



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION I  
2100 RENAISSANCE BOULEVARD, SUITE 100  
KING OF PRUSSIA, PA 19406-2713

March 3, 2020

Mr. Bryan C. Hanson  
Senior Vice President, Exelon Generation Company, LLC  
President and Chief Nuclear Officer, Exelon Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: ANNUAL ASSESSMENT LETTER FOR JAMES A. FITZPATRICK NUCLEAR  
POWER PLANT (REPORT 05000333/2019006)

Dear Mr. Hanson,

The NRC has completed its end-of-cycle performance assessment of James A. FitzPatrick Nuclear Power Plant (FitzPatrick), reviewing performance indicators (PIs), inspection results, and enforcement actions from January 1, 2019, through December 31, 2019. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. The NRC concluded that overall performance at your facility preserved public health and safety.

The NRC determined the performance at FitzPatrick during the most recent quarter was within the Licensee Response Column (Column 1) of the NRC's Reactor Oversight Process (ROP) Action Matrix in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program," because all inspection findings had very low safety significance (i.e., Green), and all PIs were within the expected range (i.e., Green). Therefore, the NRC plans to conduct ROP baseline inspections at FitzPatrick.

The enclosed inspection plan lists the inspections scheduled through December 31, 2021. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. Routine inspections performed by resident inspectors are not included in the inspection plan. You should be aware that the agency is pursuing potential changes to the ROP, including changes to engineering inspections (SECY-18-0113, "Recommendations for Modifying the Reactor Oversight Process Engineering Inspections") and other changes to the baseline inspection program described in SECY-19-0067, "Recommendations for Enhancing the Reactor Oversight Process." Should these changes to the ROP be implemented, the engineering and other region-based inspections are subject to change in scope, as well as schedule. Furthermore, all the inspections listed during the last twelve months of the inspection plan are tentative and may be revised. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes.

Additionally, although not yet scheduled or listed in the enclosed inspection plan, the NRC will perform inspections per Temporary Instruction (TI) 2515/194, "Inspection of the Licensee's Implementation of Industry Initiative Associated with the Open Phase Condition Design Vulnerability in Electrical Power Systems (NRC Bulletin 2012-01)" in calendar year 2020.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC's Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please contact me at (610) 337-5120 with any questions you have regarding this letter.

Sincerely,

X /RA/

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Signed by: Erin E. Carfang

Erin Carfang, Chief  
Reactor Projects Branch 1  
Division of Reactor Projects

Docket No. 50-333  
License No. DPR-59

Enclosure:  
FitzPatrick Inspection Plan

cc w/encl: Distribution via ListServ

SUBJECT: ANNUAL ASSESSMENT LETTER FOR JAMES A. FITZPATRICK NUCLEAR  
POWER PLANT (REPORT 05000333/2019006) DATED MARCH 3, 2020

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ADAMS ACCESSION NUMBER: ML20059L951

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|--|---------|--|--|--|--|
| <input checked="" type="checkbox"/> SUNSI Review |         | <input checked="" type="checkbox"/> Non-Sensitive<br>Sensitive |  | <input checked="" type="checkbox"/> Publicly Available<br>Non-Publicly Available |  |
| OFFICE   | RI/DRP  | RI/DRP   |  |  |  |
| NAME   | CLally  | ECarfang   |  |  |  |
| DATE   | 2/28/20 | 3/3/20   |  |  |  |

