BPA Policy 440-75
Building Code Governance Program

Table of Contents

1. Purpose & Background ............................................................................................................ 2
2. Policy Owner ............................................................................................................................ 2
3. Applicability ............................................................................................................................. 2
4. Terms & Definitions ................................................................................................................. 2
5. Policy ........................................................................................................................................ 4
6. Policy Exceptions ..................................................................................................................... 5
7. Responsibilities ........................................................................................................................ 6
8. Standards & Procedures ........................................................................................................ 10
9. Performance & Monitoring ................................................................................................... 10
10. Authorities & References ..................................................................................................... 10
11. Review ................................................................................................................................... 10
12. Revision History ..................................................................................................................... 10
Appendix A: BPA Adopted Codes, Standards, Guides and Best Practices .................................. 11
Appendix B: BPA Procedural Documents providing support for adherence to this policy ....... 13
1. Purpose & Background

This policy establishes the Bonneville Power Administration (BPA) building code governance program to ensure BPA complies with applicable laws through the adoption of building codes and the issuance of equivalencies and variances. It establishes the Authority Having Jurisdiction (AHJ), Authority Having Jurisdiction Council (AHJ Council), Building Code Official (BCO), Fire Code Official (FCO), and other supporting functions, and it sets associated duties for these roles.

The purpose of this policy is to establish a program with the primary interest of ensuring the health, safety, and welfare of occupants and meeting bulk electric system (BES) emergency response and continuity of operations requirements.

2. Policy Owner

The Chief Administrative Officer owns this policy. The Director of Facilities is responsible for its implementation and is authorized to develop, revise, and approve associated procedures, standards, and guidances.

3. Applicability

This policy applies to the management, construction, modernization, renovation, and operation and maintenance of all BPA-owned facilities. It does not apply to BES components.

4. Terms & Definitions

A. Adopted Code, Standard, or Guide: A code, standard, or guide that, once adopted by BPA, becomes the minimum requirements to which to construct, operate, and maintain BPA facilities.

B. Authority Having Jurisdiction (AHJ): Bonneville Full-Time Equivalency (BFTE) employee designated to adopt and enforce applicable building standard and code requirements.

C. Building Code Official (BCO): Designated individual who determines the proper application of BPA-adopted building codes to construction, operation, and maintenance of BPA-owned facilities. Recommends to the AHJ Council any identified building code equivalencies or variances.

D. Building Codes: Set of operational standards and requirements for building and associated structures. The purpose is to safeguard occupant health, safety, and welfare as they relate to the construction, maintenance, and occupancy of buildings and structures.

E. Bulk Electric System (BES): All components that directly generate, transmit, or
control market/high voltage power or station service, electrical support systems for the control centers, and the initial funding and construction of new facilities/upgrades driven by transmission system needs.

F. **Certificate of Occupancy**: Document issued by the Authority Having Jurisdiction Council certifying a building’s compliance with applicable building codes and other laws, and indicating it to be in a condition suitable for occupancy.

G. **Code Review**: A pre-construction review of project designs to ensure the design incorporates BPA-adopted building codes, standards, and guides.

H. **Energy Delivery Facilities**: A specific grouping of facilities that support the BPA transmission system. This includes an existing or planned location or site encompassing all real property and appurtenances, at which a BPA substation, switching station, or radio station is located.

I. **Equivalency**: The application of a code requirement to construction, operation, and maintenance activities that meets the intent and purpose of BPA-adopted codes, but for which BPA has not specifically adopted the code upon which the equivalency is based. Requests for equivalencies to BPA-adopted codes must be approval by the AHJ.

J. **Facilities**: Energy Delivery Facilities and Non-Electrified Facility (NEF)/Non-Electric Plant (NEP). For the purposes of this policy, BES components do not fall under the definition of facilities.

K. **Fire and Life Safety**: Matters related to fire cause and behavior; construction safeguards and exit facilities; facilitation of first responder ingress and operation; hazardous flammable and combustible materials; and fire alarm, fire-detecting and fire extinguishing service equipment to reduce the risk to occupants, property, and business or government operations.

L. **Fire Code Official (FCO)**: Designated individual who determines if the requirements of BPA-adopted building codes (as they relate specifically to fire) are applied properly to construction, operation, and maintenance of BPA-owned facilities.

M. **Fire Protection Engineer (FPE)**: An individual holding a license certifying they have the training and education necessary to apply science and engineering principles to protect people, property, and their environments from the harmful and destructive effects of fire and smoke.

