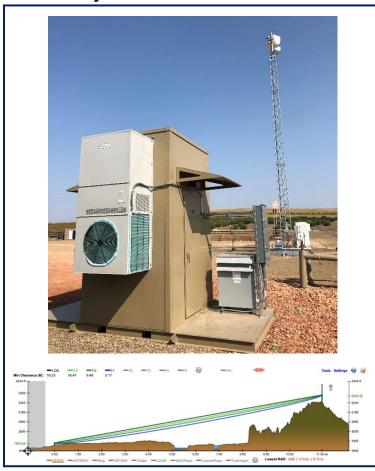
Satellite: 40+ connections, redundant satellites





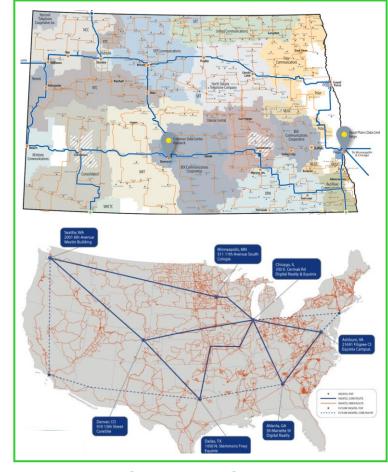
30 to 100 Mbps, ~600ms latency

Wireless: hybrid microwave and millimeter wave



150 to 600 Mbps, <10ms latency (1-way)

#### Fiber: combining private and public circuits



1 to 10 Gbps, <10ms latency (1-way)



## Use Cases for Digital Flare Mitigation®

## **Existing Flare Gas**

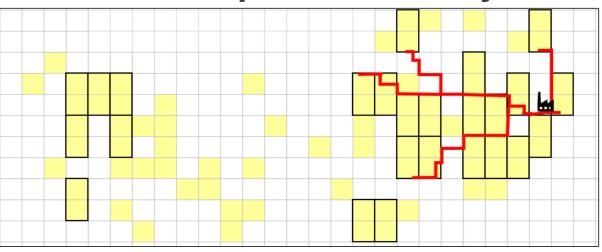


Scalable gas-capture alternative for producing wells that are currently flaring

#### **USE CASES**

- ✓ Producing wells without midstream infrastructure
- ✓ Delayed pipeline arrival
- ✓ Extended gas plant downtime
- ✓ Pipeline capacity challenges

## **Development Flexibility**



Gas offtake plan for future wells to be drilled outside existing infrastructure

#### **USE CASES**

- ✓ Drilling <u>exploratory</u> or <u>step-out</u> wells ahead of pipeline build
- ✓ Satisfy <u>expiring leases</u> outside of existing infrastructure service areas



## Case 1: Right-of-Way Issues

## **Topography**

## **Surface Owner Challenges**

Badlands and other natural features have caused midstream challenges for years

*Inability to get Right-of-Way agreement for some gathering systems or pipelines* 



Severe topography has no impact on DFM effectiveness

## **Digital Flare Mitigation**<sup>®</sup>:

- ✓ Alternative gas solution if traditional infrastructure is delayed or not available
- ✓ Allows for development and production from otherwise stranded areas



## Case 2: Midstream Constraints

Constraints in compression or processing capacity can leave a well without gas takeaway for extended time periods

Extended Gas Processing Plant Downtime

Interruptible Gas Contracts

**Compressor Station Issues** 

**Downstream Capacity Limits** 



## **Digital Flare Mitigation®:**

- ✓ Allows operator to continue producing oil despite midstream constraints while preventing regulatory or emissions violations
- ✓ Operates reliably and independently of downstream infrastructure availability



## Case 3: Exploration Wells & Delineation



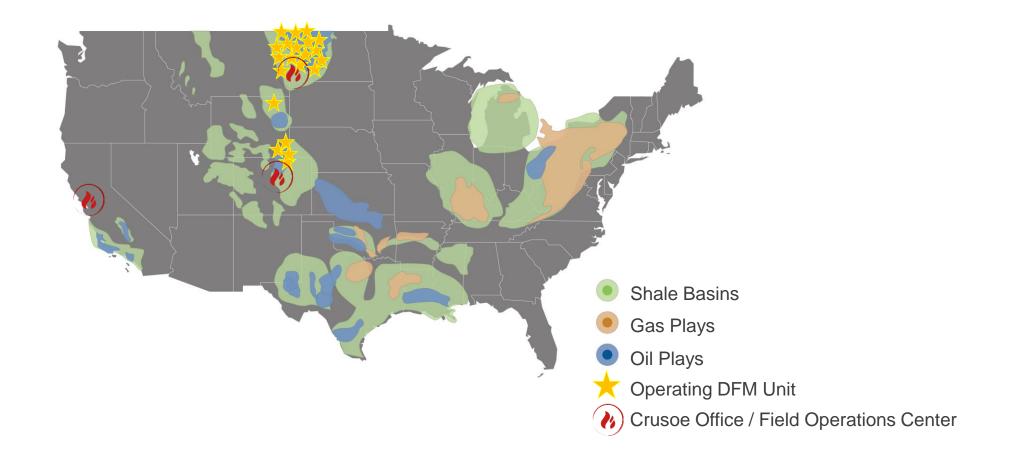
## **Digital Flare Mitigation**<sup>®</sup>:

- ✓ Prevents flaring while evaluating performance of exploration wells
- ✓ Allows operator to more quickly and flexibly delineate acreage position
- ✓ Easy mobilization allows DFM to act as stop-gap prior to arrival of pipeline



## Focused on the Bakken

• Crusoe's primary area of operations is the Bakken, with additional activity in the Powder River Basin and Denver Basin. We are proud to employ a large and growing staff in our Williston operations center.





## Crusoe's Background

- Operating since 2018
  - 38 Digital Flare Mitigation® systems operating in Powder River Basin (WY), Williston Basin (ND and MT) and DJ Basin (CO and WY)
  - Ongoing simultaneous multi-basin operations
  - Operations centers in Williston, ND and Aurora, CO
- Only one minor recordable safety incident in company history
- Approved MSAs with multiple publicly traded oil and gas companies
  - ISN & PEC third party verification of safety procedures and training policies
- Crusoe consults with leading regulatory and permitting firms to ensure compliance and positive stakeholder engagement
- Operations & business development teams assembled from high-quality E&P and service companies including:





















### **CRUSOE OPERATIONS TEAM**

#### Ken Parker, VP Facilities Engineering, Operations & Safety Manager

- 25 years of midstream, compression and facilities experience domestically and internationally
- Lifetime safety record: EMR of 0.2 vs. industry average of ~0.6-2.0

#### **Debbie Meeks, Williston Basin Operations Manager**

 35 years of gas-powered engine and generator experience for upstream and midstream companies

#### **Travis Rynestad, Lead Electrician**

Master electrician with 25 years of oilfield electrical systems experience

#### **Nick Corredor, Deployment Manager**

Field operational leadership roles within hydraulic fracturing service companies

<u>Total field operations staff of more than 25 individuals provides</u> <u>reliable and continuous support throughout multiple basins</u>



## Management Team, Organization Structure



NITIN PERUMBETI



MATTHEW DENEZZA



CHASE LOCHMILLER (CEO & Co-Founder)



**CULLY CAVNESS** (President & Co-Founder)

## Software / Networking



CAGRI AKSAY (VP Software Engineering)



SYLVAIN VAILLANCOURT (Director of Network Architecture)

## <u>Finance</u>



JAMIE ZYNGER (Controller)



MARIAM NAZEMI (Senior Financial Analyst)



MARK NOWAKIWSKY (Financial Analyst)

## Operations / Engineering



SHAYLA MARTIN (Project Engineer)

BROOK KIMBER

(Director of Purchasing &



KEN PARKER (VP Facilities Engineering & Operations)



PHIL ARCHER (Project Engineer)



**DEBBIE MEEKS** (Basin Manager-Mechanical &



NICK CORREDOR (Field Operations Manager)

#### Business Dev.



(VP Business Development)



## Senate Bill 2328

- Creates an extraction tax credit to reduce flaring with Onsite Flare Mitigation Systems
  - Capped at \$6,000 per well per month
  - Maximum of 12 months
  - Sunsets in 2023
  - Language prevents abuse and ensures that pipelines will continue to be first resort
- Helps operators overcome installation costs of flare mitigation systems
  - Piping and plumbing gas lines, valves, etc.
  - Dirt work
  - In the current environment, many operators can't justify even modest capex unless there is a clear near-term return
- Generates many economic benefits for ND, often in excess of the cost of the tax credit
- Attracts a new industry to North Dakota: high performance data centers
  - Jobs, skills and training that people are excited about
  - Supports service industries (electrical, logistics, roustabout, fabrication, dirt work, suppliers)
- Proactive move ahead of potential legislation from new administration in Washington
- In line with state's goals to reduce waste and flaring and protect the environment





## A New Technology For Flare Mitigation

Crusoe Energy Systems Inc.



Cully Cavness
Co-Founder, President and COO



#### GTUIT Testimony to the 67<sup>th</sup> Legislative Assembly of North Dakota In Support of Senate Bill 2328 February 4<sup>th</sup>, 2021

GTUIT would like to express their full support for Senate Bill 2328 currently in front of the Legislative Assembly of North Dakota. This bill will serve to incentivize oil and gas operators in North Dakota to take positive and beneficial action towards further reducing flaring in the Williston Basin. Great strides towards reducing flare volumes have been made in the past several years, but, with the current economic climate facing producers, the incremental tax savings offered by SB 2328 is exactly what is needed to incentivize producers to consider pursuing flare mitigation efforts.

