

THE NATIONAL COAL COUNCIL
2021 SPRING ANNUAL MEETING
SUMMARY OF MEETING

April 27, 2021

The National Coal Council (NCC) held its 2021 Spring meeting on Tuesday, April 27, 2021 from 11:00a.m.–1:15 p.m. ET via WebEx.

ATTENDEES

For a complete breakdown of attendance, see Appendix A.

Call to Order

Tom Sarkus called the National Coal Council meeting to order, and thanked all attendees for attending the 2021 Spring meeting. He noted that this meeting is being held in accordance with the Federal Advisory Committee Act (FACA), and the regulations that govern the implementation of the Act. A full recording is being made and will be posted on the internet sometime after the meeting is completed. Guests from the public are welcome, and an opportunity will be provided for comment at the end of the meeting.

He introduced himself as the Deputy Designated Federal Officer (DDFO), along with Dr. Jennifer Wilcox, the Principal Deputy Assistant Secretary and Acting Assistant Secretary of the Office of Fossil Energy.

Mr. Sarkus thanked the NCC Committee Members, Randall Atkins, Chair; John Ward, Vice Chair; Janet Gellici, and Hiranthie Stanford.

He then acknowledged the DOE Headquarters attendees at the meeting: Angelos Kokkinos, Associate Deputy Assistant Secretary of Clean Coal and Carbon Management; John Litynski, Deputy Director of Advanced Fossil Technology Systems; Jarad Daniels, Director of Planning and Environmental Analysis; and Joe Giove, Director of Coal Business Operations. Tom Sarkus mentioned that Joe Giove is the other DDFO for NCC.

Mr. Sarkus then welcomed attendees from DOE's National Energy Technology Laboratory (NETL): Dr. Sean Plasynski, Deputy Director and Chief Technology Officer; Mark McKoy, Carbon Storage Technology Manager; and Dr. Briggs White, Technology Manager for Crosscutting Materials, Water Management, and Advanced Energy Storage.

Mr. Sarkus proceeded by welcoming all NCC members who are participating on the webinar, as well as attendees from the DOE, the NETL, the media, and the general public.

He attested that no requests from the public to make written or verbal comments were received prior to the meeting, but anyone could ask questions via the chat feature.

Mr. Sarkus called on NCC, Inc.'s legal counsel, Eric Hutchins, to provide an important anti-trust advisory.

Anti-Trust Advisory

Eric Hutchins stated that the NCC is a federal advisory committee to the Secretary of Energy. Membership in the organization confers no immunity from federal or state anti-trust laws. NCC has a set of general anti-trust guidelines, and copies can be forwarded.

Opening Remarks

Mr. Sarkus mentioned that NCC's "Coal Power: Smart Policies in Support of Stronger, Cleaner Energy" report was published in July 2020. He also mentioned that we are looking forward to the next NCC study that is scheduled to be published this Summer. Mr. Sarkus stated that coal is important. He noted that this topic will be discussed by Dr. Jennifer Wilcox in her keynote presentation.

Mr. Sarkus continued with a housekeeping announcement. He mentioned that everyone will be on mute but will get to participate during the meeting for questions via the 'Chat Box' function of WebEx. He further stated that after the presentation, Janet Gellici and Hiranthie Stanford would relay any received in the 'Chat Box' to the presenters.

U.S. Department of Energy Keynote Presentation

Randall Atkins introduced Dr. Jennifer Wilcox. He mentioned that coal will play an important role in the future to solve environmental and societal issues.

Dr. Jennifer Wilcox thanked everyone for attending the meeting. She described the urgency to address climate change, and discussed topics revolving around coal and carbon. Dr. Wilcox mentioned President Biden's goals to achieve a clean energy economy and carbon net-zero emissions by mid-century. She stated that the Biden-Harris Administration is committed to support domestic critical minerals and that the DOE had released a Funding Opportunities Announcement on April 16, 2021 on waste coal to products research.

Ms. Gellici called for questions, and there were three questions that Dr. Jennifer Wilcox responded to.

Mr. Sarkus thanked Dr. Jennifer Wilcox for her time and presentation.

Mr. Sarkus noted that Dr. Brian Anderson, the Director of NETL, is also on the WebEx webinar. He welcomed Dr. Anderson to the meeting.

Industry Keynote Presentation

John Ward introduced Mike Nasi, Equity Partner of Jackson Walker, LLP.

Mike Nasi presented a PowerPoint titled “Debrief on Texas Polar Vortex,” sharing his insights on an extensive market report from the Electric Reliability Council of Texas (ERCOT). He stated that Texas has been dodging the bullet for several years, particularly during the summers, but finally got hit by a nasty cold-spell between February 15–19, 2021. During that time frame, wind, solar, and even some gas and coal fueled power plants were not operational. Mr. Nasi said that Texas had lost 6200 MWe of baseload power generation capacity (e.g., coal) over the previous 5 years, and that much of that buffer had been pushed out of the ERCOT market by negative power prices during periods of low demand and high wind power production. He observed that natural gas additions have not filled the gap adequately, and that there would have been 80% fewer hours of outages if baseload power plants (e.g., coal) hadn’t been prematurely retired over the past 5 years.