OFFICIAL RECORD COPY

# IP 22 Inspection Activity Plan Report

## FitzPatrick

01/01/2020 - 12/31/2021

| Unit   | Start      | End        | Activity        | CAC    | Title   | Staff Count |
|--|------------|------------|-----------------|--------|---|-------------|
| <b>FY20 FITZPATRICK Initial Exam</b>                   |            |            |                 |        |   | 4           |
| 1  | 01/26/2020 | 02/01/2020 | OV              | 000956 | VALIDATION OF INITIAL LICENSE EXAMINATION (OV)                              |             |
| 1  | 02/23/2020 | 03/07/2020 | EXAD            | 000500 | LICENSE EXAM ADMINISTRATION (EXAD)  |             |
| <b>Rad Safety Insp</b>                                 |            |            |                 |        |   | 1           |
| 1  | 02/10/2020 | 02/14/2020 | IP 71124.01     | 000725 | Radiological Hazard Assessment and Exposure Controls                        |             |
| 1  | 02/10/2020 | 02/14/2020 | IP 71124.02     | 000726 | Occupational ALARA Planning and Controls                                    |             |
| 1  | 02/10/2020 | 02/14/2020 | IP 71124.03     | 000727 | In-Plant Airborne Radioactivity Control and Mitigation                      |             |
| 1  | 02/10/2020 | 02/14/2020 | IP 71124.04     | 000728 | Occupational Dose Assessment  |             |
| <b>FIRE PROTECTION-FITZPATRICK</b>                     |            |            |                 |        |   | 3           |
| 1  | 03/16/2020 | 03/20/2020 | IP 71111.21N.05 | 001646 | Fire Protection Team Inspection (FPTI)                                      |             |
| 1  | 03/30/2020 | 04/03/2020 | IP 71111.21N.05 | 001646 | Fire Protection Team Inspection (FPTI)                                      |             |
| <b>FORCE-ON-FORCE PLANNING AND EXERCISE WEEKS - FP</b> |            |            |                 |        |   | 6           |
| 1  | 04/06/2020 | 04/10/2020 | IP 71130.03     | 000735 | Contingency Response - Force-On-Force Testing                               |             |
| 1  | 04/27/2020 | 05/01/2020 | IP 71130.03     | 000735 | Contingency Response - Force-On-Force Testing                               |             |
| <b>Fitz Requal Inspection with P/F Results</b>         |            |            |                 |        |   | 2           |
| 1  | 05/03/2020 | 05/09/2020 | IP 71111.11A    | 000703 | Licensed Operator Requalification Program and Licensed Operator Performance |             |
| 1  | 05/03/2020 | 05/09/2020 | IP 71111.11B    | 000704 | Licensed Operator Requalification Program and Licensed Operator Performance |             |
| <b>Rad Safety RETS</b>                                 |            |            |                 |        |   | 1           |
| 1  | 05/04/2020 | 05/08/2020 | IP 71124.06     | 000730 | Radioactive Gaseous and Liquid Effluent Treatment                           |             |
| 1  | 05/04/2020 | 05/08/2020 | IP 71151        | 000746 | Performance Indicator Verification  |             |
| <b>CYBER FULL IMP</b>                                  |            |            |                 |        |   | 4           |
| 1  | 05/18/2020 | 05/22/2020 | IP 71130.10P    | 000741 | Cyber Security  |             |
| 1  | 06/08/2020 | 06/12/2020 | IP 71130.10P    | 000741 | Cyber Security  |             |
| <b>EP PROGRAM INSPECTION - FITZPATRICK</b>             |            |            |                 |        |   | 1           |
| 1  | 07/13/2020 | 07/17/2020 | IP 71114.02     | 000717 | Alert and Notification System Testing                                       |             |
| 1  | 07/13/2020 | 07/17/2020 | IP 71114.03     | 000718 | Emergency Response Organization Staffing and Augmentation System            |             |
| 1  | 07/13/2020 | 07/17/2020 | IP 71114.04     | 000719 | Emergency Action Level and Emergency Plan Changes                           |             |
| 1  | 07/13/2020 | 07/17/2020 | IP 71114.05     | 000720 | Maintenance of Emergency Preparedness                                       |             |
| 1  | 07/13/2020 | 07/17/2020 | IP 71151        | 001397 | Performance Indicator Verification  |             |

This report does not include INPO and OUTAGE activities.

This report shows only on-site and announced inspection procedures.

