



**Facility Repowering Project**  
**June 2019**

## Danskammer Energy – Existing Operations

- *Operating natural gas plant*
- *Provides capacity reliability and peak generation response to NYISO*
- *Current capacity factor <5% annually*
- *Expected to increase significantly post IP closure*
- Built in the 1950s and originally fueled by coal
- Converted to oil and natural gas during the 1980's and 1990's



## Project Overview: Complementing NY Renewable Growth

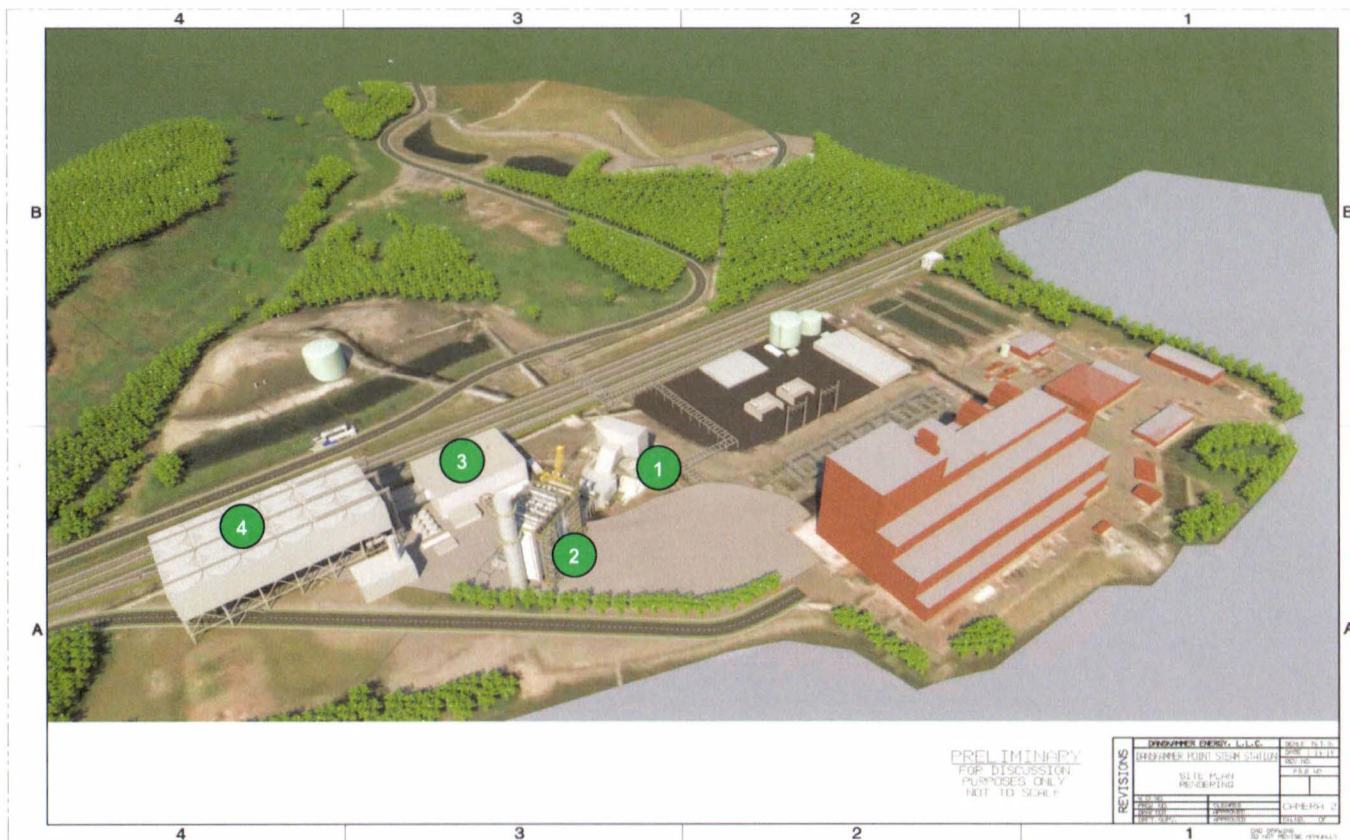
- The new facility will:
  - **Start in minutes** to support New York's grid
  - **Reduce emissions 75%-95%** per megawatt hour
  - **Eliminate use of Hudson River water** for cooling
  - Provide **significant economic benefits** to surrounding communities
  - Allow solar and **batteries** on site
  - Power more than 500,000 New York homes and businesses while using **less natural gas**