GTUIT has been involved in flare reduction in North Dakota from the very beginning. The company was founded in 2010 by Brian Cebull, Jim Haider, and Mark Peterson – three engineers from Montana who all have a long history in the oil and gas business. The flaring issue at that time in the Williston Basin was capturing national attention, and producers were looking everywhere for a solution. This allowed the GTUIT founders the opportunity to bring their combined skillsets to bear on that formidable challenge.

The associated gas being flared from horizontal Bakken wells was a very unique challenge in 2011 but GTUIT was able to leverage relationships and work with a forward-thinking group of initial customers who were committed to getting in front of the flaring problem before there were any regulations. From those humble beginnings, GTUIT was able to grow from a three-person entrepreneurial shop to a full-fledged oil field service and manufacturing company that employed as many as 75 people with more then 50 MMCFD of installed flare treatment capacity in 2019. Even though we have grown to being a global leader in gas processing and flare reduction, GTUIT's core business has been serving the producers in the Williston Basin and providing innovative and reliable solutions to their flaring challenges. GTUIT prides itself on leading the industry in wellsite gas utilization. Our mission statement is as follows:

Continue to grow as the global leader in distributed natural gas processing including the recovery, utilization, and monetization of associated natural gas for our customers- providing leading innovation and unparalleled customer service that results in reduced emissions and the prevention of waste.

Additionally, we hold to the core values upon which the company was founded in 2010:

- **Safety** Our top priority. Everyone goes home healthy every day.
- Innovation- We use innovation to solve our customers' problems.
- **Integrity** We do the right thing, every time.
- **Customer Service** Complete turn-key operations focused on customer service and communication.

This focus on safety, service, and quality has paved the way for GTUIT's 9+ years of flare capture experience with of 800,000 operating hours and a record of 0.0 TRIR (Total Recordable Incident Rate). Along the way we have processed more than 30 billion cubic feet of flare gas and recovered over 90 million gallons of Natural Gas Liquids from flare streams. In the end, the goal of flare capture is to

benefit the environment we all live in and GTUIT is most proud of being able to say that by processing the gas and recovering the liquids, we have prevented nearly 600,000 tons of direct CO<sub>2</sub> emissions in the Williston Basin as shown below in Figure 1.

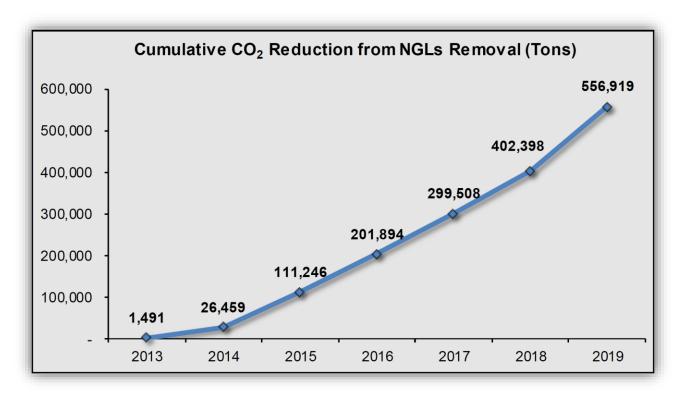


Figure 2: Cumulative CO<sub>2</sub> Reduction from NGLs Recovery

GTUIT does this by providing producers an option to flaring right at the wellhead. Our technology is based on the "Squeeze and Freeze" principal as shown in Figure 2. We connect to a stream of flare gas from a producing well then compress and refrigerate that gas right onsite. By compressing and cooling the gas, we extract as much as 70% of the mass of hydrocarbons in that flare stream. These hydrocarbons are liquified and are transported to market rather than being burned in the flare stack. Additionally, the remaining gas stream is available for power generation, CNG, LNG, or other beneficial uses.

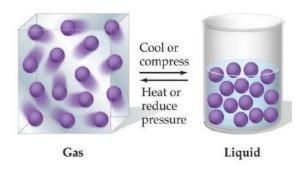


Figure 2: Squeeze and Freeze

To meet the needs of customers in the ever-changing Williston Basin, GTUIT had to design and manufacture their own equipment. This equipment had to be modular to accommodate the sometimes large but rapidly declining flare volumes on individual well pads. It also had to be very mobile to respond to the transient nature of their customers' flaring issues. It also had to be very reliable because flare capture does not just happen by being present on a well site, the equipment must be running 24/7 to do its job! So, after years of development and improvement, GTUIT's latest iteration of flare capture equipment is shown below in Figure 3.



Figure 3: GTUITs Generation III TSW-1000 Wellsite Gas Processing System

This mobile, modular, and ultra-reliable platform allows GTUIT to help producers with even the largest of flare volumes produced during the initial production of new wells. Even though most well sites in North Dakota are connected to gathering infrastructure, the massive flow rates experienced during early production months are overwhelming the existing takeaway capacity. As shown below, GTUIT equipment can deploy as much capacity as needed to serve the needs of their customers.



Figure 4: 3 MMCFD of installed capacity on a producing well in North Dakota

Additionally, GTUIT can bring along partners who can provide additional flare capture benefits such as LNG production as shown below.



Figure 5: 2 MMCFD of installed GTUIT flare capture equipment along with well site LNG production

Of course, all of this comes at a cost. Producers can get revenue from the recovered NGL stream but due to the up and down nature of NGL prices, flare capture is still an operating expense item on most sites. Up until last year, this expense was generally considered reasonable in comparison to the environmental value and the revenue of the produced oil.

However, in March of 2020, everything changed. The Covid-19 crisis along with the price war initiated by Russia and Saudi Arabia dramatically changed the landscape for oil and gas producers in western North Dakota. Prices and demand fell dramatically and every company in the oilfield was forced to restructure and adapt to minimal capital investment budgets, low prices, and low demand. This put many existing flare capture projects in a difficult situation and most projects were shut down as production was shut in or curtailed. During the downturn, GTUIT was forced to cut its staff of experts in North Dakota by 40% to keep the doors open.

As we start to see a modest recovery in oil prices, producers are cautiously looking to the future. They want to do the right thing with regards to flaring but, thanks to the economic environment, need a financial incentive to make the final decision to deploy flare capture solutions. Senate Bill 2328 is just what is needed to allow these good companies to again work towards improved flare reduction goals. This tax incentive could prove to be the tipping point for producers to produce on wells that are currently shut in or start to reduce the flare volumes on well sites where they are currently flaring. Additionally, it will allow GTUIT to bring back some of the great people that were working in North Dakota prior to March 2020 and get back to the task of helping improve the environmental footprint of North Dakota's oil and gas future.

We therefore urge a Do Pass on Senate Bill 2328. I would be happy to answer any questions.

#### Contact:

JAMES HAIDER, P.E. GTUIT - Chief Technology Officer (c) 406.461.8543 | (o) 406.867.6700 2924 Millennium Circle, Suite A Billings, MT 59102 JHaider@GTUIT.com

# Senate Energy and Natural Resources Committee

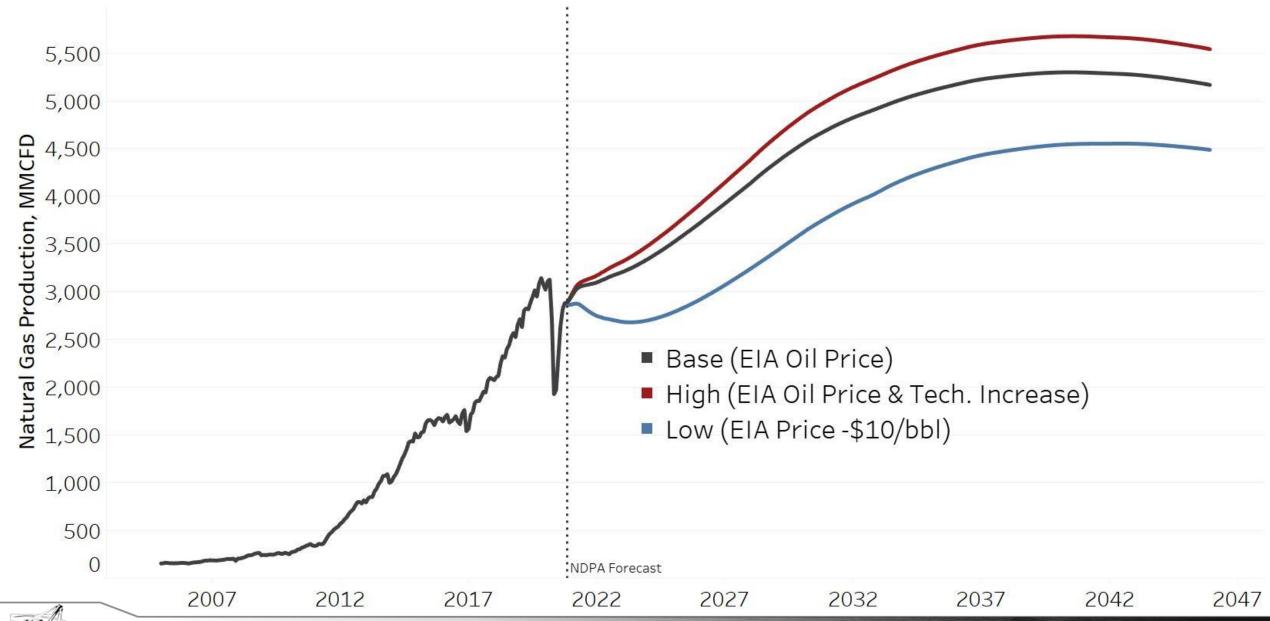
Bill 2328 – Neutral (Information)