# IP 22 Inspection Activity Plan Report

**FitzPatrick**

01/01/2020 - 12/31/2021

| Unit   | Start      | End        | Activity     | CAC    | Title   | Staff Count |
|--|------------|------------|--------------|--------|---|-------------|
| <b>Rad Safety Instruments</b>                  |            |            |              |        |   | 1           |
| 1  | 07/20/2020 | 07/24/2020 | IP 71124.05  | 000729 | Radiation Monitoring Instrumentation  |             |
| <b>Access Control, Equip perf, Training-FP</b> |            |            |              |        |   | 3           |
| 1  | 08/17/2020 | 08/21/2020 | IP 71130.02  | 000734 | Access Control  |             |
| 1  | 08/17/2020 | 08/21/2020 | IP 71130.04  | 000736 | Equipment Performance, Testing, and Maintenance   |             |
| 1  | 08/17/2020 | 08/21/2020 | IP 71130.07  | 000739 | Security Training   |             |
| 1  | 08/17/2020 | 08/21/2020 | IP 71151     | 001338 | Performance Indicator Verification  |             |
| <b>Radwaste</b>                                |            |            |              |        |   | 1           |
| 1  | 08/31/2020 | 09/04/2020 | IP 71124.08  | 000732 | Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation |             |
| <b>ISI - UNIT 1</b>                            |            |            |              |        |   | 1           |
| 1  | 09/20/2020 | 09/26/2020 | IP 71111.08G | 000701 | Inservice Inspection Activities (BWR)   |             |
| <b>Rad Safety Inspection</b>                   |            |            |              |        |   | 1           |
| 1  | 09/21/2020 | 09/25/2020 | IP 71124.01  | 000725 | Radiological Hazard Assessment and Exposure Controls  |             |
| 1  | 09/21/2020 | 09/25/2020 | IP 71124.02  | 000726 | Occupational ALARA Planning and Controls  |             |
| 1  | 09/21/2020 | 09/25/2020 | IP 71124.03  | 000727 | In-Plant Airborne Radioactivity Control and Mitigation  |             |
| 1  | 09/21/2020 | 09/25/2020 | IP 71124.04  | 000728 | Occupational Dose Assessment  |             |
| <b>Rad Safety Inspection</b>                   |            |            |              |        |   | 1           |
| 1  | 11/02/2020 | 11/06/2020 | IP 71124.01  | 000725 | Radiological Hazard Assessment and Exposure Controls  |             |
| 1  | 11/02/2020 | 11/06/2020 | IP 71124.02  | 000726 | Occupational ALARA Planning and Controls  |             |
| 1  | 11/02/2020 | 11/06/2020 | IP 71124.03  | 000727 | In-Plant Airborne Radioactivity Control and Mitigation  |             |
| 1  | 11/02/2020 | 11/06/2020 | IP 71124.04  | 000728 | Occupational Dose Assessment  |             |
| 1  | 11/02/2020 | 11/06/2020 | IP 71151     | 000746 | Performance Indicator Verification  |             |
| <b>FY21 FITZPATRICK Initial Exam</b>           |            |            |              |        |   | 4           |
| 1  | 12/13/2020 | 12/19/2020 | OV           | 000956 | VALIDATION OF INITIAL LICENSE EXAMINATION (OV)  |             |
| 1  | 01/17/2021 | 01/30/2021 | EXAD         | 000500 | LICENSE EXAM ADMINISTRATION (EXAD)  |             |
| <b>Rad Safety Inspection</b>                   |            |            |              |        |   | 1           |
| 1  | 02/08/2021 | 02/12/2021 | IP 71124.01  | 000725 | Radiological Hazard Assessment and Exposure Controls  |             |
| 1  | 02/08/2021 | 02/12/2021 | IP 71124.02  | 000726 | Occupational ALARA Planning and Controls  |             |