## Proposed Site Configuration – Smaller Footprint

### Key Components:

- 1 Gas turbine
- 2 Heat recovery steam generator
- 3 Steam turbine
- 4 Air cooled condensers



## Existing vs. Repowered Facility



**Existing**

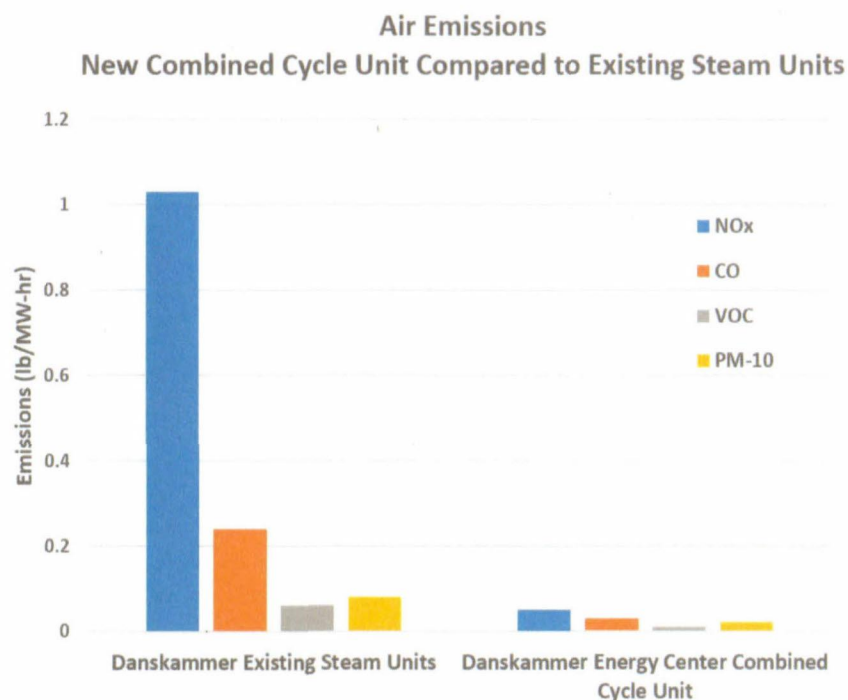
- Significant start times (11 hours)
- Less efficient / higher emissions
- Uses Hudson River for cooling
- Higher electricity cost
- Difficulty supporting renewables



**Repowered**

- Rapid start (less than 10 minutes)
- 80-90% emissions reduction
- Requires 50% less natural gas
- No use of Hudson River water
- Lower cost electricity
- Backs up renewables

## Air Emissions Profile – Combined Cycle



**\*\*We estimate the new technology used in the plant would reduce emissions on a PER HOUR basis as follows:**

- 95% reduction in NO<sub>x</sub> emissions
- 88% reduction in CO emissions
- 85% reduction in VOC emissions
- 75% reduction in PM-10 emissions
- 47% reduction in heat rate from 11,838 Btu/KW-hr for the existing steam plant to 6,300 Btu/KW-hr
- 40% reduction in CO<sub>2</sub>e emissions from 1,490 lb/MW-hr for the existing steam plant to 900 lb/MW-hr for the combined cycle plant

**\*\*This graph has been prepared based on modeling from existing generation that uses the same technology Danskammer will use. Additional air quality emissions modeling will be verified by independent third party analysis.**

