

2017

URSB of Ohio Annual Report



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REPORT FROM THE CHAIRMAN





Utility Radiological Safety Board of Ohio

REPORT TO THE GOVERNOR AND GENERAL ASSEMBLY

Governor Kasich and Members of the Ohio General Assembly:

The member agencies of the Utility Radiological Safety Board (URSB) of Ohio - the Departments of Agriculture, Health and Commerce, the Emergency Management and Environmental Protection Agencies, and the Public Utilities Commission are pleased to present the 2017 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 SFY2017, the URSB held four statutory meetings. The URSB board meetings were held at the Ohio Emergency Management Agency offices in Columbus on: July 11, 2016, October 11, 2016, January 9, 2017 and April 10, 2017.

There was one classifiable event in SFY2017 for nuclear power plants affecting Ohio.

Beaver Valley Power Station Unit 1 declared an Unusual Event under Emergency Action Level HU4 on January 27, 2017 at 0641 EDT due to a fire alarm in containment which could not be verified extinguished within 15 minutes. All other containment parameters did not indicate fire. OSHP dispatch contacted the Radiological Branch Chief, who contacted the Operations Administrator. The Radiological Branch Chief performed notifications of Ohio EMA and DPS leadership, and courtesy notifications to the Ohio Department of Health and Ohio Environmental Protection Agency. The Unusual Event was terminated at 0934 EDT after a containment entry and visual inspection determined no fire or indications of fire existed.

There were two Federal Emergency Management Agency (FEMA) evaluated exercises in SFY2017.

During the week of September 13, 2016, a Radiological Emergency Preparedness (REP), Partial 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 13, 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 in the activities on the 13th with local response to the Lake, Geauga and Ashtabula County Emergency Operations Centers. Numerous out-of-sequence demonstrations were conducted on September 12, 13, and 14, 2016.

Results from the FEMA After Action Report/ Improvement Plan (AAR/IP) were the exercise resulted in no level one or level two finding for the State of Ohio, Lake, Geauga, and Ashtabula counties. Two previous level two findings and one previous Plan issue for

the State of Ohio were resolved during this exercise. One previous Plan issue for the State of Ohio (KI) remains unresolved.

During the week of May 2, 2017, a Radiological Emergency Preparedness (REP), Partial Participation, Plume Exposure Pathway Exercise was conducted in the 10-mile Emergency Planning Zone (EPZ) around the Davis-Besse Nuclear Power Station, with activities in Ottawa, Lucas, and Sandusky Counties. On Tuesday May 2, 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 the 2nd with local response to the Ottawa, and Lucas County Emergency Operations Centers. Numerous out-of-sequence demonstrations were conducted on May 1, 2 and 3, 2017. Out-of-sequence activities also included Sandusky County

Results from the FEMA After Action Report/ Improvement Plan (AAR/IP) were the exercise resulted in no level one or level two finding for the State of Ohio, Ottawa, Lucas, and Sandusky counties. One previous Plan issue for the State of Ohio (KI) remains unresolved.

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 SFY17 and their respective designees are listed below:

Ohio Department of Agriculture
Mr. David T. Daniels, Director
Ms. Terri Gerhardt, Designee

Ohio Emergency Management Agency
Ms. Sima Merick, Director
Mr. Andrew Elder, Designee

Ohio Department of Commerce
Ms. Jacqueline T. Williams, Director
Mr. John Sharier, Designee

Ohio Environmental Protection Agency
Mr. Craig W. Butler, Director
Mr. Marcus Glasgow, Designee

Ohio Department of Health
Mr. Lance Himes, Director
Ms. Rebecca Fugitt

Public Utilities Commission of Ohio
Mr. Asim Z. Haque, Chairman
Mr. Daniel Fisher, Designee

URSB ACTIONS AND ACTIVITIES



SUMMARY OF URSB ACTIONS AND ACTIVITIES:

Statutory Meetings:

During SFY2017, the URSB held four statutory meetings. The URSB board meetings were held at the Ohio Emergency Management Agency offices in Columbus on: July 11, 2016, October 11, 2016, January 9, 2017 and April 10, 2017.

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 as a result 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 or ask questions about.

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 2017.

Board Resolutions:

There were no resolutions made by the board in state fiscal year 2017.