Electricity prices for the ERCOT market exchange soared to over \$6,500 per megawatt-hour during the 2021 Texas polar vortex, compared to a more typical price range of, say, \$18-\$21 per megawatt-hour. More importantly, in Mr. Nasi’s professional opinion, Texas narrowly averted a month-long outage and the disastrous consequences that would entail. Going forward, Mr. Nasi pointed out that while ERCOT reports a low risk of outages for the coming summer, the adjoining Midcontinent Independent System Operator (MISO) predicts that renewables will significantly impact grid performance, with complexity increasing sharply after 30% penetration levels. Mr. Nasi said that shortages are likely with any combination of low wind and solar power outputs and high electricity demand, and he predicted that the electric supply in Texas this summer will be “extremely tight, if not a big problem.”

Ms. Gellici opened the floor for questions. Two questions were received and addressed by Mr. Nasi.

Industry Presentations

Ms. Gellici then introduced William (Bill) Easter, CEO of Semplastics EHC LLC. Mr. Easter presented “Using Coal for Value-added Roofing Tiles, Batteries and Construction Materials”. He noted that the utilization of one ton of coal particles in coal-derived building components sequesters about two tons of carbon dioxide. Mr. Easter described a variety of building materials that can be designed to incorporate coal – that is, roofing tiles, bricks, and building blocks – and the physical properties that coal imparts to these products. For example, attractive roofing tiles can be produced that would resist thermal shock and the resultant breakage of the tiles. Also, he noted that building products that utilize coal as a filler can be produced in such a way as to be more fire-resistant (e.g., higher ignition temperatures) than commercially available building products that use wood fillers. Mr. Easter addressed the topic of designing/constructing a building made from coal-derived building products, and he closed by describing the potential use of coal materials as replacements for the graphite anodes in lithium-ion batteries.

Ms. Gellici proceeded by introducing David Greeson, Consultant and Project Lead of Project Tundra at the Minnkota Power Cooperative. Mr. Greeson presented “Project Tundra Update: World-scale CCS on Lignite”. Project Tundra would capture approximately 4 million metric tons of CO₂ annually from either of two lignite-fired power generation units (455 MWe and 250 MWe, respectively) at Minnkota’s Milton R. Young Power Plant in Hensler, ND, and inject it into a geologic storage formation over a mile below BNI’s adjacent lignite mine. Project Tundra’s CO₂ capture/storage rate would be 2.5 times as large as

Petra Nova, a project for which Mr. Greeson was executive sponsor prior to his retirement from NRG Energy. In plainer language, Project Tundra would sequester the CO₂ equivalent of 800,000 gasoline powered vehicles. Mr. Greeson described the carbon capture and geologic storage portions of Project Tundra. He also described its preliminary financial structure, expected contractual relationships, schedule, and next steps.

Public Comment Period and Closing Remarks

Mr. Sarkus stated that no public comments were received during the meeting via the “chat box” feature. He thanked everyone who provided support to the NCC for their efforts.

Adjourn

The meeting was adjourned at 1:10 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 audio recording of webcast on 2021 NCC Spring Annual Meeting.



Thomas Sarkus

Deputy Designated Federal Officer #1

National Coal Council



Joseph Giove III

9/13/21

Deputy Designated Federal Officer #2

National Coal Council

APPENDIX A – MEETING PARTICIPANTS

Council members present:

Thomas Adams

Barbara Altizer

Donna Anderson

Randall Atkins

Rich Axelbaum
Richard Bajura
John Bauer
Jason Begger
Michelle Bloodworth
Rick Boyd
Joseph Boylan
Lisa Bradley
Wanda Burget
Randel Christmann
Kipp Coddington
Donnie Colston
Brad Crabtree
Stacey Dahl
Ruth Demeter
John Duddy
Fred Eames
Bill Easter
Rod Eggert
Randy Eminger
Maohong Fan
David Flannery
Don Gaston
Danny Gray
Sallie Greenberg
Neeraj Gupta
John Harju
Clark Harrison
Bill Hoback

Dennis James
Mike Jones
Casey Kaptur
Steve Krimsky
Holly Krutka
Vello Kuuskraa
Douglas Lempke
Heath Lovell
Len Marsico
Howard McClintic
Charles McConnell
Charles McNeil
Emily Medine
Greg Merle
Lee Meyer
Nancy Mohn
Andre Moreira
Clark Moseley
Mike Nasi
Ken Nemeth
Karen Obenshain
Jerry Oliver
Rudolph Olson
Jack Parkes
Bob Purgert
Emily Regis
Ted Sanders
John Schultes
Constance Senior

Carolyn Slaughter

Charles Snavelly

Judd Swift

Brian Thompson

John Thompson

Beth Valiaho

Joseph Valis

John Ward

Sharla Wells

Kemal Williamson

Ken Wilmot

James Wood

Greg Workman

Others present:

Brian J. Anderson

Charles Atkins

Mike Briggs

Lesley Clark

Dan Connell

Jarad Daniels

Rich Duafala

José Figueroa

Steve Fiscor

Raj Gaikwad

Janet Gellici

Joseph Giove

Gerard Goven

David Greeson

Virginia Gum

Eric Hutchins

Sean James

Michael Klein

John Krieg

Taylor Kuykendall

John Litynski

Carol Loman

James Marshall

Ram Narula

Nadia Mokhtar

Athena Panagos

Sean Plasynski

Thomas Sarkus

Hiranthie Stanford

Elena Vasilyeva

Marissa Warren

Briggs White

Jennifer Wilcox

Marc Willis