## Benefits



- Over \$50 million in property and school taxes over next 20 years
- Over \$100 million spent locally during construction
- Provides ~40 local high-paying operations jobs
- More than 400 union construction jobs



## New York Climate Legislation

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### Renewable Energy Goals

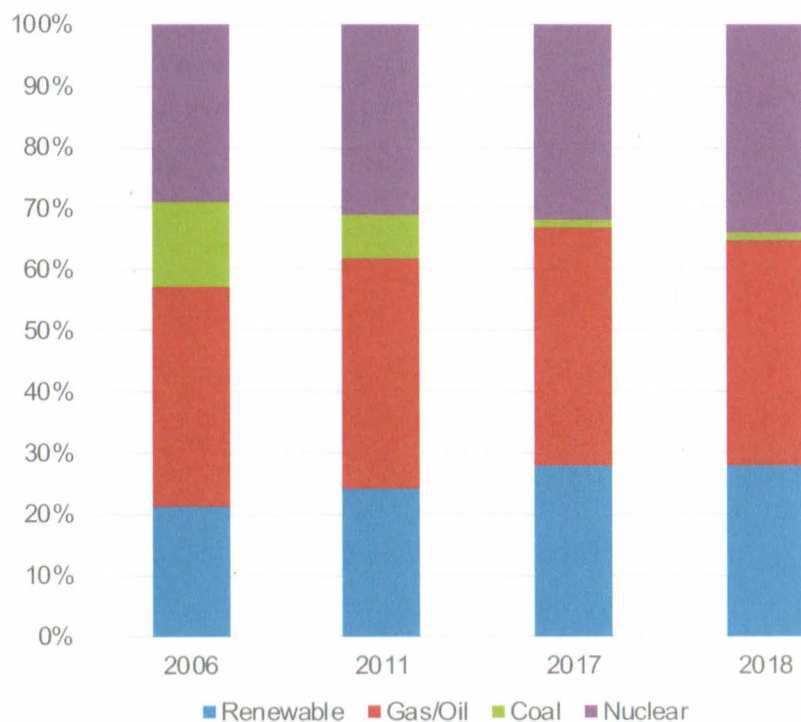
- 85 percent economy-wide greenhouse gas emissions reduction by 2050
- 70 percent renewable energy for statewide electricity generation by 2030
- 100 percent emissions-free power by 2040

### Danskammer's Role in Emissions Reduction

- A cleaner interim resource while we build renewable supply
- Fast ramping generation to support unpredictable renewables
- Future of site will include incorporating renewable technologies

