# Southwestern Energy®

# Energy Information Administration

Washington, DC

James W. Vick July 12, 2016

### **Forward-Looking Statements**



This presentation includes forward-looking statements. Forward-looking statements relate to future events and anticipated results of operations, business strategies, and other aspects of our operations or operating results. In many cases you can identify forward-looking statements by terminology such as "anticipate," "intend," "plan," "project," "estimate," "continue," "potential," "should," "could," "may," "will," "objective," "guidance," "outlook," "effort," "expect," "believe," "predict," "budget," "projection," "goal," "forecast," "target" or similar words. Statements may be forward looking even in the absence of these particular words. Where, in any forward-looking statement, the company expresses an expectation or belief as to future results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, there can be no assurance that such expectation or belief will result or be achieved. The actual results of operations can and will be affected by a variety of risks and other matters including, but not limited to, changes in commodity prices; changes in expected levels of natural gas and oil reserves or production; operating hazards, drilling risks, unsuccessful exploratory activities; limited access to capital or significantly higher cost of capital related to illiquidity or uncertainty in the domestic or international financial markets; international monetary conditions; and general domestic and international economic and political conditions; as well as changes in tax, environmental and other laws applicable to our business. Other factors affecting our business generally as set forth in our filings with the Securities and Exchange Commission. Unless legally required, Southwestern Energy Company undertakes no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

Cautionary Note to U.S. Investors –The SEC permits oil and gas companies, in their filings with the SEC, to disclose only proved, probable and possible reserves. We use the term "resource" in this presentation that the SEC's guidelines prohibit us from including in filings with the SEC. U.S. investors are urged to consider closely the oil and gas disclosures in our Form 10-K and other reports and filings with the SEC. Copies are available from the SEC and from the SWN website.

The contents of this presentation are current as of April 28, 2016.





- 3<sup>rd</sup> Largest Natural Gas Producer in the continental US
- Headquartered in Spring, Texas
- Operations in Arkansas, Pennsylvania and West Virginia
- 1,500 employees

### 2016 Tenents

- HSE
  - Core Value– Our commitment to health, safety and the environment is unwavering.
  - Protect our employees and the communities in which we operate
  - Safeguard the environment
- Live within Cash Flow
  - Southwestern is committed to operating and investing within cash flow
- Margin Enhancement
  - Cost Control
  - Production Enhancement



### Focus on Premier Quality Assets







### Well Life Cycle





WellAExplorationConstructionCompletionsProduction&

Abandonment & Reclamation



### Natural Gas Supply Chain



### **Natural Gas Supply Chain**

Natural gas systems encompass wells, gas gathering and processing facilities, storage, and transmission and distribution pipelines.



Source: Adapted from American Gas Association and EPA Natural Gas STAR Program



# Technology to support the Well Life Cycle and the Natural Gas Supply Chain

SWN Southwestern Energy®

- Exploration
  - Kingdom
  - ArcGIS
  - P2 Land
- Drilling
  - Kingdom
  - Wellview
  - Siteview
- Completions
  - Kingdom
  - Wellview
- Production
  - Cygnet SCADA
  - Enterprise Upstream (EU)
  - FloCal





## Drilling and Field Technology













## Frac Spread – Fayettville







## Frac Spread – Appalachia







### The Well Bore





BOE Report – July 19, 2013

### Abandonment and Reclamation







# Protecting our Communities and Our Environment



Back to swnRoute 1 🗿 🕴 54% 💶 from 1000 SWN Drive, C...  $\leftarrow$ 🚍 1 hr 22 - 🖶 Fairfield Bay Heber Springs 1 hr 22 min 67 64 Searcy 2 min slower (167) ۲ 2 min slower Jacksonville >> 1 hr 22 min (63 mi) Fastest route, the usual traffic



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### Top Five Problems Facing Humanity Over the Next 50 Years









# THE SECOND SECON

# **OUR VISION**

Enhance the energy delivery efficiency of the natural gas supply chain by limiting energy waste and by achieving a methane "leak/loss rate" of no more than one percent.



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## **ONE Future Member Companies**







nationalgrid

HERE WITH YOU. HERE FOR YOU.







### SWN SMART LDAR



### Company-Wide LDAR Program

- Survey both new and existing wells; survey all compressor stations
- All components and equipment surveyed with FLIR or equivalent
- Hi-Flow measurement if emission rate is to be determined
- Repair leak ASAP, but no later than 15 days
- Resurvey to confirm repair
- Track and trend leaking components/equipment

### 2014 Results

- Identified and repaired all leaking components (0.09% of components surveyed found to be leaking)
- Recovered ~350 MMCF of methane
- Reduced leak counts (35%) and reduced leak volumes (55%) from previous year







### **New Methane Measurement Technologies**

### SVSouthwestern Energy



### REBELLION **PHOTONICS GAS CLOUD IMAGING Optical Gas Imaging**



Diode Laser

**EDF** DETECTOR **CHALLENGE** 



Quanta 3 – Methane Specific Diode Laser



### 2. Optical Sensor 3. Low-Powe I. Multi-mo **Distributed Senso** Links Real-time Data Domain Dat Weather Satellite Data Data : III. Enterprise Eve

### **ADVANCED RESEARCH PROJECTS AGENCY-ENERGY (ARPAe)**

Methane Observations Network with Innovative Technology to **Obtain Reductions** 

IBM (SWN Partner)

### Thank you





### James W. Vick Senior Vice President Business Information Services

Jim joined Southwestern Energy (SWN) in November 2011 as Senior Vice President of Business Information Services. He is responsible for the Business Solutions and the Information Technology that support the Operations and Corporate functions of the organization. Prior to joining Southwestern Energy, he spent 18 years as a Principal with Deloitte Consulting in a number of consulting and leadership positions. While with Deloitte Consulting he was involved in many operational improvement projects, the implementation of a variety of financial management and reporting systems as well as providing organizational guidance to a number of corporations, non-profit organizations, and governmental entities. Prior to his time with Deloitte, Jim advised institutional investors through underwriting of Real Estate investments, worked closely with banks and savings and loans in the valuation and management of Real Estate portfolios, and provided tax-exempt bond administration support for municipalities.

Jim holds a Bachelor of Business Administration in Finance from The University of Texas at Austin. He has been active in charitable organizations including Junior Achievement, Boys and Girls Country, the Boy Scouts of America, March of Dimes, American Cancer Society and the Juvenile Protective Association.