#### NATIONAL COAL COUNCIL

#### **2018 ANNUAL SPRING MEETING**

# SUMMARY OF MEETING

April 11–12, 2018

The National Coal Council convened for its annual Spring meeting, which was held pursuant to Invitation at the New Hampshire Conference Room, the Wink Hotel, 1143 New Hampshire Avenue, NW, Washington, D.C., commencing on April 11, 2018, at 7:00 p.m. ET and continuing on April 12, 2018, at 8:34 a.m. ET.

# ATTENDEES

For a complete breakdown of attendance, see Appendix A.

#### INTRODUCTION

Assistant Secretary of Fossil Energy Steven Winberg provided the Welcome Address to the group. He noted that having spent time working and traveling with the Secretary of Energy, that he sells American energy and technology wherever he goes. He introduced the Keynote Speaker, Tom Pyle from the American Energy Alliance.

#### Welcome

Gregory Workman provided the Welcome from the Chair as well as an additional introduction of Tom Pyle. Workman stated that this is the last meeting wherein he will serve as Chair and noted the energy and enthusiasm of the group.

# **Keynote Presentation**

Tom Pyle of the American Energy Alliance provided the Keynote Presentation. Mr. Pyle noted his appreciation for the leadership for the President's energy team. He gave an overview of the American Energy Alliance and discussed various reasons for the decline in coal and coal-fired power plants. He discussed how coal competitors have emerged, the dominant competitor being natural gas. Pyle stated that coal is less vulnerable to disruption than gas, rate payers can be insulated from price shocks, and coal is a healthy part of the fuel mix.

Currently, 29 states and the District of Columba have renewable portfolio mandates, with another eight states setting a voluntary goal for renewable energy. Three big improvements were the lifting of the federal coal leasing ban, the steam protection rule CRA, and the reassessment of the so-called social cost of carbon. Three key areas where the coal industry can focus are efficiency, emerging tech, and exports. Areas of interest are carbon fiber, and coal and coal byproducts to recover rare earth elements.

# Day 2: Call to Order/Opening Remarks

Assistant Secretary of Fossil Energy Steven Winberg called the second day of the 2018 Spring Meeting of the National Coal Council. Winberg introduced Julia d'Hemecourt for the Antitrust Advisory and then noted that the council will be conducting an election for the position of Chair and Vice-Chair, followed by a keynote address, election results, and additional speakers.

He noted that this meeting is being held in accordance with the Federal Advisory Committee Act, and the Regulations that govern that Act. The meeting is open to the public. Guests from the public are welcome and an opportunity will be provided for comment at the end of the meeting.

A verbatim transcript of this meeting is being made, and therefore it is important to use the microphone, and begin by stating name and affiliation.

# **Antitrust Advisory**

Julia d'Hemecourt provided the Antitrust Advisory. The NCC is a Federal Advisory Committee to the Secretary of Energy and membership confers no immunity from federal or state antitrust laws. A copy of the general understanding can be sent to members. If a member has strayed, there will be an interruption and legal counsel will be sought.

Steven Winberg asked for a motion to adopt the Agenda. Richard Bajura provided the first motion, Lisa Bradley provided the second motion. All in favor. No opposed.

# **Election of NCC Chair and Vice-Chair**

Steven Winberg stated that each voting member should have a ballot to vote on Chair and Vice-Chair. They will vote and the ballots will be collected and tallied by representatives from the Department of Energy.

# **Department of Energy Keynote Presentation**

Assistant Secretary Winberg stated that his remarks will focus on what the DOE is doing on coal technologies, on making the current coal fleet more efficient, and what needs to happen to make sure we are able to bring on line advanced coal plants as the current fleet retires.

Secretary of Energy Perry has issued a letter to the NCC charging the council to prepare a report on optimizing existing coal fleet to ensure a reliable and resilient power grid. The report will take a detailed look at the broad range of issues and considerations that impact the existing fleet, including an outlook on the future generation mix, as well as policy, market, and technology opportunities for coal-fired power generation. It will focus on R&D to upgrade the existing fleet while developing technologies for plants in the future.

The America First energy plan focuses on boosting the production of domestic energy resources in a responsible way, growing the economy and jobs, strengthen national security, and expanding global markets for American energy resources.