Board Requested Testimony:

The board did not request any specific testimony by any individual, or the utility in state fiscal year 2017.

Questions from the Public:

There were no questions from the public in state fiscal year 2017.

URSB JOINT INSPECTION OBSERVATION PROGRAM



**Ohio Department of Health, Bureau of Environmental Health and
Radiation Protection
July 2017**

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 FY17 the URSB JIOP participants observed three 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 FY2017 (July 1, 2016 to June 30, 2017)

JIOP Number	Date(s)	Inspection	Agency
2017-DBNPS-001	September 26 - 30, 2016	In Plant Airborne Radioactivity Control & Mitigation; Occupation Dose Assessment	ODH
2017-DBNPS-002	December 12 -16, 2016	Radiological Hazard Assessment & Exposure Control; Occupational ALARA Planning & Controls	ODH
2017-DBNPS-003	June 12 - 20, 2017	Radiological Hazard Assessment & Exposure Control; Rad Solid Waste Processing & RAM Handling/Storage/Transportation	ODH

FINANCIAL REPORT



DESCRIPTION	SFY13	SFY14	SFY15	SFY16	SFY17
<i>Appropriations</i>					
Emergency Management	\$1,415,945	\$1,415,945	\$1,415,945	\$1,415,945	\$1,235,241
Health	\$984,700	\$1,012,671	\$1,009,157	\$1,041,179	\$1,127,707
Environmental Protection	\$300,571	\$298,820	\$301,552	\$300,531	\$306,164
Agriculture	\$116,988	\$117,826	\$119,672	\$125,000	\$125,176
Commerce [♦]					
Public Utilities Commission [♦]					
<i>Total Appropriation</i>	\$2,818,204	\$2,845,262	\$2,846,326	\$2,882,655	\$2,794,288
<i>Expenditures</i>					
Emergency Management	\$1,154,488	\$1,066,648	\$1,020,904	\$1,149,214	\$1,045,058
Health	\$984,700	\$984,761	\$1,009,157	\$1,033,681	\$1,127,707
Environmental Protection	\$279,826	\$270,598	\$283,016	\$312,561	\$252,056
Agriculture	\$115,069	\$117,790	\$119,266	\$121,756	\$109,731
Commerce [♦]					
Public Utilities Commission [♦]					
Total Expense (Year-end Balance)	\$2,534,083	\$2,414,797	\$2,432,343	\$2,617,212	\$2,534,552

♦ 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 gives them 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 2016, and was distributed by ODA in February 2017. 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 (Commerce) helps businesses and individuals operate safely and within state and federal laws and regulations. This helps protect the interests of consumers and ensures the safety of Ohioans.

Commerce is made up of seven operating divisions, one of which is the Division of Industrial Compliance. The Division of Industrial Compliance ensures Ohioans are safe in public buildings such as businesses, educational institutions and municipal buildings. This includes overseeing the Ohio Building Code, appeals and variances to code requirements, licensing commercial contractors, inspecting boilers, elevators and bedding, and regulating ski tramways. The division also oversees Ohio's minimum wage, prevailing wage and minor wage.

URSB Involvement

Commerce is a member of the Ohio Utility Radiological Safety Board (URSB). Commerce 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 (Section 4101:4-5) requires owners of nuclear power plants to maintain the nuclear power plant, and to safely and expeditiously return the plant to service following plant outages. This includes developing and implementing a quality assurance program with regular examinations, testing and inspections. The program must include:

- (a) Provision of access in the design and arrangement of the plant to conduct the examination and tests;
- (b) Development of plans and schedules, including detailed examination and testing procedures for filing with the enforcement and regulatory authorities having jurisdiction at the plant site;
- (c) Conduct of the program of examination and tests, system leakage and hydrostatic pressure tests, as well as in-service tests of pumps and valves;
- (d) Recording of the results of the examinations and tests, including corrective actions required and the actions taken.

Commerce is tasked with verifying that these responsibilities are met under the Ohio Revised Code, and Section XI, Rules for In-service Inspection of Nuclear Power Plant Components, of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code. This is the responsibility of the department's Authorized Nuclear In-service Inspector. To meet these responsibilities, during SFY17, 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

Commerce staff will continue to monitor the Davis-Besse and Perry Nuclear Power Plants, and will provide technical assistance to the URSB when questions regarding the requirements of ASME Section XI arise.