## Renewable Generation Progress for NY

NYISO Data 2006-2017

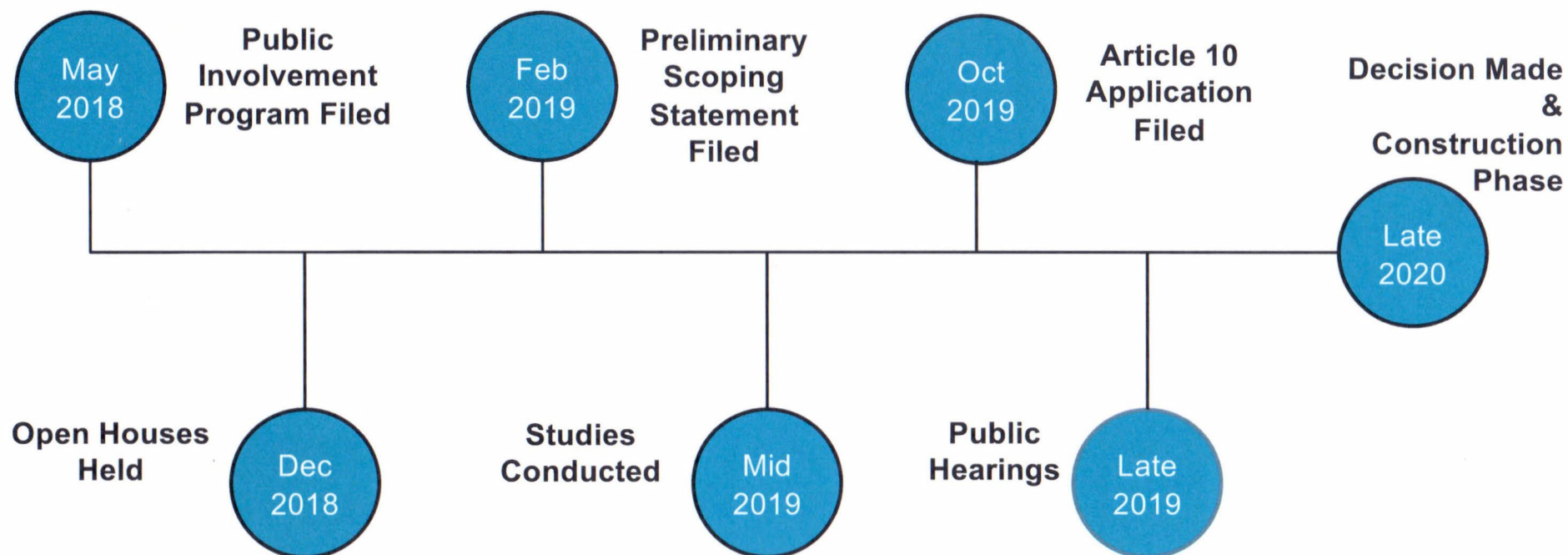


### • Renewable Breakdown

- 2006: ~21%
  - Hydro 19%
  - **Wind <1%**
  - Other 2%
- 2011: ~24%
  - Hydro 20%
  - **Wind 2%**
  - Other 2%
- 2017 ~28%
  - Hydro 23%
  - **Wind 3%**
  - Other 2%
- 2018 ~26%
  - Hydro 21%
  - **Wind 3%**
  - Other 2%

## Article 10 Timeline

**Construction Will Take Approximately 30 Months After Final Approval**



## Article 10 Planned Studies

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- Wetlands delineation
- Traffic counts and analysis
- Noise monitoring and modeling
- Cultural resource consultations
- Visual simulations and analysis
- Air emissions modeling
- Economic modeling
- Electric System Impacts
- Electric interconnection system impacts and reliability

Kenneth S. Panza, Member-at Large  
Ulster County Environmental Management Council  
33 Shotwell Rd, Woodstock, NY 12498

## Danskammer Energy Center Upgrade

### Ulster County Environmental Management Council Report Submitted EMC Meeting of June 26, 2019

Danskammer Energy, LLC, filed a proposal to repower its existing Danskammer generating station, a 532 MW natural gas peaking plant. The repowered facility will be a natural gas, combined cycle, generator of about 600 MW and will interconnect with an existing 115 kV electric transmission substation and natural gas pipeline.

#### Danskammer Donates \$20,000 to Town of Marlborough

Danskammer Energy, LLC, gave \$20,000 to the Town of Marlborough for beautification projects. Michelle Hook, vice president of public affairs for Danskammer Energy, LLC, presented the donation to the Marlborough town supervisor on Monday, June 10, 2019.

#### Pre-Application Stipulations

The first meeting to review proposed Article 10 Stipulations was held on June 11 in Albany. The purpose of the Stipulation Process is to reach agreements as to the scope and methodology of the studies and analyses, as well as required information for, the Article 10 Application. Additional meetings are being scheduled.

The pre-application Stipulation Process is subject to the confidentiality protections and restrictions set forth in 16 NYCRR § 3.9(d) of the Department of Public Service rules of procedure. Accordingly, the stipulation meetings and the documents circulated throughout this Stipulation Process are to be kept confidential and without absent the consent of the other parties participating in the Stipulation Process, they may not be disclosed outside of the stipulation meetings, except to others within your organization or group that are also bound by this confidentiality requirement.