N. **Model Building or Fire Code**: A building or fire code that is developed and maintained by a standards organization independent of the jurisdiction responsible for enacting the code.

O. **Non-Electrified Facility (NEF)/Non-Electric Plant (NEP)**: Non-electric plant components including all site buildings, their associated mechanical, structural, and utility systems, surrounding grounds and other fixed improvements upon the land within the sites controlled by BPA. This excludes all components that directly
generate, transmit, or control market/high voltage power or station service, electrical support systems for the control centers, and the initial funding and construction of new facilities/upgrades driven by transmission system needs (see *Energy Delivery Facilities*).

P. **Operations and Maintenance (O&M):** Facilities services required to assure a facility will perform the functions for which the building was designed and constructed.

Q. **Project Attestation:** A written, post-construction review in which the project’s as-built drawings are reviewed by BPA employees or contracted architectural and engineering (A&E) resources to ensure the project was constructed in accordance with the approved complete construction package, BPA-adopted building codes, standards, and guides.

R. **Variance:** Any deviation from adopted building or fire codes that requires AHJ approval.

5. **Policy**

A. **BPA’s Building Code Governance Program:** BPA’s Building Code Governance Program implements the adoption of applicable building codes and provides regular review of updates to those applicable codes through an established process of change management, communication, and oversight as outlined in BPA Procedure 440-75-1, *Adoption of Model, Consensus Building Codes*.

B. **Roles within BPA’s Building Code Governance Program:** To govern this program, an AHJ is established to ensure BPA complies with applicable laws through the adoption of building codes and the issuance of equivalencies and variances. An AHJ Council, a BCO and an FCO serve in an advisory role to the AHJ and provide subject matter expertise on code related issues.

1. **AHJ:** The CAO shall act as the AHJ for all BPA-owned facilities. The AHJ role may not be delegated.

2. **AHJ Council:** The AHJ Council consists of the Transmission Engineering (TE) Vice President, Workplace Services (NW) manager, and Safety (NF) manager. The AHJ Council role may not be delegated.

3. **BCO:** The BCO is Facilities Projects and Planning Manager. The BCO role may not be delegated.

4. **FCO:** The FCO is the NFO Occupational Safety and Health Manager. The FCO role may not be delegated.

5. **Any BPA Organization Responsible for Facilities-related Construction, Modernization, Renovation, Operations and Maintenance Activities:** All BPA organizations that contract for or execute facilities-related construction, modernization, renovation, operations and maintenance activities shall:
a) Obtain applicable permits, following BPA Procedure 440-75-3, *Obtaining Applicable Permits* (draft).

b) Prior to starting construction of an internally designed project, a BPA employee (BFTE) conducts a code review to ensure design meets the intent of BPA-adopted building codes, standards and guides. Prior to starting construction of an externally designed project, the contracted A&E firm developing the design conducts a code review to ensure the design meets the intent of BPA-adopted building codes, standards and guides. In both cases, a letter for the record indicates a code review was completed and entered into the project file.

c) At the conclusion of construction of an internally designed project, a BPA Project Manager (PM), Project Engineer (PE) or Project Architect (PA) conducts a project attestation by reviewing the project’s as-built drawings and attesting to the fact the facility was constructed in accordance with BPA-adopted building codes, standards, and guides. At the conclusion of construction of an externally designed project, the project’s A&E firm conducts a project attestation by reviewing the project’s as-built drawings and attesting to the fact the facility was constructed in accordance with BPA adopted building codes, standards, and guides. In both cases, a letter for the record indicates the attestation was completed and entered into the project file.

d) See BPA Procedure 440-75-6, *Attestations and Certificates of Occupancy* for guidance on conducting code reviews and attestations.

C. **Construction, Operations and Maintenance Records:** Construction, operations and maintenance records must be maintained consistent with BPA Procedure 440-75-10, *Preserving O&M Inspection, Testing, and Attestation Records*.

D. **BPA shall adopt and comply with applicable building codes at all BPA-owned facilities:** BPA will adopt and implement model building codes for all facilities to safeguard the life safety and health of all building occupants and first responders.

1. All facilities, regardless of use, will be constructed, operated, and maintained in accordance with BPA-adopted model building codes.