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 2016 Perry Nuclear Power Plant (PNPP) evaluated exercise as well as the May 2017 Davis-Besse Nuclear Power Station (DBNPS) evaluated exercise. ODH-BEHRP provided key personnel to the Executive Room, Dose Assessment Room, and Emergency Support Function (ESF) - 10, 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, field monitoring 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 Preparedness and ODH-Public Affairs helped staff the State Joint Information Center (SJIC) public inquiry lines.

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 two MS-1 exercises. Two MS-1 hospitals for the Davis-Besse Nuclear Power Station were observed on two different dates: one October 26, 2016 and the other May 3, 2017. Both hospitals were determined to be adequately prepared to treat an injured individual contaminated with radioactive material.

Emergency Preparedness Activities

ODH-BEHRP staff attended one quarterly Inter-agency Radiological Emergency Preparedness (IREP) Committee meeting before this group was dissolved. ODH-BEHRP staff attended quarterly Nuclear Emergency Planning Advisory Committee (NEPAC) meetings and scheduled Nuclear Power Plant Planning 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).

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. Three JIOPs covering six topic areas were completed by ODH staff in State Fiscal Year (SFY) 17. 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.

Protective Action Guidance (PAG) Manual

The U.S. Environmental Protection Agency (EPA) published a new PAG Manual in January 2017. ODH-BEHRP has reviewed the manual to determine what actions should be implemented for emergency phase, intermediate phase and long term response to ensure protection of public health in the event of a radiation release. Staff are participating in discussions with other state agencies on the proposed changes and are preparing recommendations for review and approval.

Dose Assessment Activities

The Federal Emergency Management Agency (FEMA) conducted Radiological Accident Assessment Concepts Course (RAAC) the week of April 3, 2017 in Ohio. ODH-BEHRP sent eight individuals to this training opportunity. Also, ODH-BEHRP has been routinely participating in the integrated drills for all three power plants by sending two staff members to the State Emergency Operations Center (SEOC) for Dose Assessment support.

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, milk, fish, fruit, vegetable and air samples are collected by local health departments (under contract with ODH) and analyzed by the ODH 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.

During the past four quarters calibration verifications of the 7 dry gas meters used for air sampling were performed. Equipment replacement in SFY 2017 was minimal as only one dry gas meter in Reynoldsburg at ODH Laboratory location was replaced. Routine maintenance continued to be performed on the rotary pumps in service. 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. Environmental contractor audits for calendar year 2016 were completed.

Other Related Items

Several ODH-BEHRP management and staff participated in the Preventative Radiological & Nuclear Detection Team during the Republican National Convention in July 2016.

A member of the ODH-BEHRP staff attended the FEMA Region V Scheduling Conference in November 2016. The conference featured speakers from FEMA Region V, FEMA Headquarters, NRC, and various states.

Several ODH-BEHRP staff attended various Counterterrorism Operations Support (CTOS) training classes the week of March 27, 2017 at Ohio Emergency Management Agency.

A member of the ODH-BEHRP staff attended the National Radiological Emergency Preparedness (NREP) Conference held in Grand Rapids, MI in April 2017. 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 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 three Divisions; Operations, Administration, and Regional Operations which work together to accomplish its mission. The Operations Division consists of the Radiological and Preparedness Branches. The Administration Division consists of: Fiscal, Preparedness Grants, Mitigation, Recovery, and Communications Branches. 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, and coordinates the transport of spent fuel and high level radioactive materials across Ohio.

Nuclear Power Plant Incidents

Ohio Emergency Management Agency 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 2017 there was one Unusual Event declared by Beaver Valley Power Station Unit 1 on January 27, 2017. Details of the event can be found in the Chairman’s cover letter to this report.

Events of Potential Public Interest

Ohio Emergency Management is also the point of contact for the nuclear power plants for Events of Potential Public Interest (EPPI), which are events which are not classified under the Emergency Classification Levels, but may still rise to the level of public concern. Ohio EMA disseminates these events the member agencies, NRC, FEMA, and other concerned parties. There were forty six EPPIs in SFY 2017, 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 Federal Emergency Management Agency (FEMA) evaluated exercises are a required part of the Federal REP program. In addition to the large graded exercises there are numerous drills conducted throughout the year to ensure that 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 SFY2017.