Justin J. Kringstad

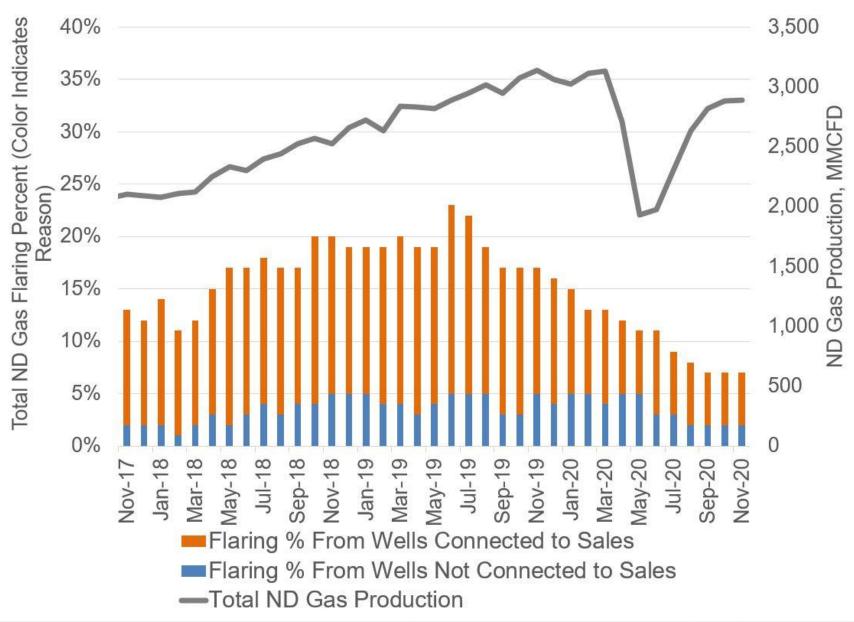
Geological Engineer
Director
North Dakota Pipeline Authority