2. The AHJ must approve all variances in accordance with BPA Procedure 440-75-4: Code Equivalencies and Variances.

6. **Policy Exceptions**

A. The AHJ may delegate the adoption and administration of codes, standards, guides, and best practices as necessary to ensure coordinated code compliance in building design and construction, safety, fire prevention, storm water management, and energy efficiency. Appendix A of this policy outlines Code delegation.
7. Responsibilities

A. AHJ: The AHJ shall not delegate the following responsibilities:

1. Enforcement of all adopted model building, fire and life safety codes, standards, and guides.
2. In consultation with the AHJ Council, approves all variances and equivalencies.
3. Document variances and equivalencies (both permanent and temporary) with associated risks and risk owners.
4. Approve equivalencies and variances prior to implementation.
5. Consult with the AHJ Council, BCO and FCO for the administration of written interpretation of variances and equivalencies, based on application of codes, standards and guides.
6. Formally adopts model building, fire and life safety codes, standards, and guides with the primary interest of health, safety; emergency response requirements; continuity of operations and protection of property.
7. The AHJ may delegate the adoption and administration of certain codes, standards, guides, and best practices as necessary to ensure coordinated code compliance in building design and construction, safety, fire prevention, storm water management, and energy efficiency. Appendix A of this policy outlines codes delegated by the AHJ.

B. AHJ Council: The AHJ Council shall not delegate the following responsibilities:

1. Approves new codes, standards and guides for adoption
2. Reviews and provides decisions for requested code variance and equivalencies
3. Assesses notices of violation and mitigation
4. Identifies and assesses risk and mitigation
5. Coordinates with affected stakeholders to support all activities related to construction, modernization, renovation, and operations and maintenance of BPA-owned, energized and non-energized facilities at BPA.
6. Recommends to the AHJ the adoption of model building and fire codes with the primary interest of health, safety, emergency response requirements, and continuity of operations and protection of property.
7. Interprets for the AHJ BPA-adopted building, fire, and life safety codes, standards and guides for all BPA facilities.
8. When an adopted code, standard, or guide does not address a specific hazard, project, or condition, consults with the Building Code Official (BCO) or Fire Code Official (FCO), and when warranted, recommend to the AHJ the use of other
recognized codes, standards, guides, and practices. The AHJ Council will seek and review all relevant sources to assess risk and obtain guidance toward determining a rational approach to address the hazard or condition.


10. Ensures stakeholders have a mechanism to provide comment/feedback on issues affecting their organizations prior to review by the AHJ.

11. Ensures the BCO and FCO complete Fire Risk Assessments and briefs results to the AHJ.

C. **BCO:** The BCO may not delegate the following responsibilities:

1. Supports the inspection and reporting of BPA’s compliance with BPA adopted building, fire and life safety codes, standards, and guides in BPA-owned and leased facilities.

2. Determines meeting or not meeting applicable building codes.

3. Serves as the subject matter expert to the AHJ council for the determination of all building code related variances and equivalencies.

4. Conducts building project attestation reviews to ensure compliance with BPA adopted building, fire and life safety codes, standards, and guides.

5. Issues building notification of inspections and code violations and report code violations to the AHJ Council.

6. In consultation with the FCO, develops and maintains Appendix A of this policy.

7. Advises BPA managers regarding actions necessary to address hazardous building situations.

8. Establishes and maintains proper documentation on BPA’s compliance with applicable Building Codes, consistent with BPA Policy 236-1 – *Information Governance and Life Cycle Management*.

D. **FCO:** The FCO shall not delegate the following responsibilities:

1. Supports the inspection and reporting of BPA’s compliance with Fire Codes in BPA facilities.

2. Determines if applicable fire codes are met or not met.

3. Verifies that all fire protection systems are tested and accepted IAW code to include life safety systems, fire protection water systems; and approved equipment, materials for compliance with BPA adopted codes, standards, and guides.

4. Acts as the conduit to the AHJ council for the determination of all fire code related variances and equivalencies.
5. Conducts fire and life safety project attestation reviews to ensure compliance with BPA adopted fire and life safety codes, standards, and guides.


7. Issues fire alarm system, component, or zone outage permits.

8. Reviews investigation of the cause, origin, and circumstances of fire alarm activations causing building evacuation; fires; explosions; hazardous materials; and other emergency fire related events.