# IP 22 Inspection Activity Plan Report

## FitzPatrick

01/01/2020 - 12/31/2021

| Unit   | Start      | End        | Activity        | CAC    | Title   | Staff Count |
|--|------------|------------|-----------------|--------|---|-------------|
| <b>Rad Safety Inspection</b>   |            |            |                 |        |   | 1           |
| 1  | 02/08/2021 | 02/12/2021 | IP 71124.03     | 000727 | In-Plant Airborne Radioactivity Control and Mitigation                            |             |
| 1  | 02/08/2021 | 02/12/2021 | IP 71124.04     | 000728 | Occupational Dose Assessment  |             |
| <b>MATERIAL CONTROL AND ACCOUNTABILITY</b>   |            |            |                 |        |   | 1           |
| 1  | 03/21/2021 | 03/27/2021 | IP 71130.11     | 000742 | Material Control and Accounting (MC&A)  |             |
| <b>Design Basis Assurance Inspection - Programs - Power Operated Valves - FitzPatrick Unit 1</b> |            |            |                 |        |   | 3           |
| 1  | 05/03/2021 | 05/07/2021 | IP 71111.21N.02 | 001645 | Design-Basis Capability of Power-Operated Valves Under 10 CFR 50.55a Requirements |             |
| 1  | 05/17/2021 | 05/21/2021 | IP 71111.21N.02 | 001645 | Design-Basis Capability of Power-Operated Valves Under 10 CFR 50.55a Requirements |             |
| <b>Rad Safety Inspection</b>   |            |            |                 |        |   | 1           |
| 1  | 05/10/2021 | 05/14/2021 | IP 71124.01     | 000725 | Radiological Hazard Assessment and Exposure Controls                              |             |
| 1  | 05/10/2021 | 05/14/2021 | IP 71124.02     | 000726 | Occupational ALARA Planning and Controls  |             |
| 1  | 05/10/2021 | 05/14/2021 | IP 71124.03     | 000727 | In-Plant Airborne Radioactivity Control and Mitigation                            |             |
| 1  | 05/10/2021 | 05/14/2021 | IP 71124.04     | 000728 | Occupational Dose Assessment  |             |
| <b>Access Control, Protective Strategy, TSR</b>  |            |            |                 |        |   | 4           |
| 1  | 05/10/2021 | 05/14/2021 | IP 71130.02     | 000734 | Access Control  |             |
| 1  | 05/10/2021 | 05/14/2021 | IP 71130.05     | 000737 | Protective Strategy Evaluation  |             |
| 1  | 05/10/2021 | 05/14/2021 | IP 71130.14     | 000743 | Review of Power Reactor Target Sets   |             |
| 1  | 05/10/2021 | 05/14/2021 | IP 71151        | 001338 | Performance Indicator Verification  |             |
| <b>PI&amp;R BIENNIAL - FP</b>  |            |            |                 |        |   | 4           |
| 1  | 06/14/2021 | 06/18/2021 | IP 71152B       | 000747 | Problem Identification and Resolution   |             |
| 1  | 06/28/2021 | 07/02/2021 | IP 71152B       | 000747 | Problem Identification and Resolution   |             |
| <b>HEAT SINK INSPECTION</b>  |            |            |                 |        |   | 1           |
| 1  | 07/25/2021 | 07/31/2021 | IP 71111.21N    | 000714 | Design Bases Assurance Inspection (Programs)                                      |             |
| <b>Rad Safety Inspection</b>   |            |            |                 |        |   | 1           |
| 1  | 07/26/2021 | 07/30/2021 | IP 71124.01     | 000725 | Radiological Hazard Assessment and Exposure Controls                              |             |
| 1  | 07/26/2021 | 07/30/2021 | IP 71124.02     | 000726 | Occupational ALARA Planning and Controls  |             |
| 1  | 07/26/2021 | 07/30/2021 | IP 71124.03     | 000727 | In-Plant Airborne Radioactivity Control and Mitigation                            |             |
| 1  | 07/26/2021 | 07/30/2021 | IP 71124.04     | 000728 | Occupational Dose Assessment  |             |

# IP 22 Inspection Activity Plan Report

## FitzPatrick

01/01/2020 - 12/31/2021

| Unit   | Start      | End        | Activity     | CAC    | Title  | Staff Count |
|--|------------|------------|--------------|--------|--|-------------|
| <b>EP Exercise Inspection - Fitzpatrick</b>          |            |            |              |        |  | 5           |
| 1  | 08/09/2021 | 08/13/2021 | IP 71114.01  | 000716 | Exercise Evaluation                                    |             |
| 1  | 08/09/2021 | 08/13/2021 | IP 71114.04  | 000719 | Emergency Action Level and Emergency Plan Changes      |             |
| 1  | 08/09/2021 | 08/13/2021 | IP 71151     | 001397 | Performance Indicator Verification                     |             |
| <b>Rad Safety Inspection</b>                         |            |            |              |        |  | 1           |
| 1  | 08/09/2021 | 08/13/2021 | IP 71124.07  | 000731 | Radiological Environmental Monitoring Program          |             |
| 1  | 08/09/2021 | 08/13/2021 | IP 71151     | 000746 | Performance Indicator Verification                     |             |
| <b>Evaluations of Changes, Tests and Experiments</b> |            |            |              |        |  | 3           |
| 1  | 09/20/2021 | 09/24/2021 | IP 71111.17T | 000709 | Evaluations of Changes, Tests, and Experiments         |             |
| <b>Rad Safety Inspection</b>                         |            |            |              |        |  | 1           |
| 1  | 11/01/2021 | 11/05/2021 | IP 71124.01  | 000725 | Radiological Hazard Assessment and Exposure Controls   |             |
| 1  | 11/01/2021 | 11/05/2021 | IP 71124.02  | 000726 | Occupational ALARA Planning and Controls               |             |
| 1  | 11/01/2021 | 11/05/2021 | IP 71124.03  | 000727 | In-Plant Airborne Radioactivity Control and Mitigation |             |
| 1  | 11/01/2021 | 11/05/2021 | IP 71124.04  | 000728 | Occupational Dose Assessment                           |             |
| 1  | 11/01/2021 | 11/05/2021 | IP 71151     | 000746 | Performance Indicator Verification                     |             |