#### Consultations – Ulster County and Other Agencies

Stakeholder consultation meetings are documented in the PIP Plan Tracking Report and comments will be recorded. Meetings held with Ulster County entities and selected agencies as recorded on the May 31, 2019 PIP tracking report include:

Ulster County Executive	2/14/2019, 5/14/2019
Ulster County Legislature	2/6/2019, 2/25/2019
Town of Marlborough	11/27/2018, 2/6/2019, 3/11/2019, 3/21/2019, 5/16/2019

Marlboro School Board Marlboro School District	12/17/2018, 2/11/2019, 4/1/2019, 4/4/2019
Riverkeeper, Scenic Hudson	5/31/2018, 11/8/2018
NRDC	1/17/2019
Environmental Defense Fund	5/15/2019

Article 10 regulations (16 NYCRR § 1000 et seq) require both general and specific consultations with affected agencies, the host municipalities, and adjacent municipalities. Each consultation meeting will include an overview of the proposed Project and the Article 10 review process and will provide Project contact information, identification of where interested parties can obtain more information, and instructions on how to be added to the stakeholder list. Additional topics covered during stakeholder consultations will vary depending on the stakeholder's role and potential impact.

# ULSTER COUNTY ENVIRONMENTAL MANAGEMENT COUNCIL

Dave Haldeman, Chair  
Margot Becker, Vice-Chair  
Kenneth Panza, Secretary

17 Pearl St, Kingston, NY 12401

June 27, 2019

John Konior, Chair  
Town of Kingston Planning Board  
906 Sawkill Road  
Kingston, NY 12401

## **RE: 850 Route 28 LLC Site Plan / Special Use Permit Application**

The Ulster County Environmental Management Council (EMC) was established by the Ulster County Charter to “Advise the County Executive and the County Legislature on all matters affecting the preservation, conservation and ecologically suitable use of the natural resources of the County.” It’s in this role that EMC is expressing its concern about the proposed concrete manufacturing facility located adjacent to the Catskill Park’s Bluestone Wild Forest and property owned by the Open Space Institute (OSI).

Ulster County is a leader in environmental stewardship and sustainability. In 2015, the county government was ranked 23rd in the nation in commitment to using green power; and in 2016, the county was featured in National Geographic magazine for its environmental initiatives and achievements. The recent efforts by OSI and others to expand the Catskill Park Bluestone Forest are consistent with Ulster County’s stated environmental ambitions.

EMC urges the Town of Kingston Planning Board to reopen the SEQRA review and carefully consider the environmental impact on the Catskill Park Bluestone Wild Forest and surrounding properties in the consideration of 850 Route LLC’s application.

Respectively submitted,

*/S/ David Haldeman*

Dave Haldeman, Chair

CC:

Patrick K. Ryan, Ulster County Executive

Tracey Bartels, Chair, Ulster County Legislature

This letter was approved by the Ulster County Environmental Management Council at its regular meeting of July 26, 2019. Kenneth S. Panza, Secretary

# ULSTER COUNTY EXECUTIVE

244 Fair St., P.O. Box 1800, Kingston, New York 12402

Telephone: 845-340-3800

Fax: 845-334-5724

PATRICK K. RYAN  
*County Executive*



MARC RIDER  
*Deputy County Executive*

## EXECUTIVE ORDER NO. 1-2019

### REGARDING THE COUNTY'S USE OF RENEWABLE ENERGY FOR THE YEARS 2019 AND 2020

**WHEREAS**, the County of Ulster has a clear governmental interest in protecting the environment and human health within the County and beyond; and

**WHEREAS**, overwhelming consensus exists among the world's leading climate scientists, the Intergovernmental Panel on Climate Change (IPCC), regarding the impacts of greenhouse gas emissions and carbon pollution including a rapid and unprecedented increase in atmospheric temperatures; and,

**WHEREAS**, it is in the best interest of the County to accelerate the reduction of carbon pollution by maximizing its usage of locally generated renewable energy, reinforcing its commitment to protect the environment and human health in Ulster County and beyond; and,

**WHEREAS**, pursuant to Section C-25(B) of the Ulster County Charter, the Ulster County Executive has the power and duty necessarily implied or incidental thereto to "supervise, direct and control the administration of all departments" of the County; and,