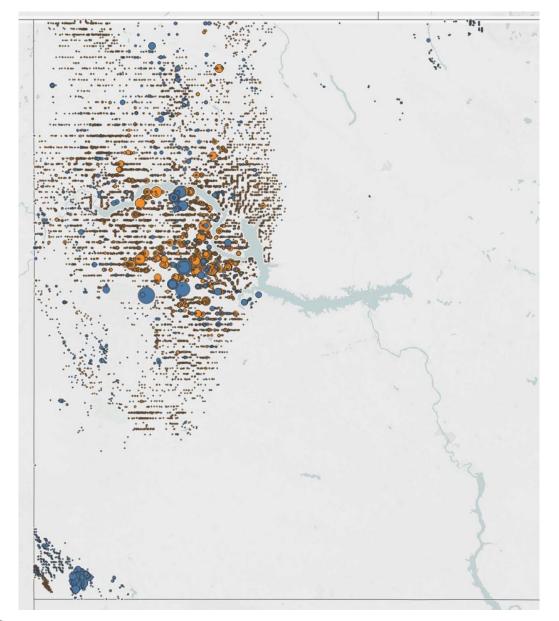
# ND Gas Production: EIA Price Deck



# Solving the Flaring Challenge

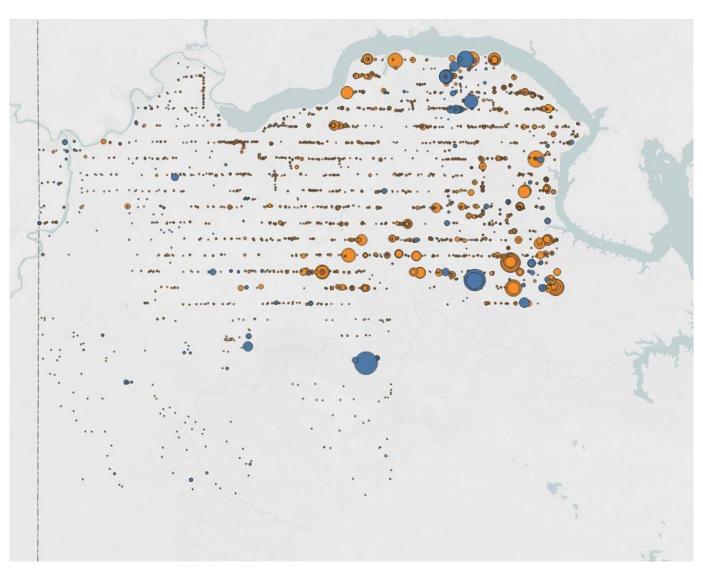


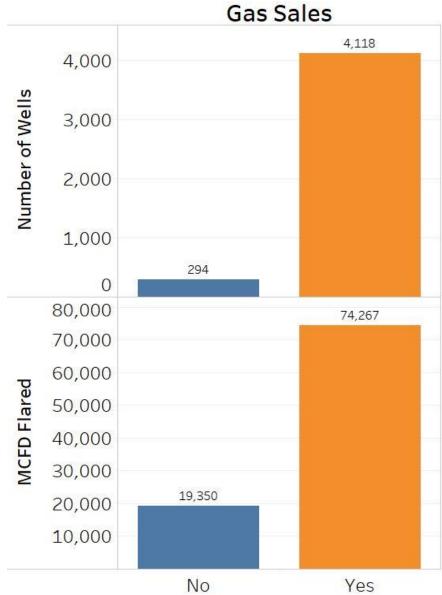
# Solving the Flaring Challenge



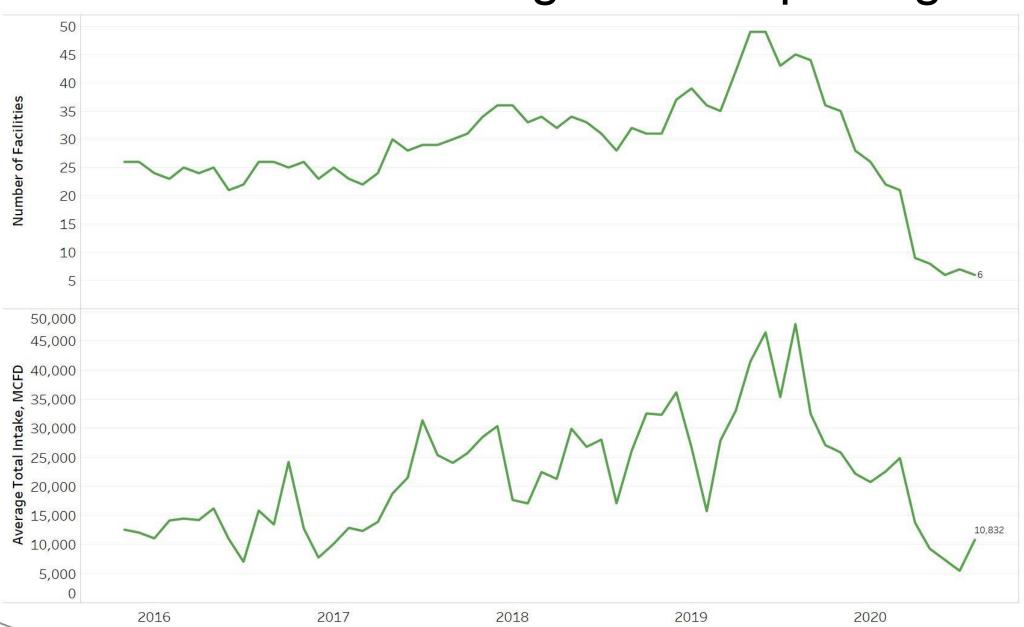


# Solving the Flaring Challenge: McKenzie County

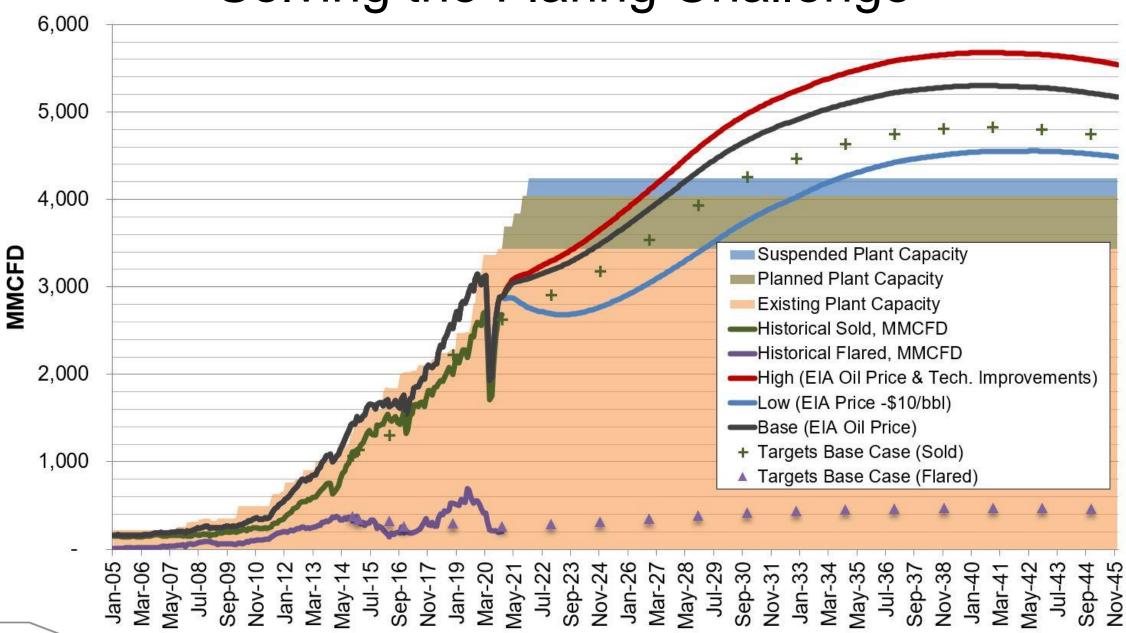




# Wellhead Processing Units Reporting\*

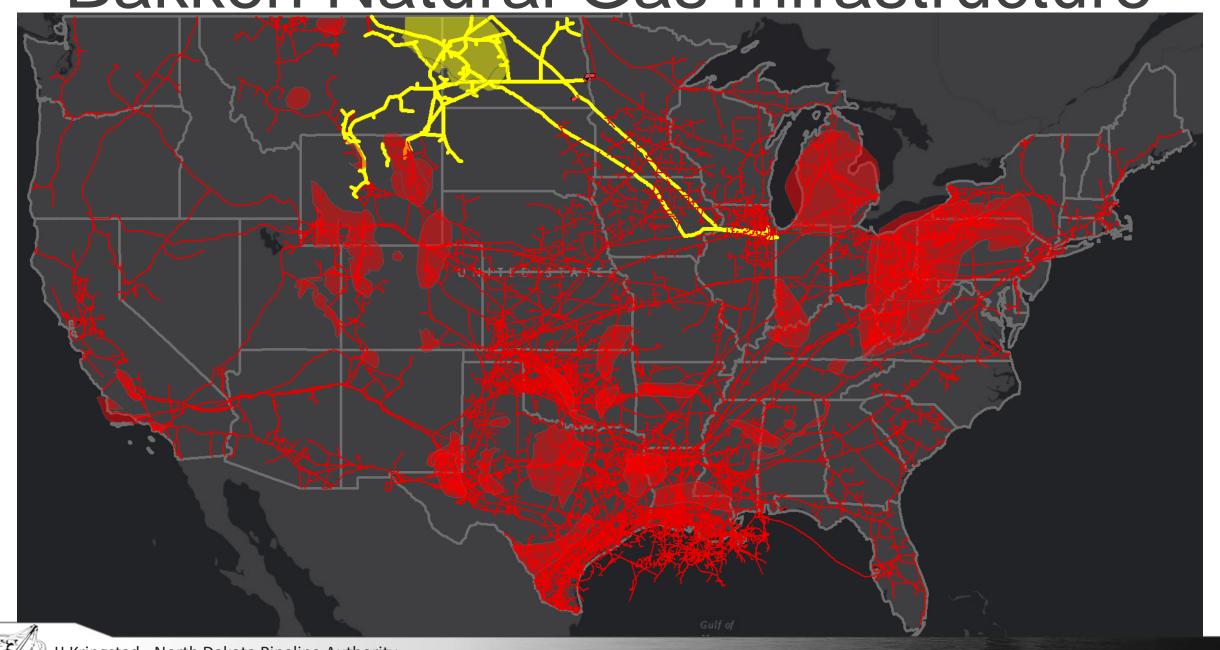


# Solving the Flaring Challenge



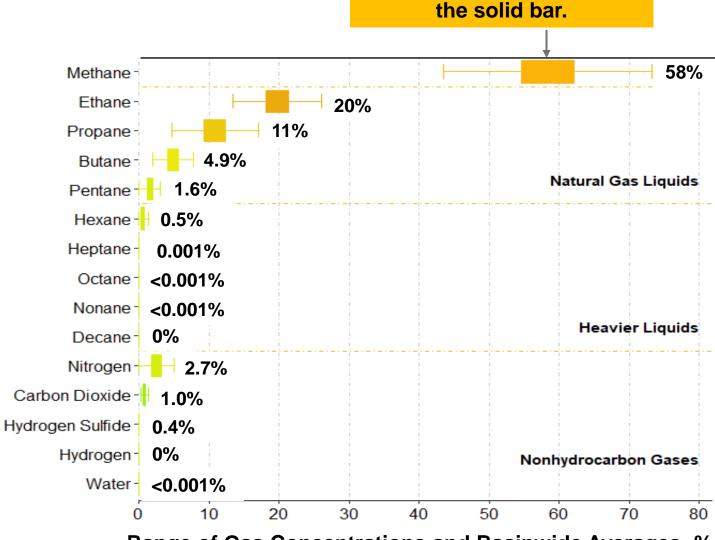


# Bakken Natural Gas Infrastructure



## Reference Slide – Bakken Gas Chemistry

Gas Component	BTU Per Cubic Foot
Methane	1,010
Ethane	1,758
Propane	2,498
Normal Butane	3,237
Isobutane	3,229
Pentanes+	3,978



Range of Gas Concentrations and Basinwide Averages, %



99% of values fall within

## **Contact Information**

Justin J. Kringstad, Director North Dakota Pipeline Authority

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

www.northdakotapipelines.com





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#### 2021 SENATE STANDING COMMITTEE MINUTES

#### **Energy and Natural Resources Committee**

Peace Garden Room, State Capitol

SB 2328 2/4/2021 PM

A BILL for an Act to create and enact a new section to chapter 57-51.1 of the North Dakota Century Code, relating to a credit for oil produced from a well site using an onsite flare mitigation system; to provide for application; and to provide an expiration date.

Chairman Kreun called the Committee Work to order at 4:02pm

#### **Discussion Topics:**

Amendment

Senator Patten moved to adopt an amendment #21.0935.02001 (4:02pm)

**Senator Roers** seconded the amendment (4:02pm)

Adopt Amendment	Vote
Senator Curt Kreun	Υ
Senator Jim P. Roers	Υ
Senator Dale Patten	N
Senator Merrill Piepkorn	Υ
Senator Donald Schaible	Υ
Senator Jessica Unruh Bell	Υ

Motion Passed 5-1-0

Senator Patten, moved DO PASS AS AMENDED (4:03pm)

**Senator Roers**, seconded DO PASS AS AMENDED (4:03pm)

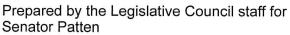
DO PASS AS AMENDED	Vote
Senator Curt Kreun	Υ
Senator Jim P. Roers	Υ
Senator Dale Patten	Υ
Senator Merrill Piepkorn	N
Senator Donald Schaible	Υ
Senator Jessica Unruh Bell	Υ

Motion Passed 5-1-0

**Senator Patten** will carry

**Chairman Kreun** called the hearing to a close at 4:03pm

Dave Owen, Committee Clerk



February 3, 2021



#### PROPOSED AMENDMENTS TO SENATE BILL NO. 2328

Page 3, line 5, after "flare" insert "mitigation"

Page 3, line 22, replace "production" with "flare mitigation"

Renumber accordingly

Module ID: s\_stcomrep\_22\_002
Carrier: Patten

Insert LC: 21.0935.02001 Title: 03000

#### REPORT OF STANDING COMMITTEE

SB 2328: Energy and Natural Resources Committee (Sen. Kreun, Chairman) recommends AMENDMENTS AS FOLLOWS and when so amended, recommends DO PASS (5 YEAS, 1 NAY, 0 ABSENT AND NOT VOTING). SB 2328 was placed on the Sixth order on the calendar.

Page 3, line 5, after "flare" insert "mitigation"

Page 3, line 22, replace "production" with "flare mitigation"

Renumber accordingly

**2021 HOUSE FINANCE AND TAXATION** 

SB 2328

#### 2021 HOUSE STANDING COMMITTEE MINUTES

#### **Finance and Taxation Committee**

Room JW327E, State Capitol

SB 2328 3/9/2021 AM

A bill relating to a credit for oil produced from a well site using an onsite flare mitigation system.

**Chairman Headland** opened the hearing at 9:00am.

Representatives	Present
Representative Craig Headland	Υ
Representative Vicky Steiner	Υ
Representative Dick Anderson	Υ
Representative Glenn Bosch	Υ
Representative Jason Dockter	Υ
Representative Sebastian Ertelt	Υ
Representative Jay Fisher	Υ
Representative Patrick Hatlestad	Υ
Representative Zachary Ista	Υ
Representative Tom Kading	Υ
Representative Ben Koppelman	Υ
Representative Marvin E. Nelson	Υ
Representative Nathan Toman	Υ
Representative Wayne A. Trottier	Υ

### **Discussion Topics:**

- Tax credit on oil wells
- Incentives to reduce flaring using innovation and technology
- Proposed amendment 21.0935.03001

**Senator Patten** introduced bill (#7982). Distributed a proposed amendment 21.0935.03001 (#8195).

Ron Ness, President of the North Dakota Petroleum Council, support #8090.

Cully Cavness, President of Crusoe Energy Systems, support #8106.

Jim Haider, Chief Technology Officer and Co-Founder of GTUIT, support #8123 and #8276.

Josh Teigen, Director of Economic Development and Finance Division with the North Dakota Department of Commerce, support #8008.

House Finance and Taxation Committee SB 2328 March 9, 2021 Page 2

**Chairman Headland** closed hearing at 10:26am.

Mary Brucker, Committee Clerk

#7982

### SB 2328 Floor Speech

Mr. President, I am introducing SB 2328 which is a bill that provides incentives to reduce flaring with innovation and technology. Managing the natural gas that is produced along with our abundant oil resource is a continuing issue that we as a state must deal with. Keeping up with the infrastructure needed to capture is very expensive and almost always operates behind the development of the oil infrastructure. Remote capture of the natural gas for other uses provide beneficial value, reduces flaring and reduces emissions.

Two examples of the technology that would qualify for the incentive are:

- 1. The conversion of stranded natural gas to run generators to provide electricity for energy intensive data processing.
- 2. Another example extracts as much as 70% of the mass of hydrocarbons that would go to the flare stream. These are then liquified and transported to market. Additionally, the remaining gas stream is available for power generation or other beneficial uses.

There are four key parts of the bill I want to address.