- During the week of September 13, 2016, a Radiological Emergency Preparedness (REP), Partial 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 May 2, 2017, a Radiological Emergency Preparedness (REP), Partial Participation, Plume Exposure Pathway Exercise was conducted in the 10-mile Emergency Planning Zone (EPZ) around the Davis-Besse Nuclear Power Station.

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

Drills

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

- Perry Nuclear Power Plant:
 - July 13, 2016
 - August 17, 2016
 - August 31, 2016
 - June 6, 2017
- Beaver Valley Power Station:
 - September 1, 2016
 - November 10, 2016
 - November 15, 2016
- Davis-Besse Nuclear Power Station
 - August 9, 2016
 - October 11, 2016
 - October 25, 2016
 - February 21, 2017
- Field Monitoring Team Drills
 - May 9, 2017

Radiological Instrumentation Maintenance and Calibration

The details of the Lease and Cooperative Agreement between Ohio EMA the Ohio State University (OSU) in regards to the Radiological Maintenance and Calibration Laboratory (RIMC) have been finalized.

National Radiological Emergency Preparedness Conference (NREP)

Chris Salz and Rochelle Batdorf attended the National REP Conference April 10-15, 2017 in Grand Rapids Michigan.

Emergency Planning

The 2017 State REP Plan revision was submitted to FEMA for review in January 2017, and was given FEMA approval in April. 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 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 May 30, 2017 Pasquale (Patsy) Razzano joined the Radiological Branch as the Radiological Analyst. Mr. Razzano has a background in Radiation Protection working outages primarily at the FENOC plants in Ohio and Pennsylvania

On July 7, 2017 Rochelle Batdorf accepted a position at the Ohio State University as a Radiological Safety Officer.

Regulatory Review

Members of the Radiological Branch of Ohio EMA review hundreds of documents from the Nuclear Regulatory Commission (NRC), FEMA, and the Nuclear Utility FENOC every year. One document of particular note this year was review of the U.S. Environmental Protection Agency PAG Manual: Protective Action Guides and Planning Guidance for Radiological Incidents. This manual, which were last updated and approved in 1992. We will be working with the partner agencies of the URSB to determine what and how Ohio will modify the Ohio REP plan concerning this new guidance. Another major document reviewed was the NRC Decommissioning Plan.

OHIO ENVIRONMENTAL PROTECTION AGENCY

The Ohio Environmental Protection Agency (OEPA) 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, OEPA 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, OEPA also receives monitoring reports from the plants and from offsite drinking water intakes around the plant to ensure there is no contaminant migration off the plant site in 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 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 with other state agencies. In SFY 2017 Ohio EPA participated in evaluated exercises for Perry Nuclear Power Plant in the fall and Davis Besse Nuclear Power Station in spring. No Ingestion Plan was exercised, and the Ohio EPA field teams did not deploy for the exercises. The back-up staff for the Assessment Annex was trained at the Perry Dry Run and Evaluated Exercises and the Davis Besse Dry Run and then took the lead on the Davis Besse Evaluated Exercise. Other County EOC staff training activities did occur.

Ohio EPA provides safety and radiation response training for the Radiological Assessment Team (RAT) at least twice annually. The RAT provides environmental sampling for the Ingestion Zone Reentry and Recovery Advisory Group; the team is preparing for the 2019 Ingestion Plan Exercise (Davis Besse Nuclear Power Station) by conducting joint training in fall 2017 and spring 2018.

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 transport 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, 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.

In addition to attending URSB statutory meetings, Dan Fisher, PUCO Transportation Department participated in Ohio Radiological Emergency Preparedness (REP) activities throughout SFY 2017 including Nuclear Power Plant Emergency Planning meetings hosted by the Ohio Emergency Management Agency.

During the week of May 2, 2017 Dan Fisher acted as an exercise controller in the Radiological Emergency Preparedness (REP), Partial Participation and Plume Exposure Pathway Exercise that was conducted in the 10-mile Emergency Planning Zone around the Davis-Besse Nuclear Power Station.