**WHEREAS**, starting in 2014, Ulster County has purchased 100% of its electricity from renewable energy sources; and,

**WHEREAS**, this environmental leadership, commitment to renewable energy and net carbon neutral government operations has been recognized by the NYS Department of Environmental Conservation and the United States Environmental Protection Agency; and,

**WHEREAS**, pursuant to Section C-74(B)(2) of the Ulster County Charter and Section A16-1(B)(2)(a) of the Ulster County Administrative Code, the Purchasing Director has the authority and the discretion to execute utility contracts.

**NOW, THEREFORE, I, PATRICK K. RYAN**, County Executive of the County of Ulster, in accordance with the aforementioned and in furtherance of my statutory duties, do hereby order and direct the following:

1. It shall be the responsibility of the Department of Purchasing, in close coordination with the Department of the Environment, to ensure that for the years of 2019 and 2020, 100% of the County's electricity is purchased directly from local renewable energy sources or by obtaining Green-e Energy certified Renewable Energy Certificates (RECs).
2. Ulster County shall endeavor to continue to operate a net carbon neutral government and furthermore decrease greenhouse gas emission associated with its operations (through conservation, efficiency, on-site/local renewable generation) by 25% by 2025 and 80% by 2050 using the County's 2012 greenhouse gas emission inventory as a baseline.
3. Ulster County shall endeavor to supply 100% of its annual building and fleet electricity usage from locally generated renewable energy sources by the year 2030.
4. It shall be the responsibility of the Department of Environment, in close coordination with the Departments of Purchasing, Planning and Public Works, to implement the June 2019 Climate Action Plan for county government operations to meet the County's carbon emission reduction goals, drive deployment of clean technology and improve climate resilience.
5. It shall be the responsibility of the Department of the Environment Coordinator to act as the Climate Smart Communities Coordinator for government operations.
6. Ulster County government shall support ways to decrease energy use, decrease greenhouse gas emissions and increase the use of green power across our community and sets a goal of decreasing community wide greenhouse gas emissions by 80% by 2050 (below 1990 levels) using the regional GHG emissions inventory as a baseline.
7. This Executive Order shall take effect immediately and shall remain in effect until otherwise superseded or revoked.

The County of Ulster



Patrick K. Ryan, County Executive

Dated: June 18, 2019  
Kingston, New York

# Obituary

## John Stephen Sansalone

May 15, 1952 - June 17, 2019



John S. Sansalone

John Stephen Sansalone, 67, of Gardiner, died unexpectedly on Monday, June 17, 2019, at his home.

Born on May 15, 1952, in Yonkers, NY, he was the son of the late Frank Edward and Elizabeth Dudley (Thayer) Sansalone.

John earned degrees in Civil and Environmental Engineering - a Bachelor of Science from New York University and a Master of Science from Polytechnic Institute of New York (Tandon School of Engineering, NYU). He retired following a long career as a Civil Engineer with the State of New York's Department of Environmental Conservation in New Paltz, NY.

John was active in numerous organizations related to his professional life. He served on several committees concerned with regulations for certification, permits, and standards for the design of wastewater treatment systems. He was a life member of the American Society of Civil Engineers, in which he served on the Board of Directors and was a past president of the Mid-Hudson Branch. He was also a Life Member of the New York Water Environment Association, serving as a Board Member and active on various committees.

A longtime resident of Ulster County, John served on the Town of Gardiner Environmental Conservation Commission and was town representative to the Ulster County Environmental Management Council. He was also a Life Member of the Gardiner Fire Department, where he volunteered for more than 25 years.

John's interests included history (Ulster County Civil War Roundtable), hiking (Intercollegiate Outing Club Association), winemaking (Mid-Hudson Wine Society), and traditional music and dance (Old Songs Folk Festival). He was a voracious reader whose interests encompassed science, politics, current events, and the natural world.

