Celebrating 35 Years!



2024 ANNUAL CONFERENCE PROGRAM

JUNE 11, 2024

Crowne Plaza Harrisburg Hershey Hotel 23 S. 2nd St. Harrisburg, PA 17101 717-234-5021



- 9:00 AM 4:00 PM Technical Symposium & Keynotes
- 11:15 AM 1:00 PM Keynote, Trade Show & Lunch
- 4:00 PM 6:00 PM Trade Show & Legislative Networking Reception

Cocktails and hors d'oeuvres will be served from 4:30 PM to 6:00 PM.





Join us as we celebrate the Appalachian Region Independent Power Producers Association's 35th anniversary this year! Our largest event each year, the annual conference includes technical presentations and an exhibit trade show that brings together vendors, plant personnel, and state lawmakers to network and learn about the coal refuse reclamation to energy industry. Featuring keynote addresses by:





An Association of Independent Power Producers in the Anthracite and Bituminous Coal Regions of the United States

2024 ARIPPA Annual Conference Program

Crowne Plaza Harrisburg Hershey Hotel 23 S. 2nd St. Harrisburg, PA 17101

Monday, June 10th – Exhibitor Setup

6:00 PM - 10:00 PM - Exhibitor Setup Inside Grand Ballroom:

Exhibitors may set up their booths the night before the conference. They may also set up the next morning.

TUESDAY, JUNE 11TH — TECHNICAL SYMPOSIUM, TRADE SHOW & LEGISLATIVE NETWORKING RECEPTION

7:00 AM - 9:00 AM - Exhibitor Setup Inside Grand Ballroom:

Exhibitors may set up their booths the morning of the conference if they haven't done so already. Please be sure to pick up your attendee packet at the registration desk.

8:00 AM - 5:00 PM – Registration Outside of Grand Ballroom:

Registered attendees will receive a packet of info needed for all events planned throughout the day, including a presentation schedule and list of exhibitors.

9:00 AM - 4:00 PM – Technical Symposium & Keynote Addresses in Grand Ballroom:

Speaker times and topics enclosed, featuring ARIPPA grants presentation by EPCAMR and WPCAMR and keynote addresses by the PJM Interconnection and Penn State University.

<u>11:15 AM - 1:00 PM – Trade Show & Lunch in Grand Ballroom:</u>

Enjoy lunch while seeing all the latest products and services and share info with colleagues. The first keynote presentation will also be at approximately 11:30 AM or once attendees are about to finish their meals.

4:00 PM - 6:00 PM - Trade Show & Legislative Networking Reception in Grand Ballroom:

Meet and greet with Pennsylvania state legislators and continuation of trade show. Cocktails and hors d'oeuvres will be served from 4:30 PM to 6:00 PM.



Crowne Plaza Harrisburg Hershey Hotel Info

23 South 2nd Street, Harrisburg, PA 17101 (717) 234-5021

Room Reservation Link

In order for the rates to show up, the dates must be entered in correctly.

ARIPPA Room Rate: \$128/night for 1 King Bed or \$136/night for 2 Queen Beds

Room Block Deadline: May 20, 2024



The Crowne Plaza Harrisburg Hershey Hotel provides guests with spacious rooms and suites and great amenities like complimentary wi-fi, a fitness center, and a heated indoor pool. Guests can also enjoy breakfast, lunch, or dinner at the hotel's onsite restaurant, Restaurant23.

