

2019

URSB of Ohio Annual Report



TABLE OF CONTENTS

REPORT FROM THE CHAIRMAN	2
DESCRIPTION OF THE URSB	5
URSB ACTIONS AND ACTIVITIES	7
URSB JOINT INSPECTION OBSERVATION PROGRAM	9
FINANCIAL REPORT	12
AGENCY OVERVIEWS	14
Ohio Department of Agriculture	15
Ohio Department of Commerce	16
Ohio Department of Health	18
Ohio Emergency Management Agency	21
Ohio Environmental Protection Agency	25
Public Utilities Commission of Ohio	27

REPORT FROM THE CHAIRMAN





Utility Radiological Safety Board of Ohio

REPORT TO THE GOVERNOR AND GENERAL ASSEMBLY

Governor Mike DeWine and Members of the Ohio General Assembly:

The member agencies of the Utility Radiological Safety Board (URSB) of Ohio - Departments of Agriculture, Health, Commerce, Emergency Management, Environmental Protection, and the Public Utilities Commission are pleased to present the 2019 Annual Report of major Board activities.

The URSB was established in July 1989 (ORC Section 4937) to coordinate the nuclear power plant responsibilities of its member agencies. The Board is also charged with the responsibility of enhancing the quality of the State's response to nuclear power safety issues in the areas surrounding our nuclear power plants. This report details the actions of the Board toward the accomplishment of these goals.

During SFY2019, the URSB held four statutory meetings. The URSB board meetings were held at the Ohio Emergency Management Agency offices in Columbus on: July 9, 2018, October 9, 2018, January 14, 2019 and April 8, 2019.

There were no classifiable events in SFY2019 for nuclear power plants affecting Ohio.

There were two Federal Emergency Management Agency (FEMA) evaluated exercises in SFY2019.

During the week of September 17, 2018, a Radiological Emergency Preparedness (REP), Full Participation, Plume Exposure Pathway Exercise was conducted in the 10-mile Emergency Planning Zone (EPZ) around the Perry Nuclear Power Plant, with activities in Lake, Geauga, and Ashtabula Counties. On Tuesday, September 18, 2018, personnel responded to the State Emergency Operations Center in response to a simulated incident at the Perry Nuclear Power Plant. Lake, Geauga and Ashtabula counties participated on September 18th with local response to the Lake, Geauga and Ashtabula County Emergency Operations Centers. Numerous out-of-sequence demonstrations were conducted on September 17, 18, and 19, 2018.

Results from the FEMA After Action Report/ Improvement Plan (AAR/IP) indicated one Level 2 finding and one Planning Issue for the State, which were re-demonstrated and corrected prior to the final report. There were no findings or planning issues for Lake, Geauga, and Ashtabula Counties.

During the week of April 15, 2019, a Radiological Emergency Preparedness Full Participation, Plume Exposure Pathway, and a State Ingestion Exposure Pathway Exercise were conducted in the 10-mile Emergency Planning Zone, (EPZ) and 50-mile Ingestion Planning Zone (IPZ) around the Davis-Besse Nuclear Power Station. On Tuesday April 16, 2019, personnel responded to the State Emergency Operations Center in response to a simulated incident at the Davis-Besse Nuclear Power Station. Ottawa and Lucas Counties participated in the activities on April 16th, with local response to the Ottawa, and Lucas County Emergency Operations Centers.

Numerous out-of-sequence demonstrations were conducted on April 16, 17, and 18, 2019 by the counties in support of the Plume Exposure Pathway Exercise, including activities in Sandusky County.

On April 17, 2019, personnel responded to the State Emergency Operations Center for an enhanced Table-Top Exercise to demonstrate State response to a simulated radiological deposition in the 50-mile Ingestion Planning Zone (IPZ) surrounding the Davis-Besse Nuclear Power Station. Out-of-sequence activities were conducted in support of the State Ingestion Pathway Exercise during the weeks of April 8, and April 15, 2019.

Results from the FEMA After Action Report/ Improvement Plan (AAR/IP) indicated one Level 2 finding for the State which was re-demonstrated prior to the final report. There were no findings or planning issues for Ottawa or Lucas Counties.

The URSB continues to closely monitor nuclear power issues that could have a direct effect on Ohio's nuclear utilities and the safety of Ohio's citizens.

I encourage your review of the many specific activities of the URSB and its member agencies contained in the enclosed overviews.