He is survived by three sisters, Marina L. Schmid and her husband, John of Germantown, NY, Elena Sansalone and her husband, Jan R. Van Meter of New York, NY, and Frances Sansalone

of Framingham, MA; and extended family, including an uncle and several nieces, nephews, and cousins.

Friends may call on Saturday, July 13, 2019, between 10 a.m. and 1 p.m. at Copeland Funeral Home, 162 South Putt Corners Road, New Paltz, New York, 12561. A reception for friends and family will follow at the Gardiner Fire Department, 2349 Route 44/55, Gardiner, NY 12525.

In lieu of flowers, donations may be made in John's memory to the Gardiner Fire Department or to the environmental organization of your choice.

# In Memoriam

## John Stephen Sansalone

May 15, 1952 - June 17, 2019



The New York Water Environment Association, Inc. (NYWEA) was founded in 1929, by professionals in the field of water quality as a non-profit, educational organization. Association members helped lead the way toward existing state and national clean water programs. Today the Association has over 2,500 members representing diverse backgrounds and specialties, but all are concerned and involved with protecting and enhancing our precious water resources.



John Sansalone, P.E.

It is with a heavy heart that we share the news of the passing of John Sansalone. John received his Bachelor's degree in Engineering from New York University and his Masters in Science in Civil/ Environmental Engineering in 1975. He first joined the Water Environment Federation (WEF) and the NY Water Environment Association in 1974 and dedicated his career to environmental issues with a focus on water quality. He became a WEF Life Member in 2017.

He worked for the NYS Department of Environmental Conservation for 37 years with the primary responsibility of permit drafting, inspection and compliance of water resource recovery utilities. John was a dedicated volunteer for the NY Water Environment Association (NYWEA), having served on the Lower Hudson Chapter Board, the NYWEA State

Association Board, Utility O&M committee, Government Affairs Committee and Awards Committee. In each one of these leadership capacities John gave 110%, always sharing his opinion and passion for the issue at hand.

He was the recipient of several NYWEA and WEF Awards including the Arthur Sidney Bedell Award, the Golden Manhole Society and the Select Society of Sanitary Sludge Shovelers. John was recently nominated for NYWEA's Hall of Fame. He was also a supporter of NYWEA's Scholarship Program. Always interested in the good work performed by water resource recovery operators, for decades John served as a Judge on the State Operations Challenge competition. He was also a frequent moderator at the NYC Watershed Conference.

John gave mightily to other organizations besides NYWEA, serving in leadership positions with Ulster County Environmental Management Council, the Mid-Hudson branch of the American Society of Civil Engineers (ASCE), and the Town of Gardiner Environmental Conservation Commission. John was an active member of the Gardiner Fire & Rescue Department, and notably recognized as one of the top ten responders from 1997-2008. John was also passionate about history, serving as a Trustee on the Ulster County Civil War Roundtable. He was an enthusiastic historian and was sure to share his knowledge of the Dutch settlement in New York, anything about Henry Hudson and the Half Moon and General Washington's chain across the Hudson at Storm King. John loved music and also volunteered his time with the Old Songs Folk Festival and the Champlain Valley Folk Festival.

More recently he connected NYWEA with leaders of ASCE and the American Council of Engineering Companies. Known for speaking his mind, John broke the mold and took his service on the boards and committees he served on seriously, never allowing the organization to be a "rubber stamp" but rather to debate/discuss all sides on the issue. John had a gift for sharing his knowledge and could tell you much about the environmental issues facing New York State today, he was a tremendous asset on NYWEA's Government Affairs Committee. He was likely a great asset to all of the organizations he volunteered with. Just a few days before his passing, John was scheduled to be a Judge during the NYWEA Operations Challenge on June 11, 2019, but was not able to attend due to not feeling well. As of this writing 6/21/19 we have no details regarding arrangements. Below he is pictured at NYWEA's Legislative Dialogue with Libby Ford. He will be greatly missed! -Patricia Cerro-Reehil



John Sansalone with Libby Ford at NYWEA's Legislative Dialogue.