

# Virtual Conference SCHEDULE WEDNESDAY MAY 6

# 8:30 - 8:35 AM - WELCOME BY THOMAS WHEAT, MSPE PRESIDENT



(A) 8:35 - 9:35 AM Building a Bright Future: Michigan's Clean Energy Plan (1 PDH)

Dennis Dobbs, Vice President of Enterprise Project Management and Environmental Services Consumers Energy

In 2019, with input from customers and other stakeholders, Consumers Energy launched its Clean Energy Plan for Michigan. The plan will eliminate coal and meet 90 percent of the state's energy needs with clean resources by 2040. Learn about the engineering challenges and opportunities surrounding the clean and lean energy future they're building, the efforts to modernize the grid to accommodate new technologies, enable flexibility and reduce peak load, and the programs offered to residents and businesses to help them save energy and money.

# Sponsored by Prein&Newhof

## 9:35 - 9:50 AM - BREAK

#### (B) 9:50 - 10:50 - Legislative Update (1 PDH)

Leanne Panduren, PE, FNSPE, MSPE Legislative & Government Affairs Committee Chair

This session will provide an update on the 2019-2020 Michigan Legislative cycle including a recap of bills and activities the Legislative and Governmental Affairs Committee are tracking. It will also highlight how members can get involved to assist in working with their Legislators to support the profession.

10:50 - 11:05 AM - BREAK - ENGINEER OF THE YEAR

#### BREAKOUT SESSIONS 11:05 AM - 12:05 PM

# (C) Innovations in Manufacturing and Product Development to Promote Green Infrastructure and Sustainability (1 PDH)

Mick Vargas, PE, Advanced Drainage Systems, Inc.

The use of recycled plastic material in the manufacture of pipe for gravity flow storm sewer projects and other

water management product applications is a growing trend in Michigan and throughout the U.S. This session will discuss research, processes, and technology regarding the conversion of over 400 million pounds of recycled plastic annually into highly engineered drainage products. Discussion topics will include the proper design of corrugated HDPE pipe using ASTM/AASHTO standards, construction methods, research, and case studies. Storm water management and water quality will also be included.

#### (D) Large Scale Solar Generation Planning and Design Considerations (1 PDH)

John Gauss, PE, Consumers Energy

The presentation will provide a brief overview of solar energy in Michigan and how it works. It will cover different considerations in how a site is planned and designed and the potential impacts from these decisions.

# THURSDAY MAY 7



(E) 8:30 - 9:30 AM Mackinac Bridge Then and Now (1 PDH)

Kim Nowack, PE, Mackinac Bridge Authority

In 2019, with input from customers and other stakeholders, Consumers Energy launched its Clean Energy Plan for Michigan. The plan will eliminate coal and meet 90 percent of the state's energy needs with clean resources by 2040. Learn about the engineering challenges and opportunities surrounding the clean and lean energy future they're building, the efforts to modernize the grid to accommodate new technologies, enable flexibility and reduce peak load, and the programs offered to residents and businesses to help them save energy and money.

# 9:30 - 9:45 AM - BREAK

# **BREAKOUT SESSIONS 9:45 - 10:45 AM**

#### (F) Cherry Capital Airport Runway 10 Extension (1 PDH)

Bob Nelesen, PE, Prien & Newhof; Daniel Sal, CM, Cherry Capital Airport/Northwestern Regional Airport Commission; Nicholas Broad, PE, Elmer's Crane and Dozer, Inc.

The Cherry Capital Airport embarked upon a decades long project to extend its primary air carrier runway. The culmination of this planning effort was a large construction project that needed to be completed in a very short amount of time. Hear about this project's implementation from the Engineer's, Owner's, and Contractor's viewpoints. Storm water management and water quality will also be included.

## (G) Utility Scale Storage: Opportunities and Lessons Learned (1 PDH)

Nathan Washburn, PE, Consumers Energy

The presentation will provide a basic overview of why storage is important, lessons learned from a couple battery projects, and opportunities for future projects.

## 10:45 - 11:00 AM - BREAK

# BREAKOUT SESSIONS 11:00 AM - 12:00 PM

#### (H) Cyber Security (1 PDH)

John Keebler, Coalition, Inc.

Session description coming soon.

#### (I) Protect Your License (1 PDH)

Zeyn Uzman, PE, SE, PEng, F.NSPE, Uzman Engineering, LLC

This presentation explains three different cases where my engineering license was used without my knowledge to seal plans and reports. Each case was different in the extent of the fraud and the ramifications.

# FRIDAY MAY 8



# (J) 8:30 - 9:30 AM NSPE Update/Engineering Ethics: The Basics (1 PDH)

Mark Golden, FASAE, CAE, CEO & Executive Director, NSPE

This presentation will focus on professional engineering ethics principles and concepts, including such topics as protection of the public health safety and welfare, professional competency, objectivity, truthfulness, confidentiality, conflicts of interests and emerging issues/challenges affecting the practice of engineering. Examples of ethical dilemmas will be reviewed and discussed.

# 9:30 - 9:45 AM - BREAK - YOUNG ENGINEER OF THE YEAR

# BREAKOUT SESSIONS 9:45 - 10:45 AM

#### (K) Technology 2050 (1 PDH)

Alex Yazdani, PE, Sigma Technologies

A glimpse at the level of technological advancement and the and geopolitical views and responses in the year 2050. Storm water management and water quality will also be included.

#### (L) PFAS: Breaking the Cycle of "Forever" Chemicals (1 PDH)

Mark Prein, PE, Prein&Newhof

Our understanding and knowledge for treating and managing PFAS compounds grows greater by the day. The "forever" characteristics within this family of chemicals creates significant challenges within the profession for designing systems that can break the cycle of these contaminants in our environments. The presenter will share some first-hand knowledge and experience his team has had working with these chemicals in all aspects of the civil engineering field.

## 10:45 - 11:00 AM - BREAK

# BREAKOUT SESSIONS 11:00 AM - 12:00 PM

#### (M) Innovative Access Solutions - What is new in the industry? (1 PDH)

James Cassell, EJ

Learn what is new and available in the infrastructure access industry, with real world applications and project successes. The next answer to your clients most difficult challenge could be at your fingertips. This presentation will cover multiple disciplines.

#### (N) 7 Deadly Sins of Email (1 PDH)

Jamie Piercy, Professional Concepts Insurance Agency

Emails are part of the oxygen of our daily professional lives. They are a primary path of communication and we use them to get things done. Yet given the litigious nature of our world, it is critical to treat this common form of communication with the attention it needs and think very carefully about what we write and why we write it. This three-part program presents examples of self-implicating and subsequently weaponized emails and guidelines for writing appropriate, shorter, clearer messages.