- 1. This bill entitles the producer to a \$6,000 per month credit per well against the tax liability under the Oil Extraction Tax section of Century Code. The credit may be claimed for up to twelve months for a total of \$72,000/well. The credit only applies to those wells which are not connected to a gas pipeline or if they are connected, there is insufficient capacity in the line to handle all the gas being produced. In other words, it applies to natural gas that would be a candidate for flaring. It also would not apply to any gas that would be used in the normal production operations of a well, to stripper wells, or to wells that are technically and commercially capable of connecting to a gas pipeline. The target is the gas subject to flaring of which no extraction tax is collected anyway.
- 2. The bill includes an opt-in provision for wells located within the boundaries of the Fort Berthold Indian Reservation if the Three Affiliated Tribes request to be included by notification to the ND Tax Commissioner.
- 3. When it comes to natural gas, the most efficient business model would be to flare all of it because of the very low value of the gas. This, for so many

- reasons such as environmental concerns and it being waste on a non-renewable resource make this an untenable option. That is why the energy industry has spent more than \$20 billion on gas infrastructure in ND. And this is the right thing to do. We should be making every effort to minimize our carbon footprint as we continue to develop our energy resources.
- 4. Finally, while this does carry a tax credit of up to \$72,000/well. The credit applies to gas where no tax revenue would be generated if the gas was flared. It also, could potentially result in a tax revenue increase if the operating company is able to bring a well online sooner as a result of being able to utilize gas that had no access to the pipeline system. When a well has one day of delayed production, the revenue from that day is not realized the next day, it is realized at the end of the well's life.

This bill contains a three-year sunset which will allow review by the next legislative body.

There is not enough information on utilization for the tax department to determine a fiscal note.

Your Energy and Natural Resources Committee voted 5-1 with a DO PASS recommendation and ask that you concur.

21.0935.03001 Title. Prepared by the Legislative Council staff for Senator Patten

March 8, 2021

#### PROPOSED AMENDMENTS TO ENGROSSED SENATE BILL NO. 2328

Page 1, line 14, after "collecting" insert "or utilizing"

Renumber accordingly



#### Senate Bill 2328

#### **Testimony of Ron Ness**

### **House Finance and Taxation Committee**

March 9, 2021

Chairman Headland and members of the Committee, my name is Ron Ness, president of the North Dakota Petroleum Council. The North Dakota Petroleum Council represents more than 650 companies in all aspects of the oil and gas industry, including oil and gas production, refining, pipeline, transportation, mineral leasing, consulting, legal work, and oilfield service activities in North Dakota. I appear before you today in support of Senate Bill 2328.

Senate Bill 2328 is a strong message from the State of North Dakota in support of continued efforts to reduce flaring with innovation and technology. The Bakken is, first and foremost, an oil play. The abundant rich natural gas that is produced along with the oil has been a challenge for producers since the first big Bakken well was drilled in Parshall field in late 2006. We lacked the infrastructure necessary to capture the gas and our location, in the middle of the continent and far from the marketplace, made for challenging economics in managing the gas we were producing.

On top of that, the North Dakota Industrial Commission took steps to require oil operators to capture a specified percentage of their gas or face production restrictions. This was an additional challenge for operators and midstream developers, now with a deadline attached, to not only build processing plants but also get easements and pipelines built to every well site.

Fifteen years and \$20 billion dollars later, the industry has finally built the infrastructure to now capture 93% of the natural gas produced each day. This is a huge achievement given the stubborn trend of low natural gas prices and the huge investments required to build the complex infrastructure related to handling and processing the Bakken's rich natural gas. Frankly, it's an amazing accomplishment and an applaudable solution to a highly publicized and controversial issue.

So, what else can be done to capture even more of the natural gas that might be stranded, either waiting for the pipeline to arrive or another plant to be expanded. Over the past decade, I've heard from around 250 entrepreneurs from all over the world promoting new ideas for remote well site technologies to help solve our state's natural gas flaring challenge and to find value for the gas until a pipeline arrives. My message has always been we hope you have the answer! However, that solution must be able to operate on a paper-thin margin, it must operate efficiently at sub-zero temperatures, be portable and fit on the well pad, and not hurt the economics of the well.

This, along with the unpopularity of the deducts on gas production costs as well as climate and other concerns, have made this a tough business model. However, today, I have two NDPC members that will testify in support of this bill. They have met these challenges head-on and made remote capture technologies successful in the Bakken. SB 2328 will assist additional companies and technologies in overcoming the economic hurdles of remote gas capture in the Bakken.

First to testify will be Cully Cavness with Crusoe Energy Services followed by Jim Haider with GTUIT. We have worked on this bill concept for nearly a year and a lot of thought has gone into the right type of incentive that helps the oil producer reduce the costs of trying these new technologies. The bill also keeps intact the acknowledgement that midstream companies have invested billions of dollars to gather, transport, process, and export this gas and the fact that in most cases those entities have a legal right to this gas when their infrastructure is capable and ready to take it. The language in this bill makes that clear and with that the industry is supportive of every effort to reduce as much of the flaring as possible in the Bakken.

We support the amendment offered by the bill's prime sponsor and urge a **Do Pass** recommendation on Senate Bill 2328. I would be happy to answer any questions.

# A New Technology For Flare Mitigation

#8106

Crusoe Energy Systems Inc.



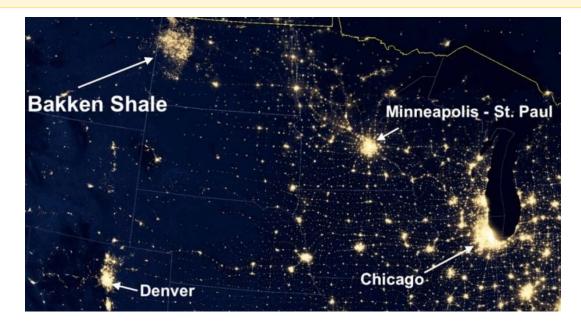
Cully Cavness
Co-Founder, President and COO







200-500 million cubic feet of gas flared daily in North Dakota





# The Digital Flare Mitigation Solution

- Crusoe converts "stranded" natural gas into electricity for energy-intensive computing at the well site
- Digital Flare Mitigation<sup>®</sup> solves critical regulatory and environmental challenges for oil and gas companies by achieving <u>beneficial use</u>, <u>reducing flaring</u> and <u>reducing emissions</u>

Crusoe's Objective: help operators solve the regulatory and environmental challenges of stranded and uneconomic gas



### Why Digital Flare Mitigation?

- ✓ Modular design allows for rapid turnkey deployment and mobilization
- ✓ Highly scalable up to many mmcfd
- ✓ High reliability with few failure points



# Digital Flare Mitigation







### **Energy-Intensive Computing**







- The Digital Flare Mitigation® system is a mobile and modular assembly of power generation, computing and remote telecommunications components optimized specifically for stranded gas resources
- Designed for portability, rapid commissioning, rugged oilfield conditions and modular scalability



# Easy Integration, Compact Footprint





# Step 1: Connection Point

Operator provides simple manifold and valve to existing gas line

Typically, manifold directly onto line leading to flare

### Step 2: Generator

Crusoe provides generator system, delivered on portable trailer or skid

1 Day

### Step 3: Compute Module

Computing modules delivered by truck

Satellite antennae installed and aligned after delivery

### Step 4: Startup

Computers connected to generator

Generator start up

Flare becomes back-up gas plan

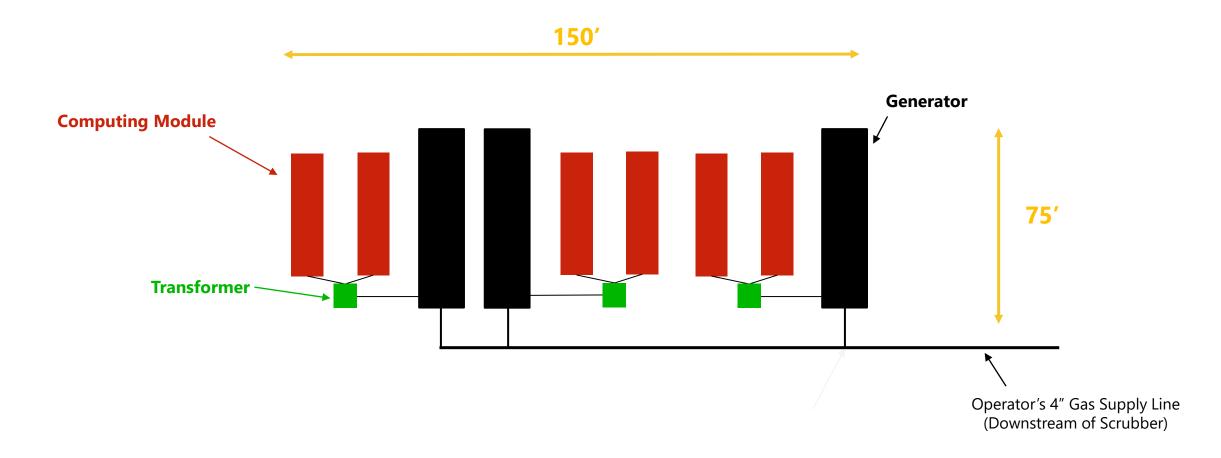
1-2 Days

1-5 Days

1 Day



# Site Diagram w/Skid Generators

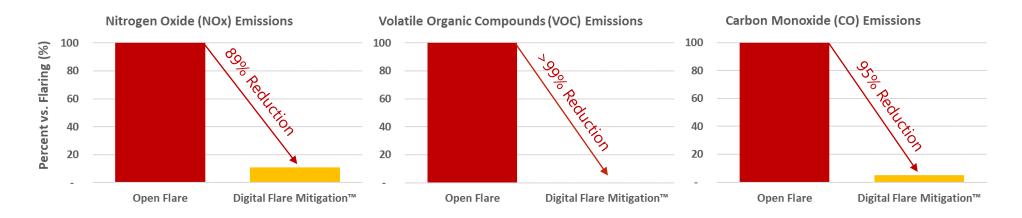


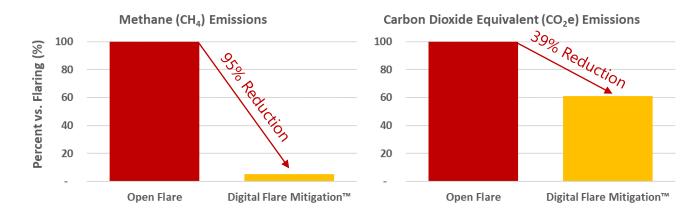
900 Mcfd total: each 300 Mcfd package requires 50' x 75'



### Crusoe Reduces Emissions

 Relative to flaring, Crusoe's Digital Flare Mitigation® technology achieves deep reductions in emissions of methane, volatile organic compounds (VOCs), nitrogen oxides (NOx), carbon monoxide (CO), smogforming compounds and CO2-equivalent greenhouse gasses.