Sincerely,



SIMA S. MERICK
Chair

SSM/pwh

DESCRIPTION OF THE URSB



DESCRIPTION OF THE URSB

The Utility Radiological Safety Board (URSB) of Ohio was established by the Ohio General Assembly as part of Amended Substitute House Bill 111 in July of 1989 and later revised by Amended Substitute House Bill 215 in June of 1997. The Board's purpose is to develop a comprehensive policy for the State regarding nuclear power safety. The Board's objectives are to promote safe, reliable, and economical power; establish a memorandum of understanding with the Nuclear Regulatory Commission (NRC) and the State; and recommend policies and practices that promote safety, performance, emergency preparedness, and public health standards that are designed to meet the State's needs.

The URSB membership consists of six state agencies: the Ohio Departments of Agriculture, Commerce, and Health; the Ohio Emergency Management and Environmental Protection Agencies; and the Public Utilities Commission of Ohio.

Board meetings are held quarterly at the offices of the Ohio Emergency Management Agency at 2855 West Dublin-Granville Road, Columbus, Ohio. The meetings are open to the public.

To find out more information concerning the URSB and its members, please refer to the URSB homepage at <http://www.ursb.ohio.gov/index.stm> or contact the URSB Secretary at (614) 889-7150. The Board members for SFY19 and their respective designees are listed below:

Ohio Department of Agriculture
Ms. Dorothy Pelanda, Director
Ms. Terri Gerhardt, Designee

Ohio Emergency Management Agency
Ms. Sima Merick, Director
Ms. Holly Welch, Designee

Ohio Department of Commerce
Ms. Sheryl Maxfield, Director
Mr. John Sharier, Designee

Ohio Environmental Protection Agency
Ms. Laurie A. Stevenson, Director
Mr. Marcus Glasgow, Designee

Ohio Department of Health
Dr. Amy Acton, Director
Ms. Rebecca Fugitt, Designee

Public Utilities Commission of Ohio
Mr. Sam Randazzo, Chairman
Mr. Randall Schumacher, Designee

URSB ACTIONS AND ACTIVITIES



SUMMARY OF URSB ACTIONS AND ACTIVITIES:

Statutory Meetings:

During SFY2019, the URSB held four statutory meetings. The URSB board meetings were held at the Ohio Emergency Management Agency offices in Columbus on: July 9, 2018, October 9, 2018, January 14, 2019 and April 8, 2019.

At each meeting member agencies report on; planning, training, drills, and exercises which have been conducted in support of Radiological Emergency Preparedness for response to incidents at a nuclear power facility that could impact Ohio.

The Nuclear Regulatory Commission state liaison attends, and will make a report on any inspections conducted by their resident inspectors, and by inspection teams through the NRC nuclear power oversight program. The liaison also reports any findings and any additional inspections required because of those findings.

A member of the FirstEnergy Nuclear Operations group (FENOC) also reports on any activities and incidents that occurred at the power plants affecting Ohio, and any future inspection and maintenance evolutions which the URSB may wish to observe have questions on.

Additional details from these meetings are available by contacting the URSB Secretary at 614-889-7150, or on the Utility Radiological Safety Board website at <http://www.ursb.ohio.gov/index.stm>

Recommendations Received by the Board:

There were no recommendations received for action by the board in state fiscal year 2019.

Board Resolutions:

There was one resolutions made by the board in state fiscal year 2019.

- Resolution 2019-01 Recognized Daniel Fisher for 20 years of service to the board.

Board Requested Testimony:

The board did not request any specific testimony by any individual, or the utility in state fiscal year 2019

Questions from the Public:

There were no questions from the public in state fiscal year 2019.

URSB JOINT INSPECTION OBSERVATION PROGRAM



URSB JOINT INSPECTION OBSERVATION PROGRAM

**Ohio Department of Health, Bureau of Environmental Health and
Radiation Protection
July 2019**

The Joint Inspection Observation Program (JIOP) was implemented by the Board in April 1991 by adopting URSB Resolution 91-002, “Resolution Adopting General Agreement between the U.S. Nuclear Regulatory Commission and Ohio’s State Liaison Officer for State Observations of NRC Inspections of Nuclear Power Plants”. The agreement allows URSB JIOP members to observe Nuclear Regulatory Commission (NRC) inspections of Perry Nuclear Power Plant (PNPP) and Davis-Besse Nuclear Power Station (DBNPS). Under “adjacent state observation” status, a second agreement with NRC Region I allow JIOP participants to observe NRC inspections at the Beaver Valley Power Station (BVPS). A guideline document has been developed setting the conditions and procedures for member agencies’ participation in the program. This document includes the goals and objectives of the JIOP. The URSB JIOP Goals and Objectives are delineated below.