Winberg stated that domestically, parity for coal helps ensure the stability of the electric grid, strengthens the energy security, and provides jobs. There is also a revival in coal exports. Because of this, we are at the beginning of the next cycle of coal advancements. There was a significant bump in funding, specifically in clean-coal R&D. In the Budget it is called the Advanced Coal Energy Systems, and the CCUS Program. There is a need to upgrade the existing coal fleet to make the plants more efficient and keep them competitive, to extend their lives, and to make sure that they can operate on the grid that is accommodating more intermittent renewable generation, while also focusing on the technologies that are built of coal-fired power plants of the future.

The ACE System Program comes from these needs and will target a suite of advanced processes and technologies to improve the efficiency and competitiveness of existing plants. The focus of the R&D is on power generation efficiencies, advanced systems and controls, other novel constraints, advanced coal processing to develop common data, common database coal combustion, and coal combustion phenomenon. There is also an interest in expanding work in supercritical CO2 power production.

There is also a focus on advancing domestic production of rare earths, standing up critical materials, and big data using machine learning.

# Announcement of Election Results of NCC Chair and Vice-Chair

It was a unanimous decision for both candidates, as verified by Doug Matheny, that Deck Slone from Arch Coal will be the 2018-2019 Chair of the NCC and the Vice-Chair will be Danny Gray.

# **NCC Business Reports**

Deck Slone stated that one of the new initiatives is the new NCC study for Secretary Perry on advancing U.S. coal exports. There will be an organizational subcommittee meeting later in the month, with the plan to have the report complete by the fall meeting in September.

# **Keynote Presentation**

Dr. Anthony Ku, Director of Advanced Technologies at the National Institute of Clean and Low-Carbon Energy (NICE), presented on China's efforts to advanced ultralow emissions coal power. The 2020 goal is to have total energy use grow to be about five billion tons. There is a drive toward efficiency making coal cleaner, but also focusing on coal as being one of the primary sources of energy in China in the years ahead. There is a goal to modernize the production and continue to build upon past success in largescale coal conversion, with a focus on emissions.

# **Industry Presentations**

Randall Atkins presented "Carbon from Coal." Mr. Atkins is the Chairman of the Board and CEO of RAMACO Coal. A short video presentation was shown to introduce the topic of coal, with thermal coal being the focus, and its future, as it is unclear whether thermal coal will be able to compete against renewables and gas as the cheapest route to power. A company-wide objective is to create high-volume, high-margin product uses for coal from carbon through innovative high-tech futures. RAMACO Carbon is pursuing an integrated philosophy of having the resource, technology, and manufacturing integrated into one ecosystem.

Daniel Connell presented "Opportunities for New Technology in Coal Mining and Beneficiation." Mr. Connell is the Director of Market Strategy and Business Development for CONSOL Energy. He noted that coal remains a valuable energy resource worldwide and that the United States remains the richest country in the world from a coal reserve standpoint. But there has not been a lot of funding directed forward the upstream aspects of the coal industry in recent times, but this seems to be changing. There is a need to improve the efficiency of existing coal plants and a focus on automating the mining process. CONSOL is in the process of developing advanced shear operations across the entire longwall fleet, which increases productivity. Predictive and preventative maintenance is also of great importance, and big data is a big opportunity in the mining space. Looking forward, there is a need to initiate focused dialogue among coal stakeholders, producers, equipment manufacturers, and transportation providers to prioritize the areas of greatest need. There is also a need to reengage academia and innovative thinkers in putting the coal industry on their radar.

John Thompson presented "Enhancing the Success Rate of Technology Development: An Ecosystem Approach." Mr. Thompson is the Technology and Market Director for the Clean Air Task Force. The group is interested in promoting durable climate solutions, that would sustain when economics change, when politics change. He noted that a series of reports will be issued later in 2018 looking at a wide range of innovation policies and focusing on how quickly carbon capture can be scaled. To address climate change, it must be at scale, must be globally applicable, cannot be too expensive, and must be easy to construct/build. There is also a need to look at what competing technologies are doing. Important focus areas are carbon dioxide pipelines, storage sites, safety and long-term care standards. There was then an overview discussion of the 45Q tax credit and carbon tax and the need for more and better policies.

# Motions

To Adopt Agenda: Steven Winberg asked for a motion to adopt the Agenda. Richard Bajura provided the first motion, Lisa Bradley provided the second motion. All in favor. No opposed.

To Approve Election of 2018-2019 Chair: The NCC Executive Committee has unanimously put forth Deck Slone to serve in this role.

To Approve Election of 2018-2019 Vice-Chair: The NCC Executive Committee has unanimously put forth Danny Gray to serve in this role.