# Crusoe Digital Pipeline™ Architecture

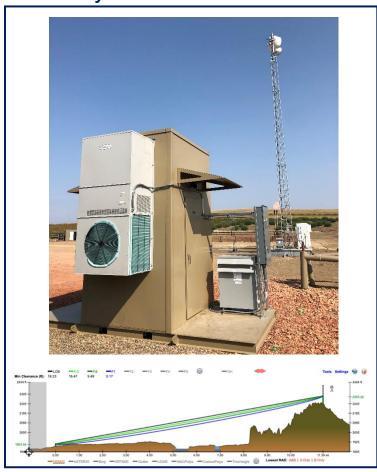
Satellite: 40+ connections, redundant satellites





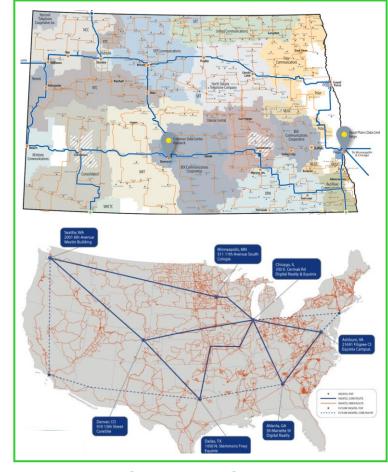
30 to 100 Mbps, ~600ms latency

Wireless: hybrid microwave and millimeter wave



150 to 600 Mbps, <10ms latency (1-way)

Fiber: combining private and public circuits



1 to 10 Gbps, <10ms latency (1-way)



# Use Cases for Digital Flare Mitigation®

## **Existing Flare Gas**

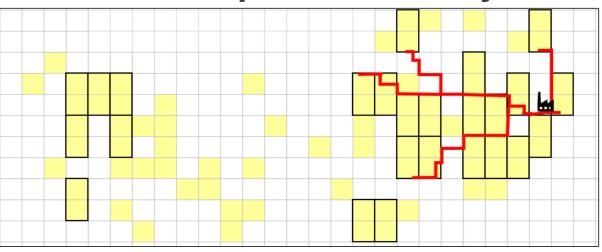


Scalable gas-capture alternative for producing wells that are currently flaring

### **USE CASES**

- ✓ Producing wells without midstream infrastructure
- ✓ Delayed pipeline arrival
- ✓ Extended gas plant downtime
- ✓ Pipeline capacity challenges

### **Development Flexibility**



Gas offtake plan for future wells to be drilled outside existing infrastructure

### **USE CASES**

- ✓ Drilling <u>exploratory</u> or <u>step-out</u> wells ahead of pipeline build
- ✓ Satisfy <u>expiring leases</u> outside of existing infrastructure service areas



# Case 1: Right-of-Way Issues

### **Topography**

### **Surface Owner Challenges**

Badlands and other natural features have caused midstream challenges for years

*Inability to get Right-of-Way agreement for some gathering systems or pipelines* 



Severe topography has no impact on DFM effectiveness

### **Digital Flare Mitigation**<sup>®</sup>:

- ✓ Alternative gas solution if traditional infrastructure is delayed or not available
- ✓ Allows for development and production from otherwise stranded areas



### Case 2: Midstream Constraints

Constraints in compression or processing capacity can leave a well without gas takeaway for extended time periods

Extended Gas Processing Plant Downtime

Interruptible Gas Contracts

**Compressor Station Issues** 

**Downstream Capacity Limits** 



### **Digital Flare Mitigation®:**

- ✓ Allows operator to continue producing oil despite midstream constraints while preventing regulatory or emissions violations
- ✓ Operates reliably and independently of downstream infrastructure availability



## Case 3: Exploration Wells & Delineation



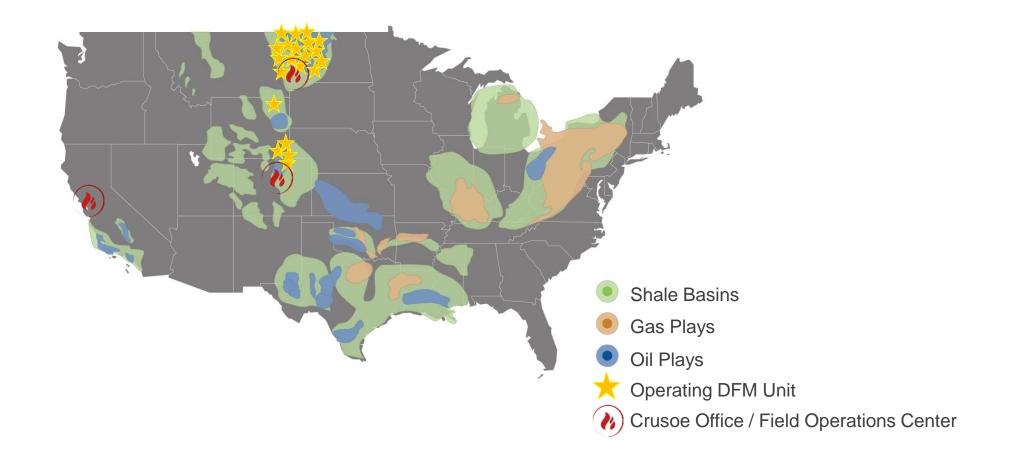
### **Digital Flare Mitigation**<sup>®</sup>:

- ✓ Prevents flaring while evaluating performance of exploration wells
- ✓ Allows operator to more quickly and flexibly delineate acreage position
- ✓ Easy mobilization allows DFM to act as stop-gap prior to arrival of pipeline



### Focused on the Bakken

 Crusoe's primary area of operations is the Bakken, with additional activity in the Powder River Basin and Denver Basin. We are proud to employ a large and growing staff in our Williston operations center.





# Crusoe's Background

- Operating since 2018
  - 38 Digital Flare Mitigation® systems operating in Powder River Basin (WY), Williston Basin (ND and MT) and DJ Basin (CO and WY)
  - Ongoing simultaneous multi-basin operations
  - Operations centers in Williston, ND and Aurora, CO
- Only one minor recordable safety incident in company history
- Approved MSAs with multiple publicly traded oil and gas companies
  - ISN & PEC third party verification of safety procedures and training policies
- Crusoe consults with leading regulatory and permitting firms to ensure compliance and positive stakeholder engagement
- Operations & business development teams assembled from high-quality E&P and service companies including:





















### **CRUSOE OPERATIONS TEAM**

### Ken Parker, VP Facilities Engineering, Operations & Safety Manager

- 25 years of midstream, compression and facilities experience domestically and internationally
- Lifetime safety record: EMR of 0.2 vs. industry average of ~0.6-2.0

#### **Debbie Meeks, Williston Basin Operations Manager**

 35 years of gas-powered engine and generator experience for upstream and midstream companies

### **Travis Rynestad, Lead Electrician**

Master electrician with 25 years of oilfield electrical systems experience

#### **Nick Corredor, Deployment Manager**

Field operational leadership roles within hydraulic fracturing service companies

<u>Total field operations staff of more than 25 individuals provides</u> <u>reliable and continuous support throughout multiple basins</u>



# Management Team, Organization Structure



NITIN PERUMBETI



MATTHEW DENEZZA



CHASE LOCHMILLER (CEO & Co-Founder)



**CULLY CAVNESS** (President & Co-Founder)

### Software / Networking



CAGRI AKSAY (VP Software Engineering)



SYLVAIN VAILLANCOURT (Director of Network

### Finance



JAMIE ZYNGER



MARIAM NAZEMI (Senior Financial Analyst)



MARK NOWAKIWSKY (Financial Analyst)

### Operations / Engineering



SHAYLA MARTIN (Project Engineer)



KEN PARKER (VP Facilities Engineering & Operations)



**DEBBIE MEEKS** 

(Basin Manager-Mechanical &

BROOK KIMBER (Director of Purchasing & Logistics)



(Project Engineer)



NICK CORREDOR (Field Operations Manager)

### Business Dev.



ANDREW LIKENS (VP Business Development)



ANNA PIERINI (Business Development Manager)

### Senate Bill 2328

- Creates an extraction tax credit to reduce flaring with Onsite Flare Mitigation Systems
  - Capped at \$6,000 per well per month
  - Maximum of 12 months
  - Sunsets in 2023
  - Language prevents abuse and ensures that pipelines will continue to be first resort
- Helps operators overcome installation costs of flare mitigation systems
  - Piping and plumbing gas lines, valves, etc.
  - Dirt work
  - In the current environment, many operators can't justify even modest capex unless there is a clear near-term return
- Generates many economic benefits for ND, often in excess of the cost of the tax credit
- Attracts a new industry to North Dakota: high performance data centers
  - Jobs, skills and training that people are excited about
  - Supports service industries (electrical, logistics, roustabout, fabrication, dirt work, suppliers)
- Proactive move ahead of potential legislation from new administration in Washington
- In line with state's goals to reduce waste and flaring and protect the environment





# A New Technology For Flare Mitigation

Crusoe Energy Systems Inc.