In FY19, the URSB JIOP participants observed five NRC inspections.

URSB JIOP Goals and Objectives

1. To observe NRC inspections at Ohio nuclear power facilities and BVPS.
 - To participate with the NRC to observe inspections.
 - To communicate to the public, URSB member agencies, and interested parties first-hand information obtained by observing inspections, in accordance with NRC protocol.
 - To communicate with the NRC resident, regional, and national inspectors.

2. To raise issues of health, safety, and economic concerns with the Board.
 - To observe NRC inspections and obtain timely, first-hand information which will assist in formulating state positions on public health, safety, performance, and/or cost issues.
 - To maintain a historical database to monitor the economical production and safe operation of nuclear energy.

3. To inform the URSB about which inspections were observed during each quarter.

JIOP INSPECTIONS FY2019 (July 1, 2018 to June 30, 2019)

JIOP Number	Date(s)	Inspection	Agency
2019-DBNPS-001	October 15 – 19, 2018	Occupational ALARA Planning & Controls	ODH
2019-BVPS-001	October 29 – Nov 2, 2018	Outage Inspection – In-Plant Airborne Radioactivity Control & Mitigation; Radiological Hazard Assessment; Occupational ALARA Planning & Controls; and Occupational Dose Assessment	ODH
2019-PNPP-001	October 29 – Nov 2, 2018	Radiation Monitoring Instrumentation and Performance Indicator Verification – Reactor Coolant System Activity	ODH
2019-DBNPS-002*	February 4 – 8, 2019	Radiological Hazard Assessment & Exposure Controls	ODH
2019-DBNPS-003*	April 8 - 12, 2019	Radiation Monitoring Instrumentation	ODH

*No observation at the site. ODH participated in exit meeting via phone.

FINANCIAL REPORT



DESCRIPTION	SFY15	SFY16	SFY17	SFY18	SFY19
<i>Appropriations</i>					
Emergency Management	\$1,415,945	\$1,415,945	\$1,235,241	\$1,157,386	\$1,188,475
Health	\$1,009,157	\$1,041,179	\$1,127,707	\$1,144,546	\$1,157,262
Environmental Protection	\$301,552	\$300,531	\$306,164	\$332,403	\$352,430
Agriculture	\$119,672	\$125,000	\$125,176	\$91,400	\$96,038
Commerce♦					
Public Utilities Commission♦					
<i>Total Appropriation</i>	\$2,846,326	\$2,882,655	\$2,794,288	\$2,725,735	\$2,794,205
<i>Expenditures</i>					
Emergency Management	\$1,020,904	\$1,149,214	\$1,045,058	\$990,309	\$1,154,278
Health	\$1,009,157	\$1,033,681	\$1,127,707	\$1,144,546	\$1,157,262
Environmental Protection	\$283,016	\$312,561	\$252,056	\$125,229	\$276,984
Agriculture	\$119,266	\$121,756	\$109,731	\$91,310	\$95,124
Commerce♦					
Public Utilities Commission♦					
Total Expense (Year-end Balance)	\$2,432,343	\$2,617,212	\$2,534,552	\$2,351,394	\$2,598,036

♦ Denotes agency does not receive funding from FENOC

AGENCY OVERVIEWS



OHIO DEPARTMENT OF AGRICULTURE

The Ohio Revised Code directs the Ohio Department of Agriculture (ODA) to protect the food supply as it relates to Food Safety and Animal Health. ODA also promotes public safety involving nuclear power plant operations. ODA, in coordination with the United States Department of Agriculture (USDA) and the Ohio State University Cooperative Extension Service, estimates damage to crops and livestock from radiation incidents.

ODA maintains emergency response plans and monitoring programs in order to respond to and mitigate the effects of nuclear incidents. ODA coordinates procedures for the protection and recovery of livestock, poultry, crops, and processed foods from radiation effects. ODA reviews and maintains embargo and quarantine procedures for all affected food, agricultural commodities, and livestock within an affected area and for possible outlets for contaminated products.