9. Issues permits necessary to ensure that operations and maintenance activities are conducted safely and reduce fire and life safety risks as they pertain to:
   a) The maintenance, storage, or handling of materials likely to pose a fire or life safety risk.
   b) Any fire related processes, which produce conditions hazardous to life or property to include installing equipment utilized in connection with such activities.
   c) Installing, modifying, or removing from service any fire protection system or equipment or any other construction, equipment installation or modification in accordance with the provisions of the National Fire Protection Agency (NFPA).

10. Advises BPA managers with regard to actions necessary to address hazardous fire and life safety situations.

11. Conducts periodic, random or requested inspections for new, permanent or temporary property/facilities, processes, equipment, systems and other fire related life safety and/or hazardous conditions. Annotate inspection results in written form and make results made available to the applicable manager(s) within the inspected organization.

12. Witnesses all acceptance testing of completed fire protection systems to include life safety systems, fire protection water systems; and approved equipment, materials for compliance with BPA adopted codes, standards and guides.

13. Maintains FCO related documentation consistent with BPA’s compliance with applicable Fire Codes, consistent with BPA Policy 236-1 – Information Governance and Life Cycle Management.

E. All BPA entities conducting facilities-related Construction, Modernization, Renovation, Operations and Maintenance Activities: All BPA Organizations that contract for, or execute, facilities-related construction, modernization, renovation, operations and maintenance activities shall:
1. Contacts the BPA FCO to obtain fire alarm system, component, or zone outage permits. No fire alarm system, component, or zone shall be removed from service (outage) without a valid outage permit.

2. Ensure incorporation of BPA adopted fire and life safety codes, standards, and guides into project drawings and specifications.

3. At the completion of the design and prior to starting construction of an internally designed project, a BFTE conducts a code review to ensure design meets the intent of BPA adopted building codes, standards and guides. At the completion of the design and prior to starting construction of an externally designed project, the contracted A&E firm developing the design conducts a code review to ensure the design meets the intent of BPA adopted building codes, standards and guides. In both cases, a letter for the record indicates a code review was completed and entered into the project file.

4. At the conclusion of construction of an internally designed project, a BPA Project Manager, Project Engineer or Project Architect conducts a project attestation by reviewing the projects as-built drawings and attesting to the fact the facility was constructed accordance with BPA adopted building codes, standards and guides. At the conclusion of construction of an externally designed project, the projects A&E firm conducts a project attestation by reviewing the projects as-built drawings and attesting to the fact the facility construction was in accordance with BPA adopted building codes, standards and guides. In both cases, a letter for the record indicates the attestation was completed and entered into the project file.

5. See BPA Procedure 440-75-6, *Attestations and Certificates of Occupancy* for guidance on conducting code reviews and attestations.

6. Maintain Construction and Operation and Maintenance records for the following actions:
   a) Inspection, testing and attestation of Fire Protection and Alarm Systems
   b) Inspection, testing and attestation of Backflow devices
   c) Inspection, testing and attestation of Elevators
   d) Inspection, testing and attestation of Cranes & Hoists
   e) Inspection, testing and attestation of Fuel Islands

7. Maintain official records to support the demonstration of compliance with BPA’s applicable building or fire codes, consistent with BPA Policy 236-1, *Information Governance & Life Cycle Management*.

8. Engage with CAO’s Project Management Office (N) and Communications (DK) if construction activities will affect employees or potentially disrupt BPAbusiness activities.
8. Standards & Procedures

A. The AHJ, AHJ Council, BCO and FCO will meet quarterly to:
   1. Review/discuss new codes, standards, and guides for adoption.
   2. Review and provide decisions for requested code variance and equivalencies.
   3. Assess notices of violation and mitigation.
   4. Identify and assess risk and mitigation.
   5. Coordinate with affected stakeholders.
   6. Develop procedural documents to guide policy adherence.

9. Performance & Monitoring

BPA’s Facilities and Workplace Services will establish key metrics that will demonstrate improvement over time. Policy effectiveness is achieved through the measurement of results from targeted Fire Hazard Assessments and result tracking of routine building and fire inspection results.

10. Authorities & References

B. Executive Order 13717, Establishing a Federal Earthquake Risk Management Standard
C. BPA Procedure 440-75-1, Adoption of Model, Consensus Building Codes
D. BPA Procedure 440-75-4, Code Equivalencies and Variances
E. BPA Procedure 440-75-6, Attestations and Certificates of Occupancy
F. BPA Procedure 440-75-10, Preserving O&M Inspection, Testing, and Attestation Records
G. BPA Procedure 440-75-11, Approving Modifications to BPA Fire Detection, Annunciation, and Protective Systems

11. Review

A. This policy will be reviewed and updated within 90 days of the effective date of a new version of Department of Energy policy, the publishing of International Code Council family of code updates or other laws or orders effecting fire or life safety programs.