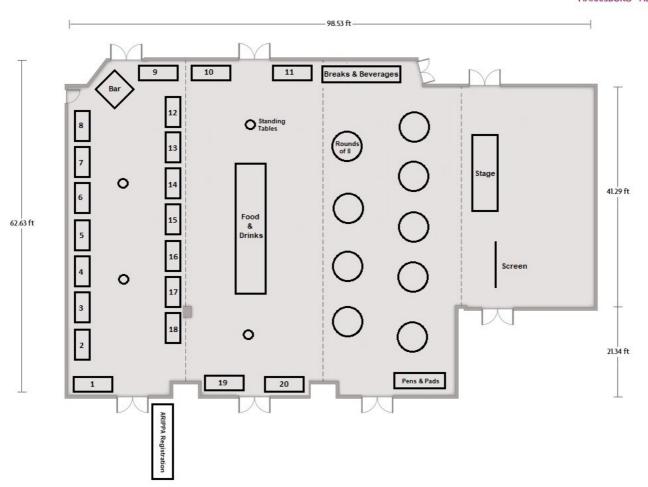
The hotel is located in the heart of downtown Harrisburg and is in walking distance to local restaurants, bars, and attractions. Its location offers easy access to Interstates 81 and 83, the Pennsylvania Turnpike and is approximately 12 miles from the Harrisburg International Airport (MDT).

Individual guest reservations can be made by **calling 717-234-5021** and **referencing the 2024 ARIPPA conference** or **online**. The ARIPPA room rate is **\$128/night for 1 King Bed or \$136/night for 2 Queen Beds**. These rates will be offered by the Crowne Plaza for Monday, June 10th and Tuesday, June 11th. Valet parking is available for overnight guests at the rate of \$15/day per vehicle. Attendees not staying overnight will be charged \$25/day per vehicle.

Crowne Plaza® Harrisburg - Hershey - Grand Ballroom A,B,C & D



*Layout subject to change depending on the number of attendees and exhibitors.





Annual Conference Schedule

Tuesday, June 11, 2024

Crowne Plaza Harrisburg Hershey Hotel – Grand Ballroom

TIMES 9:00 AM	PANELISTS OPENING REMARKS Jaret Gibbons, ARIPPA
9:00 AM – 9:30 AM	Managing Air Jenifer Gelorme, High Temperature Technologies
9:30 AM – 10:00 AM	Electricity Pricing Volatility and Risk Management Mark Perman, Acumen
10:00 AM – 10:15 AM	BREAK
10:15 AM – 10:45 AM	From Environmental Zero to Hero in Two Years Geoffrey Hensley and Larry Kuennen, Dominion Energy
10:45 AM – 11:15 AM	Efficiency Improvements, Cost Savings and Reduced Emissions Through Improved Plant Heat Rate/Performance Using THERMOPHASE Jason Wilburn, Pittsburgh Chemical Solutions
11:15 AM – 1:00 PM	KEYNOTE, TRADE SHOW & LUNCH Keynote Address: Ensuring A Reliable Energy Transition Asim Haque, PJM Interconnection
1:00 PM – 1:30 PM	Field Rewind Planning and Best Practices Jamie Clark, AGT Services
1:30 PM – 2:00 PM	Generator Life Extension – Key Rotor and Stator Factors Howard Moudy, National Electric Coil
2:00 PM – 3:00 PM	INDUSTRY PANEL – OPEN DISCUSSIONS Adam Rexroad, American Bituminous Power Partners Fred Farabaugh, Colver Green Energy Alex Brush, Gilberton Power Company Hank Zielinski, Northampton Generating Company Jeff Campbell, Stronghold Digital Mining
3:00 PM – 3:15 PM	BREAK
3:15 PM – 4:00 PM	KEYNOTES ARIPPA AMD/AML Reclamation Grants Presentation by EPCAMR and WPCAMR Keynote Address: Use of FBC Fly Ash as Supplementary Cementitious Materials (SCM) in Concrete Dr. Farshad Rajabipour, Penn State University
4:00 PM	CLOSING REMARKS Jaret Gibbons, ARIPPA
4:00 PM – 6:00 PM	ARIPPA TRADE SHOW & LEGISLATIVE NETWORKING RECEPTION

Cocktails and hors d'oeuvres served from 4:30 PM to 6:00 PM

2024 ARIPPA Conference Keynote Addresses

11:30 AM - 12:00 PM

Ensuring A Reliable Energy Transition

Asim Haque, PJM Interconnection



Asim Z. Haque, Sr. Vice President – Governmental & Member Services, oversees Governmental Services, State Policy Solutions and Member Services, which includes Stakeholder Affairs, Client Management, Membership Process & Engagement and State & Member Training.