If an incident occurs, ODA assesses and deals with problems impacting agriculture and its related industries. ODA, in coordination with the Ingestion Zone Recovery and Re-entry Advisory Group (IZRRAG) and the counties involved, determines affected target groups including farmers, food producers, distributors and processors in the ingestion exposure pathway and provides emergency response information.

Nuclear Power Plant Emergency Planning

ODA attends monthly Nuclear Power Plan Intermediate Planning (NPPIP) meetings, Nuclear Power Plant Emergency Planning (NPPEP) meetings, Nuclear Emergency Planning Advisory Committee (NEPAC) meetings and After Action Group meetings.

ODA continues to participate in the scheduled IZRRAG meetings to review and revise the Ohio Plan for “Response to Radiation Emergencies at Commercial Nuclear Power Plants” procedures and advisories in preparation for nuclear power plant training, exercises or related emergencies.

Other Related Items

The Ohio Agriculture Brochure was reviewed and updated in 2018, and was distributed by ODA in January 2019. The brochure is distributed to Ohio food producers, processors and distributors located within a ten-mile radius of a nuclear power plant, and the brochure is made available to counties within a fifty-mile radius of those plants. The brochure is also available electronically on the Ohio Department of Agriculture website and via links on URSB member agency sites.

ODA also participated on applicable committees in support of the URSB.

OHIO DEPARTMENT OF COMMERCE

DIVISION OF INDUSTRIAL COMPLIANCE

The Ohio Department of Commerce focuses on assisting businesses in complying with state laws and regulations and ensuring the safety of Ohioans. The Division of Industrial Compliance is one of eight operating divisions that make up the Ohio Department of Commerce. The Division has a wide variety of programs and responsibilities that it oversees, including, but not limited to:

- Reviewing plans for, inspecting, and handling variances relating to the construction and renovation of commercial and public buildings under the Ohio Building Code
- Licensing commercial contractors
- Regulating the construction and operation of mechanical systems, such as boilers, elevators, and ski tramways
- Overseeing the installation of manufactured homes and regulating manufactured home parks
- Administering and enforcing Ohio’s laws regarding minimum wage, prevailing wage, and minor labor

URSB Involvement

The Ohio Department of Commerce is a member of the Ohio Utility Radiological Safety Board (URSB). The Department is committed to helping ensure the safety of the citizens of and visitors to Ohio by monitoring the Davis-Besse and Perry nuclear power plants’ quality assurance programs.

Agency-Specific Activities

The Ohio Revised Code requires an owner of a nuclear power plant to maintain the plant and to safely and expeditiously return the plant to service following plant outages. As part of this requirement, owners of nuclear power plants must develop and implement a quality assurance program that includes regular examinations, testing, and inspections. The program must also:

- (a) Provide access in the design and arrangement of the plant to conduct the examinations and tests;
- (b) Develop plans and schedules for the examinations, tests, and inspections, including detailed examination and testing procedures for filing with the enforcement and regulatory authorities having jurisdiction at the plant site;
- (c) Conduct the examination and tests, including system leakage tests, hydrostatic pressure tests, and in-service tests of pumps and valves;

(d) Create records of the results of the examinations and tests, including any corrective actions required and any remedial steps taken.

The Ohio Department of Commerce is charged with verifying that nuclear power plant owners are complying with all of the requirements of the Ohio Revised Code and Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code. The Department's Authorized Nuclear In-service Inspector (ANII) is responsible for doing such verification, and during SFY19, the Authorized Nuclear In-service Inspector:

- Witnessed pressure tests
- Reviewed nondestructive examination procedures and repair programs
- Verified that the visual examinations and tests on pumps and valves had been completed and the results recorded

Future Activities

The Ohio Department of Commerce's staff will continue to monitor the Davis-Besse and Perry nuclear power plants and provide technical assistance to the URSB when questions arise regarding the requirements under Ohio law or the ASME Boiler and Pressure Vessel Code.

OHIO DEPARTMENT OF HEALTH

The Ohio Department of Health (ODH) is designated the Ohio radiation control agency in accordance with Ohio Revised Code 3748.02. The Ohio Department of Health, Bureau of Environmental Health and Radiation Protection (ODH-BEHRP) provides support to the Utility Radiological Safety Board (URSB) through its statutory functions in matters of radiation protection. ODH-BEHRP serves as the lead state agency on all health physics and agreement state issues within Ohio, monitors the radiological performance of the nuclear power plants, provides emergency response personnel and dose assessment team leadership in the event of a radiological emergency, observes the evaluation of hospitals abilities to treat contaminated injured people, ensures radiological environmental monitoring outside of commercial nuclear power plant boundaries, and provides input for working groups.