B. This policy will be reviewed and updated within 90 days of an internal reorganization that affects any entity in the policy and/or roles section.

C. Notwithstanding (A) or (B) above, this policy will be reviewed every 5 years by the cognizant Facilities and Workplace Services authority.
### 12. Revision History

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<tr>
<th>Version Number</th>
<th>Issue Date</th>
<th>Brief Description of Change or Review</th>
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<tr>
<td>1</td>
<td>9/23/2019</td>
<td>Initial Policy</td>
</tr>
<tr>
<td>1.1</td>
<td>1/21/2020</td>
<td>Minor revision to Section 2: Policy Owner</td>
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<tr>
<td>1.2</td>
<td>5/7/2020</td>
<td>Updated Appendix B with effective dates and reference section to reflect procedure documents.</td>
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### Appendix A: BPA Adopted Codes, Standards, Guides and Best Practices

A. The following model building codes, standards, guides, and best practices have been adopted for use across all BPA facilities to ensure coordinated code compliance in building, safety, fire prevention, storm water, and energy efficiency:

<table>
<thead>
<tr>
<th>Council</th>
<th>Code (General Building)</th>
<th>Current Edition</th>
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<tbody>
<tr>
<td>IBC</td>
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<td>IBC</td>
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<td>IBC</td>
<td>International Mechanical Code (IMC)</td>
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<tr>
<td>IBC</td>
<td>International Energy Conservation Code (IECC) – ASHRAE 90.1 incorporated by reference</td>
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<td>IBC</td>
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<td>IAPMO</td>
<td>Uniform Plumbing Code Plumbing Code (UPC)</td>
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<td>IEEE</td>
<td>National Electrical Safety Code (NESC)</td>
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<th>Code (Fire)</th>
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<tr>
<td>NFPA 1</td>
<td>Fire Code</td>
<td>2018</td>
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<tr>
<td>NFPA 10</td>
<td>Standard for Portable Fire Extinguishers</td>
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<td>NFPA 12A</td>
<td>Standard on Halon 1301 Fire Extinguishing Systems</td>
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<td>NFPA 13</td>
<td>Standard for the Installation of Sprinkler Systems</td>
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<td>NFPA 70</td>
<td>National Electrical Code</td>
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<td>NFPA 70e</td>
<td>Standard for Electrical Safety in the Workplace</td>
<td>2018</td>
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<tr>
<td>NFPA 72</td>
<td>National Fire Alarm and Signal Code</td>
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<td>NFPA 101</td>
<td>Life Safety Code NFPA</td>
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<tr>
<td>NFPA 2001</td>
<td>Standard on Clean Agent Fire Extinguishing Systems</td>
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State Code (storm water)

<table>
<thead>
<tr>
<th>Code Year</th>
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<tr>
<td>National Electrical Safety Code (NESC)</td>
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B. The AHJ delegates adoption and administration of the following codes, standards, guides and best practices:

<table>
<thead>
<tr>
<th>Code, Standard, Guide or Best Practice</th>
<th>Code Year</th>
<th>Date Adopted</th>
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<tr>
<td>National Electrical Safety Code (NESC)</td>
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Appendix B: BPA procedural documents providing support for adherence to this policy

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<th>Procedure #</th>
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<td>Authority Having Jurisdiction Communications</td>
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<td>440-75-3</td>
<td>Obtaining Applicable Permits</td>
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<td>440-75-4</td>
<td>Code Equivalencies and Variances</td>
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<tr>
<td>440-75-5</td>
<td>Facilities Fire Incident Reporting and Response</td>
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<td>440-75-6</td>
<td>Attestations and Certificates of Occupancy</td>
<td>4-23-20</td>
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<tr>
<td>440-75-7</td>
<td>Notification of Inspections and Code Violations</td>
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<td>440-75-8</td>
<td>Fire Alarm System, Component, or Zone Outage Permits</td>
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<td>440-75-9</td>
<td>Fire Risk Assessments (FRA)</td>
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<tr>
<td>440-75-10</td>
<td>Preserving O&amp;M Inspection, Testing, and Attestation Records</td>
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