Haque is an officer of the company and leads the Governmental and Member Services Division. The Governmental Services team is the primary conduit between PJM and governmental entities, which includes legislatures, Governor's officers and regulatory bodies. The team also includes a technical arm that serves to assist government in the

advancement of their policy initiatives. The Member Services Division is charged with providing cutting-edge service to PJM members and facilitating the PJM stakeholder process.

Prior to joining PJM, Haque was the chairman of the Public Utilities Commission of Ohio (PUCO). He was appointed to the PUCO by Gov. John R. Kasich in 2013 and was reappointed to a second term in 2016.

As the state's chief regulator, Haque led Ohio through some of the nation's most pressing energy policy discussions. He guided Ohio's Clean Power Plan compliance efforts, adjudicated cases pertaining to the future of baseload power plants in competitive markets, and successfully executed to completion Ohio's grid modernization endeavor, PowerForward.

Haque, an attorney, began his career at a large general practice firm and went on to work as inhouse counsel at a global auto manufacturer prior to his appointment to the PUCO.

Additionally, Haque serves on the board of the Philadelphia Education Fund, which works to create equitable opportunities for all students to succeed in college and career.

He is a graduate of Case Western Reserve University, where he graduated cum laude with a bachelor's degree in chemistry and political science. He received his Juris Doctor from The Ohio State University Moritz College of Law, where he was awarded the school's Outstanding Recent Alumnus Award in 2015.

2024 ARIPPA Conference Keynote Addresses

3:15 PM - 3:30 PM

ARIPPA AMD/AML Reclamation Grants Presentation Robert Hughes, EPCAMR and Anne Daymut, WPCAMR



Since 2010, ARIPPA has partnered with the Eastern and Western Pennsylvania Coalitions for Abandoned Mine Reclamation, EPCAMR and WPCAMR respectively, to offer competitive awards to watershed and conservancy organizations facilitating abandoned mine drainage (AMD) and/or abandoned mine land (AML) remediation projects in Pennsylvania. Awards are granted under the guidance and administration of EPCAMR and WPCAMR.

To date, ARIPPA has collectively donated \$96,000 to various deserving volunteer watershed and conservancy groups actively battling Pennsylvania's mine legacy problem. ARIPPA is contributing to this remediation initiative again this year.

Recipients of the 2024 grants will be announced during the annual conference. Robert Hughes, Executive Director of EPCAMR, and Anne Daymut, Watershed Coordinator at WPCAMR, will present the recipients and associated projects.



3:30 PM - 4:00 PM

<u>Use of FBC Fly Ash as Supplementary Cementitious Materials (SCM) in Concrete</u> Dr. Farshad Rajabipour, Penn State University



Dr. Farshad Rajabipour is a Chaired Professor and the Interim Head of the Department of Civil and Environmental Engineering at Penn State University. He is also the Director of USDOT's CIAMTIS university transportation center, which is focused on Improving the Durability and Extending the Life of Transportation Infrastructure. He received his Ph.D. from Purdue University in Civil Engineering with emphasis on cementitious materials. He has 22 years of teaching and research experience in support of sustainable concrete materials that are used in buildings and other civil infrastructure. Specifically, he performs research on concrete decarbonization, unconventional pozzolans, concrete

durability, and ultra-high-performance concrete. He is a fellow of the American Concrete Institute (ACI) and the Cementitious Materials Section Editor for ASCE Journal of Materials in Civil Engineering.