Nuclear Power Plant Emergency Response Exercises

ODH-BEHRP staff regularly participates in nuclear power plant exercises. ODH-BEHRP participated in the September 2018 Perry Nuclear Power Plant (PNPP) evaluated exercise and the April 2019 Davis-Besse Nuclear Power Station (DBNPS) evaluated Ingestion Phase exercise. ODH-BEHRP provided key personnel to the Executive Room, Dose Assessment Room, IZRRAG, Emergency Support Function (ESF) – 8 & 10, Field Monitoring and Sampling Teams, Sample Screening, along with liaison positions with the county, the utility, and the utility joint information center. In preparation, ODH-BEHRP staff attended several training sessions as well as a web based annual training, including: plant-specific systems training, dose assessment training, controller training, sampling team training and sample screening training. ODH-BEHRP rotates staff members through different positions to broaden staff skills and allow flexibility in assigning response personnel. ODH-Office of Communications helped staff the State Joint Information Center (SJIC) public inquiry lines. ODH-Office of Health Preparedness helped staff the ESF-8 desk. ODH coordinated the effort to incorporate the use of RadResponder for sample collection and analysis tracking and the use of ArcGIS for analyzing and mapping dose and restricted zone data.

Medical Service (MS-1) exercises are routinely observed by ODH-BEHRP staff at designated hospitals inside the 10-mile Emergency Planning Zone. In this fiscal year, ODH-BEHRP staff observed zero MS-1 exercises due to schedule conflicts. Two evaluated MS-1 drills for the Davis-Besse Nuclear Power Station were conducted on August 21, 2018 (ProMedica-Fremont) and April 17, 2019 (Magruder Hospital). Both hospitals were determined to be adequately prepared to treat an injured individual contaminated with radioactive material.

Emergency Preparedness Activities

ODH BEHRP staff attended monthly Nuclear Power Plant Emergency Planning & Intermediate Planning meetings. ODH-BEHRP staff attended quarterly Nuclear Emergency Planning Advisory Committee (NEPAC) meetings. These meetings provide an opportunity to collaborate with URSB

member agencies, as well as utility and local government representatives for planning purposes, resolution of common issues, and identification and tracking of corrective actions documented during exercise activities.

ODH-BEHRP regularly joins with other state agencies and First Energy Nuclear Operating Company (FENOC) in development and training activities. This fiscal year included attendance at the Beaver Valley Power Station (BVPS) Offsite Agency Training Session (OATS) in August.

Joint Inspection Observation Program (JIOP)

ODH-BEHRP staff participates with the United States Nuclear Regulatory Commission (NRC) in the Joint Inspection Observation Program (JIOP) inspections. Five JIOPs covering five topic areas were completed by ODH staff in State Fiscal Year (SFY) 19. The details of the topics can be found in the URSB Joint Inspection Observation Program section of this annual report. Findings from these inspections may be found on the NRC website.

Dose Assessment Activities

ODH-BEHRP sent one individual to Illinois for the NRC - Rascal Dose Assessment Software Training in October 2018. ODH-BEHRP has seen the benefit of participating in the power plant integrated drills. This fiscal year ODH-BEHRP participated in a total of 6 integrated drills with the power plants.

Radiological Environmental Monitoring Activities

ODH-BEHRP staff performs offsite radiological environmental monitoring activities at the Davis-Besse Nuclear Power Station, Perry Nuclear Power Plant, and Beaver Valley Power Station. Surface water, potable water, bottom sediment, fish, fruit, vegetable and air samples are collected by local health departments (under contract with ODH) and analyzed by the ODH Public Health Laboratory. All sample results indicated that radioactivity levels are at or near the Lower Limit of Detection (LLD) and well below the NRC release criteria.

Calibration verifications of the dry gas meters used for air sampling were performed for all sampling locations. No equipment was replaced in SFY 2019. The inventory needs of each contractor continued to be met throughout the year as supplies necessary for the continued collection of samples were provided to the contractors. All environmental contractor audits for calendar year 2019 were completed.