#### **Public Comment Period**

In compliance with FACA requirements for this meeting, Steve Winberg noted that this meeting is duly authorized and publicized, and is open to the public. The public can submit comments to the Department of Energy, or if the individual wishes to speak, they may do so at this meeting.

No comments were made.

#### **Closing Remarks**

Janet Gallici thanked the speakers, presenters, and sponsors, and noted that all presentations will be available on the NCC website within a few days. The attendees were asked to fill out evaluation forms.

#### Adjournment

The meeting adjourned at 12:08 p.m.

I hereby certify that, to the best of my knowledge, the foregoing minutes are accurate and complete. The minutes were completed after-the-fact based on the transcription of the Spring 2018 National Coal Council Annual Meeting.

Tom Sartus

8/13/20

Thomas Sarkus

Deputy Designated Federal Officer #1

National Coal Council

#### **APPENDIX A – ATTENDEES**

#### **Council Members Present:**

Robert Agbede

C. Thomas Alley, Jr.

Barbara Farmer-Altizer

Donna Anderson

**Rodney Andrews** 

Shannon Angielski

Hon. Duane Ankney

**Randall Atkins** 

**Richard Bajura** 

Shannon Mahher Banaga

Robert Bibb

Jason Borer

**Rick Boyd** 

Lisa Bradley

Brenda Brickhouse

James Brock

Alfred Brown

Roxanne Brown

F. William Brownell

**Charles Bullinger** 

John Cassady

Henry Cialone

**Kipp Coddington** 

Brad Crabtree

Joseph Craft III

Diana Daury

Hans Daniels

David Dnton

Katherine Dombrowski

John Duddy

George Duggan

Michael Durham

Ron Eller

**Russ Epting** 

Jeff Erikson

David Flannery

Mark Forwerck

**David Frederick** 

Thomas Gale

Janet Gellici

Danny Gray

Matthew Greek

Rob Hardman

John Harju

Roy Hill

William Hoback

Michael Holmes

Susan Jackson

Dennis James

Kim Johnson

Brian Kalk

Casey Kaptur

Michael Karmis

Steven Krimsky

Holly Krutka

Roxann Laird

David Lawson

Mark Lewis

John Long

Leonard Marsico

**Charles McConnell** 

Charles McNeil

**Emily Medine** 

Tom Metcalfe

Rafic Minkara

Betsy Monseau

Michael Moore

Clark Moseley

Michael Nasi

Kenneth Nemeth

Karen Obenshain

Mary Eileen O'Keefe

Fredrick Palmer

**Caryl Pfeiffer** 

**Robert Purgert** 

Angila Retherford

Charlene Russell

Peter Salditt

Thomas Sarkus

Todd Savage

John Schultes

**Constance Senior** 

Sharon Sjostrom

Carolyn Slaughter

Deck Slone

Michael Sorensen

Benjamin Sporton

Scott Stallard

Vicky Sullivan

Scott Teel

John Thompson

Mather Usher

Kathy Walton

Kemal Williamson

Gregory Workman

Xiaoliang Yang

#### **Also Present:**

Jack Adams

Sy Ali

Douglas Archer

**Charles Atkins** 

Mitchell Baer

Martin Baker

Peter Balash

Darren Bossie

Dylan Brown

Daniel Cardenas

Leland Gogliani

**Donald Collins** 

Daniel Connell

Jarad Daniels

Cyril Draffin

Michael Eckard

Randall Eminger

Jeffrey Eppink

Joseph Evers

Maohong Fan

John Fischer

Randall Gentry

Sheila Glesmann

**Dietrich Gross** 

Jeremy Harrell

Clark Harrison

**Richard Hoggan** 

Marty Irwin

Daniel Jack

Michael Jones

Alison Kerester

Angelos Kokkinos

Anthony Ku

Joshua Learn

Stephen Lee

Ruyu Li

Heath Lovell

Douglas Matheny

Michael McKenna

**Gregory Merle** 

Nancy Mohn

Rod Osborne

Sean Plasynski

Thomas Pyle

Mssood Ramezan

**Rachel Rogier** 

Daniel Roling

Fadi Shadid

George Skoptsov

Michelle Sneed

Chunshan Song

Conrad Stewart

Judd Swift

Thomas Tarka

Audrey Taucher

Osamu Usui

Roxann Walsh

Kark Weiss

Kazuko White

Eddie Joe Williams

Tomasz Wiltowski

Steven Winberg

Sam Wood

Hao Yu