Cully Cavness
Co-Founder, President and COO



### GTUIT Testimony to the 67<sup>th</sup> Legislative Assembly of North Dakota In Support of Senate Bill 2328 February 4<sup>th</sup>, 2021

GTUIT would like to express their full support for Senate Bill 2328 currently in front of the Legislative Assembly of North Dakota. This bill will serve to incentivize oil and gas operators in North Dakota to take positive and beneficial action towards further reducing flaring in the Williston Basin. Great strides towards reducing flare volumes have been made in the past several years, but, with the current economic climate facing producers, the incremental tax savings offered by SB 2328 is exactly what is needed to incentivize producers to consider pursuing flare mitigation efforts.

GTUIT has been involved in flare reduction in North Dakota from the very beginning. The company was founded in 2010 by Brian Cebull, Jim Haider, and Mark Peterson – three engineers from Montana who all have a long history in the oil and gas business. The flaring issue at that time in the Williston Basin was capturing national attention, and producers were looking everywhere for a solution. This allowed the GTUIT founders the opportunity to bring their combined skillsets to bear on that formidable challenge.

The associated gas being flared from horizontal Bakken wells was a very unique challenge in 2011 but GTUIT was able to leverage relationships and work with a forward-thinking group of initial customers who were committed to getting in front of the flaring problem before there were any regulations. From those humble beginnings, GTUIT was able to grow from a three-person entrepreneurial shop to a full-fledged oil field service and manufacturing company that employed as many as 75 people with more then 50 MMCFD of installed flare treatment capacity in 2019. Even though we have grown to being a global leader in gas processing and flare reduction, GTUIT's core business has been serving the producers in the Williston Basin and providing innovative and reliable solutions to their flaring challenges. GTUIT prides itself on leading the industry in wellsite gas utilization. Our mission statement is as follows:

Continue to grow as the global leader in distributed natural gas processing including the recovery, utilization, and monetization of associated natural gas for our customers- providing leading innovation and unparalleled customer service that results in reduced emissions and the prevention of waste.

Additionally, we hold to the core values upon which the company was founded in 2010:

- **Safety** Our top priority. Everyone goes home healthy every day.
- Innovation- We use innovation to solve our customers' problems.
- **Integrity** We do the right thing, every time.
- **Customer Service** Complete turn-key operations focused on customer service and communication.

This focus on safety, service, and quality has paved the way for GTUIT's 9+ years of flare capture experience with of 800,000 operating hours and a record of 0.0 TRIR (Total Recordable Incident Rate). Along the way we have processed more than 30 billion cubic feet of flare gas and recovered over 90 million gallons of Natural Gas Liquids from flare streams. In the end, the goal of flare capture is to

benefit the environment we all live in and GTUIT is most proud of being able to say that by processing the gas and recovering the liquids, we have prevented nearly 600,000 tons of direct CO<sub>2</sub> emissions in the Williston Basin as shown below in Figure 1.

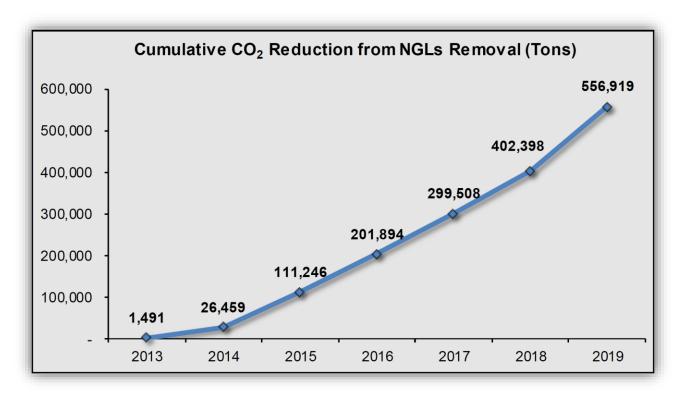


Figure 2: Cumulative CO<sub>2</sub> Reduction from NGLs Recovery

GTUIT does this by providing producers an option to flaring right at the wellhead. Our technology is based on the "Squeeze and Freeze" principal as shown in Figure 2. We connect to a stream of flare gas from a producing well then compress and refrigerate that gas right onsite. By compressing and cooling the gas, we extract as much as 70% of the mass of hydrocarbons in that flare stream. These hydrocarbons are liquified and are transported to market rather than being burned in the flare stack. Additionally, the remaining gas stream is available for power generation, CNG, LNG, or other beneficial uses.

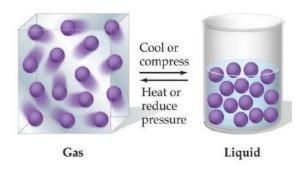


Figure 2: Squeeze and Freeze

To meet the needs of customers in the ever-changing Williston Basin, GTUIT had to design and manufacture their own equipment. This equipment had to be modular to accommodate the sometimes large but rapidly declining flare volumes on individual well pads. It also had to be very mobile to respond to the transient nature of their customers' flaring issues. It also had to be very reliable because flare capture does not just happen by being present on a well site, the equipment must be running 24/7 to do its job! So, after years of development and improvement, GTUIT's latest iteration of flare capture equipment is shown below in Figure 3.



Figure 3: GTUITs Generation III TSW-1000 Wellsite Gas Processing System

This mobile, modular, and ultra-reliable platform allows GTUIT to help producers with even the largest of flare volumes produced during the initial production of new wells. Even though most well sites in North Dakota are connected to gathering infrastructure, the massive flow rates experienced during early production months are overwhelming the existing takeaway capacity. As shown below, GTUIT equipment can deploy as much capacity as needed to serve the needs of their customers.



Figure 4: 3 MMCFD of installed capacity on a producing well in North Dakota

Additionally, GTUIT can bring along partners who can provide additional flare capture benefits such as LNG production as shown below.



Figure 5: 2 MMCFD of installed GTUIT flare capture equipment along with well site LNG production

Of course, all of this comes at a cost. Producers can get revenue from the recovered NGL stream but due to the up and down nature of NGL prices, flare capture is still an operating expense item on most sites. Up until last year, this expense was generally considered reasonable in comparison to the environmental value and the revenue of the produced oil.

However, in March of 2020, everything changed. The Covid-19 crisis along with the price war initiated by Russia and Saudi Arabia dramatically changed the landscape for oil and gas producers in western North Dakota. Prices and demand fell dramatically and every company in the oilfield was forced to restructure and adapt to minimal capital investment budgets, low prices, and low demand. This put many existing flare capture projects in a difficult situation and most projects were shut down as production was shut in or curtailed. During the downturn, GTUIT was forced to cut its staff of experts in North Dakota by 40% to keep the doors open.

As we start to see a modest recovery in oil prices, producers are cautiously looking to the future. They want to do the right thing with regards to flaring but, thanks to the economic environment, need a financial incentive to make the final decision to deploy flare capture solutions. Senate Bill 2328 is just what is needed to allow these good companies to again work towards improved flare reduction goals. This tax incentive could prove to be the tipping point for producers to produce on wells that are currently shut in or start to reduce the flare volumes on well sites where they are currently flaring. Additionally, it will allow GTUIT to bring back some of the great people that were working in North Dakota prior to March 2020 and get back to the task of helping improve the environmental footprint of North Dakota's oil and gas future.

We therefore urge a Do Pass on Senate Bill 2328. I would be happy to answer any questions.

#### Contact:

JAMES HAIDER, P.E. GTUIT - Chief Technology Officer (c) 406.461.8543 | (o) 406.867.6700 2924 Millennium Circle, Suite A Billings, MT 59102 JHaider@GTUIT.com





# GTUIT. HISTORY, MISSION, AND VALUES

**HISTORY**: GTUIT was founded in 2011 by three Oil and Gas Industry Engineers in response to the North Dakota flaring issue. The company has grown to the leader in North Dakota flare gas capture employing as many as 75 people and operating over 50 MMCFD of processing capacity on as many as 17 individual sites at once in 2019.

**MISSION**: "Continue to grow as the global leader in distributed natural gas processing including the recovery, utilization, and monetization of associated natural gas for our customers- providing leading innovation and unparalleled customer service that results in reduced emissions and the prevention of waste."

VALUES:

**Safety-** Our top priority. Everyone goes home healthy every day. **Innovation-** We use innovation to solve our customers' problems. **Integrity-** We do the right thing, every time.