Other Related Items

A member of the ODH-BEHRP staff attended the FEMA Region V Scheduling Conference in November 2018. The conference featured speakers from FEMA Region V, FEMA Headquarters, NRC, and various states.

A member of the ODH-BEHRP staff attended the National Radiological Emergency Preparedness (NREP) Conference held in Orlando, FL in April 2019. The conference featured speakers from FEMA, NRC, Conference of Radiation Control Program Directors (CRCPD), Federal Drug Administration (FDA), Department of Defense (DOD)/Department of Energy (DOE) and various states.

OHIO EMERGENCY MANAGEMENT AGENCY

The Ohio Emergency Management Agency (Ohio EMA) was established under Ohio Revised Code Chapter 5502.22 as a division of the Department of Public Safety. The mission of the Ohio EMA is to coordinate activities to mitigate, prepare for, respond to and recover from disasters. Phases of mitigation, preparedness, response and recovery are designed to minimize effects upon the population caused by all hazards. The agency maintains the State Emergency Operation Center (State EOC), data links to nuclear power plants, and multiple communications links to federal, state, and county organizations. The Ohio EMA implements federal and state policies and programs, and supports county emergency management agencies.

The Executive Director of Ohio EMA supervises the day-to-day operations of the agency's professional and technical support personnel and serves as the chair of the Utility Radiological Safety Board (URSB).

The Radiological Branch Chief serves as the State Liaison Officer to the Nuclear Regulatory Commission for the State of Ohio.

The Ohio EMA is organized into five Divisions: Communications, Operations, Preparedness, Administration, and Fiscal, which work together, to accomplish its mission. The Communications Division and Fiscal Division operate independently. The Preparedness Division consists of the Radiological, Logistics, Public Affairs, and Planning Training & Exercise Branches. The Administration Division consists of Grants, Mitigation, and Recovery Branches. The Operations Division consists of the Watch Office and Regional Operations Branches and has responsibility for the State Emergency Operations Center (SEOC). The Ohio EMA is responsible for Nuclear Power Plant incident response, accident assessment, instrument maintenance, training, planning, exercises and drills, utility, federal, and public interfacing and facilitation of the URSB. In addition, Ohio EMA continues to monitor activities relating to high-level radioactive waste, coordinates the transport of spent fuel and high-level radioactive materials across Ohio, and is the coordinating agency for the Ohio Radiological Nuclear Detection program.

Nuclear Power Plant Incidents

Ohio EMA in conjunction with the Ohio State Highway Patrol Dispatch is the initial point of notification for all declared incidents concerning the nuclear power plants that affect Ohio. In SFY 2019, there were no classifiable events.

Events of Potential Public Interest

Ohio EMA is also the point of contact for the nuclear power plants for Events of Potential Public Interest (EPPI), which are events that are not classified under the Emergency Classification Levels, but may still rise to the level of public concern. Ohio EMA disseminates these events to the member agencies, Nuclear Regulatory Commission (NRC), Federal Emergency Management Agency (FEMA), and other concerned parties. There were thirty-six EPPIs in SFY 2019, the majority of which were for emergency medical service for non-work related conditions.

Nuclear Power Plant Exercises and Drills

Ohio EMA is responsible for the design, coordination, and execution of Radiological Emergency Preparedness (REP) Evaluated Exercises in Ohio. These FEMA evaluated exercises are a required part of the REP program. In addition to the large graded exercises there are numerous drills conducted throughout the year to ensure that the State of Ohio and the counties surrounding our nuclear power plants are prepared at and above FEMA standards.

There were two Federal Emergency Management Agency (FEMA) evaluated exercises in SFY2019:

- During the week of September 17, 2018, a Radiological Emergency Preparedness (REP), Full Participation, Plume Exposure Pathway Exercise was conducted in the 10-mile Emergency Planning Zone (EPZ) around the Perry Nuclear Power Plant.
- During the week of April 15, 2019, a Radiological Emergency Preparedness (REP) Full participation Plume Exposure Pathway, and State’s Ingestion Exposure Pathway Exercise was conducted in the 10-mile Emergency Planning Zone (EPZ) and 50-mile Ingestion Planning Zone (IPZ) surrounding the Davis-Besse Nuclear Power Station.

Details and results can be found in the Chairwoman’s cover letter.