2024 ARIPPA Conference Presentation Abstracts

9:00 AM - 9:30 AM

Managing Air

Jenifer Gelorme, High Temperature Technologies

All power plant system owners and operators battle moving targets: safety, reliability, availability, pollution control, efficiency and plant ROI. They have access to many levers to reach these targets, but none of these will function as designed without basic control of air flow throughout the entire process. Boiler air leakage and failing ductwork expansion joints lead to a loss of effective control. Excess throughput can create fan limiting derates, inefficient or overworked backend pollution control equipment, moisture issues and parasitic power loss. Excess air in the boiler undermines a boiler's efficiency leading to heat rate penalties and high LOI. This paper will discuss the impacts of air leakage and some proven maintenance solutions that have been used in the power industry, including at many of ARIPPA's member plants, since the 1980s. While these solutions have played a strategic role for decades, the span of control created by managing this air flow has become increasingly critical as ARIPPA's fleet continues down a path requiring load and fuels flexibility.

9:30 AM - 10:00 AM

Electricity Pricing Volatility and Risk Management

Mark Perman, Acumen

Over the past two years, a variety of factors have significantly disrupted energy costs, from the war in Ukraine, inflation, unpredictable weather, and supply chain disruptions. In some cases, prices in energy markets have doubled or tripled only to return to previous levels. We will examine whether trends point to ongoing volatility, and what you can do to lessen the impact of swings in the market.

10:15 AM - 10:45 AM

From Environmental Zero to Hero in Two Years

Geoffrey Hensley and Larry Kuennen, Dominion Energy

This presentation will walk through the timeline of the past two years from the point where Dominion joined ARIPPA through learning how the members operate and what the organization has done and continues to do to promote reclamation of waste coal and used that information to springboard conversations with the legislature and state organizations in Virginia to change the optics of the Virginia City Hybrid Energy Center.

2024 ARIPPA Conference Presentation Abstracts

10:45 AM - 11:15 AM

Efficiency Improvements, Cost Savings and Reduced Emissions Through Improved Plant Heat Rate/Performance Using THERMOPHASE

Jason Wilburn, Pittsburgh Chemical Solutions

THERMOPHASE is a patented non-biocide/non-hazardous product. It is a nano-coating that prevents fouling and improves thermal efficiency. It has been applied to various heat exchangers such as condensers, chillers, plate and frames, etc. Recently it has been applied to membrane filters and has shown reduced differential pressure across the membrane and improved fluid flow. The product has been used for years by some industrial and commercial plants as well as a full scale 770MW with data from 2 years of usage and done in conjunction with the DOE/NETL. In the 770MW application the efficiency gains provided significant savings in fuel, water usage and emissions. The product has also been evaluated by the Electric Power Research Institute (EPRI) as well, showing successful results. Other power plants have currently begun applying THERMOPHASE as well or in consideration to do so.

1:00 PM - 1:30 PM

Field Rewind Planning and Best Practices

Jamie Clark, AGT Services

All turbine-generator owners/operators need to have a plan. Whether for a future, known outage to rewind a generator field. Or in the event of a sudden field ground or other issue that requires an unscheduled field rewind. This technical presentation will cover how an owner/operator can have the best plan for either event and ensure the best results when the rewind is complete. We will discuss issues ranging from the initial generator disassembly and reassembly, after the rewind. To what you MUST include in your rewind specifications, to ensure a quality result. Key witness points throughout the project will also be discussed.

1:30 PM - 2:00 PM

<u>Generator Life Extension – Key Rotor and Stator Factors</u>

Howard Moudy, National Electric Coil

Generator life extension can be challenging, especially if due to a failure/forced outage. Even when given time to deliberate and plan, the life extension challenge can be quite daunting. This presentation will identify critical factors for both the rotor and stator which are integral to successfully executing an emergency or planned life extension. The rotor and stator factors will be identified and discussed separately. Technical / specification elements, Critical to Quality (CTQ) factors, as well as schedule and price drivers will be addressed. This presentation will conclude with a summary of rotor and stator critical factors to help guide life extension efforts, followed by open floor questions.