**Customer Service-** Complete turn-key operations focused on customer service and communication.

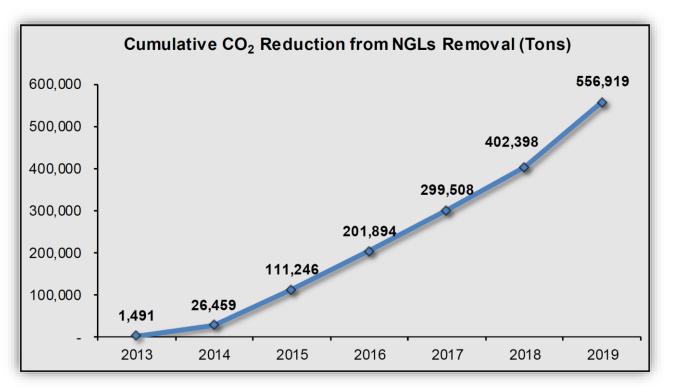


# **GTUIT EXPERIENCE**

- Industry leader in engineering, manufacturing, & operation of mobile & modular associated gas processing equipment.
- Over 9 year's experience & 800,000 operating hours
- Full service, turn-key operations
- ISO 9001:2015 Certified Manufacturing QMS

# 30+ BCF processed

# 90+ Million Gallons of NGLs recovered

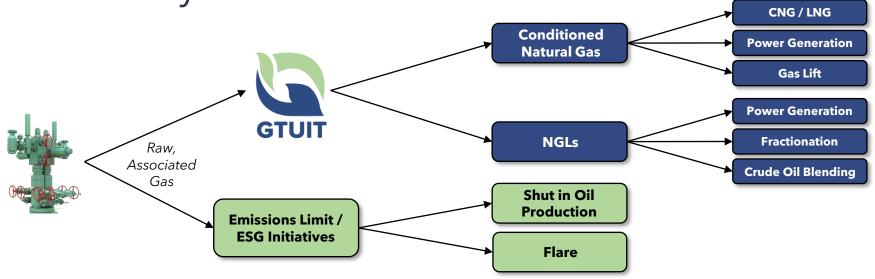




# **GTUIT. NATURAL GAS UTILIZATION SOLUTIONS**

- Flare gas capture/utilization
- Fuel conditioning for engines & turbines
- Tank vapor monetization

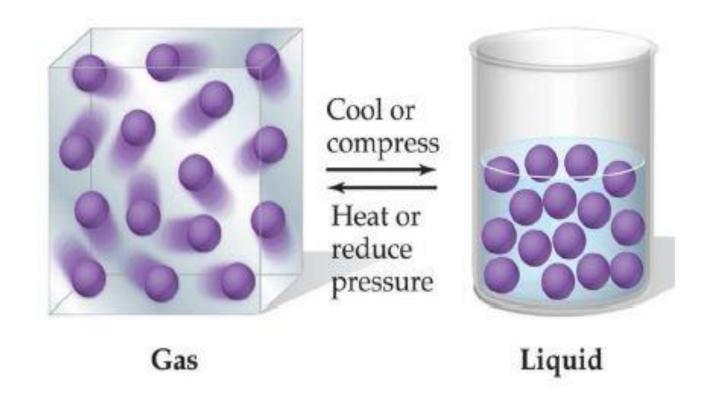
Gas lift systems





# GTUIT<sub>8</sub> - SQUEEZE AND FREEZE (TSW)

- 1. Compress the gas into a small space
- 2. Refrigerate the gas to remove heat
- 3. Phase change!
- 4. Separate the condensed NGLs from the clean dry gas





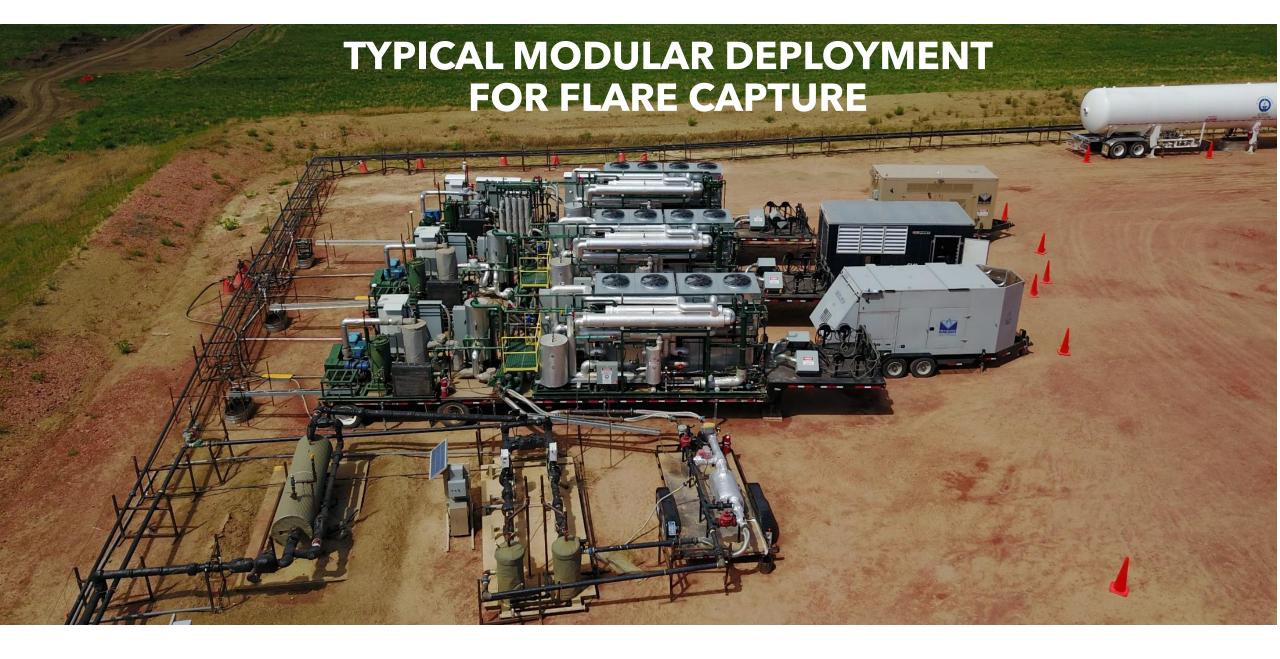
# **GTUIT's patent-pending processing system**

# THE SOLUTION FOR STRANDED GAS

- ✓ Chiller based technology
- Mobile & modular for rapid deployment
- Designed specifically for associated gas
- ✓ Proven technology with the industries highest uptime performance



















### **Department of Commerce Testimony SB 2328 February 2, 2021 House Finance and Taxation Committee**

Mr. Chairman and Members of the Committee,

My name is Josh Teigen and I have the honor of serving as the Director for the Economic Development and Finance Division for the ND Department of Commerce.

I am here today to testify in support of SB 2328 both on behalf of the ND Dept of Commerce, but also on behalf of the Empower Commission. By statute, the Empower Commission is to be chaired by a member of the Dept of Commerce. While I am not that Chairperson, I am here on behalf of James Leiman, who currently serves as chair.

The Empower Commission supports SB 2328 as a valuable tool for our energy industry and the infrastructure required to move us toward the future of an ever-evolving energy industry. The reduction of flaring is important to the ND economy and assists the state in access to capital through working towards ESG compliance.

This bill incentivizes the capture of natural gas and has been thoroughly vetted by private industry and government partners. I encourage you to pass this bill and will now stand for any questions that you may have.

#### 2021 HOUSE STANDING COMMITTEE MINUTES

#### **Finance and Taxation Committee**

Room JW327E, State Capitol

SB 2328 3/9/2021 PM

A bill relating to a credit for oil produced from a well site using an onsite flare mitigations system.

Chairman Headland opened up for discussion at 2:33pm.

Representatives	Present
Representative Craig Headland	Υ
Representative Vicky Steiner	Υ
Representative Dick Anderson	Υ
Representative Glenn Bosch	Υ
Representative Jason Dockter	AB
Representative Sebastian Ertelt	Υ
Representative Jay Fisher	Υ
Representative Patrick Hatlestad	Υ
Representative Zachary Ista	Υ
Representative Tom Kading	Υ
Representative Ben Koppelman	Υ
Representative Marvin E. Nelson	Υ
Representative Nathan Toman	Υ
Representative Wayne A. Trottier	Υ

#### **Discussion Topics:**

- Amendment 21.0935.03001
- Committee decision

Representative D. Anderson made a motion for a Do Pass.

Representative Fisher seconded the motion.

Representative Ista reminded the committee of an amendment 21.0935.03001 (#8195).

Representative D. Anderson and Representative Fisher withdrew their motions.

Representative M. Nelson made a motion to adopt the amendment 21.0935.03001.

Representative Ista seconded the motion.

Voice vote-motion carried.

Representative D. Anderson made a motion for a DO PASS AS AMENDED.

### Representative Fisher seconded the motion.

### Roll call vote:

Representatives	Vote
Representative Craig Headland	Υ
Representative Vicky Steiner	Υ
Representative Dick Anderson	Υ
Representative Glenn Bosch	Υ
Representative Jason Dockter	AB
Representative Sebastian Ertelt	Υ
Representative Jay Fisher	Υ
Representative Patrick Hatlestad	Υ
Representative Zachary Ista	Υ
Representative Tom Kading	Υ
Representative Ben Koppelman	Υ
Representative Marvin E. Nelson	Υ
Representative Nathan Toman	Υ
Representative Wayne A. Trottier	Υ

Motion carried 13-0-1

Representative D. Anderson is the bill carrier.

Chairman Headland closed the discussion at 2:39pm.

Mary Brucker, Committee Clerk

Prepared by the Legislative Council staff for Senator Patten

March 8, 2021



### PROPOSED AMENDMENTS TO ENGROSSED SENATE BILL NO. 2328

Page 1, line 14, after "collecting" insert "or utilizing" Renumber accordingly

Module ID: h\_stcomrep\_41\_002 Carrier: D. Anderson Insert LC: 21.0935.03001 Title: 04000

#### REPORT OF STANDING COMMITTEE

SB 2328, as engrossed: Finance and Taxation Committee (Rep. Headland, Chairman) recommends AMENDMENTS AS FOLLOWS and when so amended, recommends DO PASS (13 YEAS, 0 NAYS, 1 ABSENT AND NOT VOTING). Engrossed SB 2328 was placed on the Sixth order on the calendar.

Page 1, line 14, after "collecting" insert "or utilizing"

Renumber accordingly

21.0935.03001 Title. Prepared by the Legislative Council staff for Senator Patten

March 8, 2021

#### PROPOSED AMENDMENTS TO ENGROSSED SENATE BILL NO. 2328

Page 1, line 14, after "collecting" insert "or utilizing"

Renumber accordingly