Drills

Ohio EMA participated with applicable counties in the following integrated drills and dry runs:

- Perry Nuclear Power Plant:
 - August 15, 2018
 - May 15, 2019
- Beaver Valley Power Station:
 - August 30, 2018
 - September 13, 2018
 - January 24, 2019
- Davis-Besse Nuclear Power Station
 - October 23, 2018
 - February 5, 2019
 - March 19, 2019
- Field Monitoring Team Drills
 - August 14, 2018
 - March 13, 2019

Radiological Instrumentation Maintenance and Calibration

The Radiological Maintenance and Calibration Laboratory (RIMC) is moving from Ohio State University and there are plans to construct a new lab space at Ohio EMA.

National Radiological Emergency Preparedness Conference (NREP)

Chris Salz and Bart Ray attended the National REP Conference April 1-4, 2019 in Orlando, Florida.

Emergency Planning

The 2019 State REP Plan revision was submitted to FEMA for review in January 2019. In addition to the state plan, the plans for counties were submitted along with their supporting Standard Operating Procedures.

Common Dose Assessment

Peter Hill and Cheryl Chubb continued their training as Federal Radiological Monitoring and Assessment Center (FRMAC) Assessment Scientists with continuing education quarterly with the Department of Energy's Emergency Operations Training Academy. Maintaining TurboFRMAC certification will enable the State of Ohio to integrate with the FRMAC scientists in the event of an incident.

Personnel Changes

On January 22, 2019, Forrest Lohner started at Ohio EMA at the Radiological Instrumentation and Calibration Facility as a Radiological Instrument Technician 1.

Regulatory Review

Members of the Radiological Branch of Ohio EMA review hundreds of documents from the NRC, FEMA, FirstEnergy Nuclear Operation Group (FENOC), and other State, County and Federal agencies every year.

OHIO ENVIRONMENTAL PROTECTION AGENCY

The Ohio Environmental Protection Agency (Ohio EPA) regulates emissions to the environment to ensure clean air, clean water, and the proper disposal of solid and hazardous waste, and enforces management standards in order to protect Ohio citizens and the environment. With regard to the URSB and nuclear power operations, Ohio EPA is charged with applying these standards to the nuclear power plants in Ohio. As the plants are large industrial complexes, Ohio EPA routinely monitors the permitted discharges of the nuclear power plants to ensure compliance with all regulated pollution standards.

The nuclear plants are permitted under the National Pollutant Discharge Elimination System, hazardous waste rules, air permitting, and chemical storage. Ohio EPA divisions receive regular reports from the nuclear plants on these activities and track their performance as with other industries. In addition, the nuclear plants sample ground water on and around the facilities to ensure there is no contaminant migration off the plant site into the ground water.

During nuclear power plant exercises, or in the event of an actual incident involving the release of radioactive material, Ohio EPA has a Radiological Assessment Team (RAT) that has trained to collect environmental samples in affected areas, and who will also take samples in non-affected areas to ensure that the full extent of any contamination is fully understood. These environmental samples, in conjunction with samples collected by other agencies will be analyzed and evaluated. Ohio EPA maintains staff at the State Emergency Operations Center who can provide technical expertise to evaluate these samples and advise local officials and state policy makers regarding the appropriate actions to be taken to protect the public health and well-being.

Ohio EPA participates in power plant evaluated exercises and drills with other state agencies.

From July 2018 to June 2019 Ohio EPA participated in the following events:

Davis-Besse IPX (Ingestion Plume Exercise) and IZRRAG (Ingestion Zone Reentry & Recovery Advisory Group) FEMA graded exercises from April 16-18, 2019.

- Ohio EPA personnel participated in the IPX with the Field Team Communicator at the State EOC and Liaison/Dose Assessment at Ottawa County EOC. During the post-plume phase of the exercise Ohio EPA participated with IZRRAG including the Division of Drinking and Ground Water (DDAGW) with representation in the Executive Room. Ohio EPA GIS provided technical assistance to IZRRAG. The Ohio EPA RAT demonstrated IZZRAG sampling competency during the field sampling exercise on April 18 at Fremont Airport.
- Preparation for the Davis-Besse exercises included a tabletop exercise on September 25, 2018 and a dry-run on March 19-21, 2019. Ohio EPA participated in the GIS training sponsored by OGRIP on February 15, 2019.
- On August 22-23, 2018, Ohio EPA RAT conducted internal training in preparation for multi-agency field sampling training. On October 3, 2018, Ohio EPA RAT conducted

multi-agency field sampling training with our state partners. On January 15, 2019, Ohio EPA RAT attended the FRMAC Technical Field Training.

Perry Nuclear Power Plant (PNPP) IPX September 18, 2018

- On September 18, 2018, Ohio EPA attended the PNPP graded exercise as the Field Team Communicator for the State EOC and Liaison/Dose Assessment at the Lake County EOC. On August 15, 2018, Ohio EPA participated in the Dry Run Exercise in the same roles.

Other Training

- Ohio EPA participates in the multi-agency Radiological Technology Working Group that meets monthly. Ohio EPA participated in RadResponder training coordinated by the Working Group on March 6-7, 2019, at the State EOC.
- On July 10-12, 2018, Ohio EPA successfully completed FEMA training: Post-Plume Planning (RPPP) Course, and REP Core Concepts.
- On June 4, 2019, Ohio EPA RAT conducted internal training on radiological monitoring and decontamination including donning and doffing of PPE.

Personnel

- Ohio EPA RAT added 14 new members to the team this past year fully staffing the team with 32 members.

On May 28, 2019, Bill Lohner filled the position of Ohio EPA Senior Health Physicist.

PUBLIC UTILITIES COMMISSION OF OHIO

The Public Utilities Commission of Ohio (PUCO) works to assure all residential and business consumers access to adequate, safe and reliable utility services at fair prices, while facilitating an environment that provides competitive choices. The PUCO regulates transportation, electric, natural gas, telecommunications and water/wastewater companies operating in the State of Ohio. The PUCO Transportation Department is responsible for enforcing state and federal motor carrier and rail safety requirements within the state of Ohio.

Transport of Radioactive Materials – PUCO Regulatory Responsibilities & Capabilities

The Governor has designated the PUCO as the state’s routing agency for radioactive materials and spent nuclear fuel. The PUCO Transportation Department is responsible for the enforcement of federal and state regulations governing the highway and railroad transportation of hazardous materials, including radioactive materials. Transportation Department staff are trained to standards prescribed by the United States Department of Transportation (US DOT), the Federal Motor Carrier Safety Administration (FMCSA) and the Commercial Vehicle Safety Alliance (CVSA).

These personnel are certified to conduct inspections of Highway Route Controlled Quantities of radioactive materials shipments using the CVSA Level VI, North American Standard (NAS) Inspection for Radioactive Shipments. The Level VI inspection procedure is limited to radiological shipments and includes inspection procedures of the US DOT/CVSA NAS Level I inspection. The Level VI inspection procedures include US DOT radiological requirements and stringent “out-of-service criteria” for trucks transporting the materials. CVSA Level VI inspections include close examination of the driver, the vehicle, and the radioactive materials packaging and cargo. Radioactive materials shipments that are not examined under the Level VI process are inspected using the North American Standard Level I procedures. The Federal Motor Carrier Safety Administration requires all Highway Route Controlled Quantities of Class 7 materials pass a CVSA Level VI inspection as specified in 49 CFR 385.415(b)(1).

Several PUCO Transportation Department personnel are certified by the US DOT Federal Railroad Administration (FRA) to inspect rail shipments of radioactive materials. Along with checking for compliance with the US DOT Hazardous Materials Regulations, these PUCO personnel are also FRA certified to inspect rail equipment, track, signals and operating practices.

PUCO personnel often work closely with Ohio EMA and ODH personnel to coordinate and conduct inspections of high level and special interest radioactive materials shipments. This includes radioactive industrial sources and shipments of radioactive waste. PUCO personnel inspect and escort all US DOT regulated Highway Route Controlled Quantities (HRCQ) and as applicable Quantities of Concern (QC) shipments that enter or travel through Ohio.

SFY 2019 Accomplishments:

- Attended Quarterly URSB meetings
- Established a “Rad” coordinator to manage PUCO’s collective rad involvement and multiagency efforts
- Issued “Rad Responder” compatible smart phones to hazardous materials investigative specialists to aid in any necessary radiation related emergency responses
- Attended multi-agency “Rad Responder” training
- Participated in FEMA evaluated Davis-Besse incident exercises (dry run and final)
- Attended annual National Transportation Stakeholders Forum as a part of CSG Midwest/DOE/NRC cooperative effort