



# OHIO LEGISLATIVE SERVICE COMMISSION

---

## Bill Analysis

Brian D. Malachowsky

### **H.B. 178**

132nd General Assembly  
(As Introduced)

Rep. DeVitis

---

### **BILL SUMMARY**

- Creates the Zero-Emissions Nuclear Resource (ZENR) Program that requires certain electric distribution utilities (EDUs) to purchase zero-emissions nuclear credits (ZENCs) and recover the purchase costs through a nonbypassable rider imposed on retail electric service customers.
- Establishes criteria and a process for a nuclear energy resource to be designated a ZENR by the Public Utilities Commission of Ohio (PUCO).
- Establishes the pricing, transfer, and payment process for the purchase of ZENCs, including the establishment of \$17 as the ZENC price for the initial program period and for adjustment of the price in each subsequent program period.
- Provides for the program, beginning with the initial program period of two years commencing on the bill's effective date, to continue for a total of eight two-year periods (16 years) and to terminate on the last day of the eighth program period.
- Prohibits the program from being terminated prior to the end of the second program period.
- Creates the ZENR fund in the custody of the Treasurer of State, but not as part of the state treasury, in which payments for ZENC purchases are to be deposited and from which payments are to be made for ZENCs to corresponding ZENRs that generated them.
- Provides that all financial statements, financial data, and trade secrets submitted to or received by the PUCO for purposes of satisfying the ZENR criteria and any information taken for any purpose from the statements, data, or trade secrets are not public records.

- Requires the PUCO, in years six and eleven, to evaluate the ZENC price to determine the success of the ZENR program and to submit a report of the evaluation to the standing committees of both houses of the General Assembly that have primary jurisdiction over public utility legislation.
- Amends the state competitive retail electric service policy to encourage support for nuclear energy resources because they provide fuel diversity and environmental and other benefits.

---

## TABLE OF CONTENTS

Zero-Emissions Nuclear Resource program.....	3
Definitions .....	3
ZENR criteria .....	4
Criteria for all ZENRs .....	4
Criteria for an in-state ZENR .....	5
Criteria for out-of-state ZENRs .....	6
ZENR approval process .....	6
Application .....	6
In-state resources .....	6
Comments from interested parties.....	6
Reply to comments.....	6
Default for approval after 50 days.....	6
Out-of-state resources.....	7
Continuation as a ZENR.....	7
Continuation as ZENR if criteria met.....	7
Intent to continue.....	7
ZENR market .....	7
PUCO establishes price and supply .....	7
ZENR transfers credits .....	8
PUCO notification of ZENC supply .....	8
Sale of ZENCs .....	8
Non-transferability of ZENCs.....	9
PUCO processing sale .....	9
Nonbypassable rider to recover ZENC costs .....	9
ZENR custodial fund .....	9
ZENR program timeline.....	10
Requirements for ZENRs during program periods.....	10
Keep headquarters in Ohio .....	10
Maintain employees .....	10
Certain information not public records.....	10
Study .....	11
State competitive retail electric service policy changes .....	11
Energy diversity.....	11
Mitigating the policy of competitive electricity markets.....	11

---

## CONTENT AND OPERATION

### Zero-Emissions Nuclear Resource program

The bill creates a Zero-Emissions Nuclear Resource (ZENR) program to enable the state of Ohio to meet its policy goals and requirements under which Zero-Emissions Nuclear Credits (ZENCs) are purchased by electric distribution utilities (EDUs) to provide long-term energy security, and environmental and other benefits to the region and to retail electric service customers in the state.

Participation in the program is mandatory for EDUs in Ohio that have a ZENR within its certified territory. Also, all EDUs in the same holding company system must participate jointly and allocate costs across all classes of each participating utility's customers.<sup>1</sup>

#### Definitions

The bill defines the following terms:

- "Nuclear Energy Resource" is an electric generation unit fueled, in whole or in part, by nuclear power and licensed by the nuclear regulatory commission.<sup>2</sup> There are two operating nuclear power reactors that meet this definition and are in the certified territory of an Ohio EDU: Davis-Besse and Perry (both operated by FirstEnergy Nuclear Operating Company (FENOC)).<sup>3</sup> FENOC also operates Beaver Valley, Units 1 and 2 (Shippingport, Pennsylvania)<sup>4</sup> that meet the definition and are in the same holding company as the EDUs in whose certified territory Davis-Besse and Perry are located.<sup>5</sup> (See **COMMENT 1**.)
- "PJM" is the PJM Interconnection, L.L.C., or its successor.<sup>6</sup>

---

<sup>1</sup> R.C. 4928.751.

<sup>2</sup> R.C. 4928.75(A).

<sup>3</sup> U.S. Nuclear Regulatory Commission (last updated 02/21/2017, last accessed 04/24/2017) <https://www.nrc.gov/info-finder/region-state/ohio.html>.

<sup>4</sup> See, <https://www.nrc.gov/info-finder/region-state/pennsylvania.html>.

<sup>5</sup> First Energy Corp., <https://www.firstenergycorp.com/content/fecorp/about.html>.

<sup>6</sup> R.C. 4928.75(B).



- "Zero-Emissions Nuclear Credit" (or ZENC) means the attributes associated with one megawatt hour of electricity generated by a Zero-Emissions Nuclear Resource.<sup>7</sup>
- "Zero-Emissions Nuclear Resource" (or ZENR) means a nuclear resource that satisfies the "ZENR requirements" (outlined below).<sup>8</sup>

### **ZENR criteria**

A nuclear resource that satisfies the criteria for all ZENRs and either the in-state or out-of-state criteria is a ZENR.

#### **Criteria for all ZENRs**

All nuclear energy resources must satisfy the following criteria to be a ZENR:

- Be interconnected within the PJM transmission system;<sup>9</sup>
- Have a determination from PJM that the resource is transmission deliverable under their metrics used to calculate deliverability for purposes of capacity planning on a round-the-clock baseload basis into the transmission zone or zones of EDUs participating in the ZENR program;<sup>10</sup>
- On or after January 1, 2017:
  - Did not receive from another state a state tax exemption, deferral, exclusion, allowance, payment, credit, deduction, or reimbursement calculated, in whole or in part, using a metric that provides value for emissions not produced by the resource;
  - Is not wholly owned by a municipal or cooperative corporation or a group, association, or consortium of those corporations; or

---

<sup>7</sup> R.C. 4928.75(C).

<sup>8</sup> R.C. 4928.75(D).

<sup>9</sup> R.C. 4928.754(A).

<sup>10</sup> R.C. 4928.754(B).

- Did not, during a program period (see "**ZENR program timeline**" discussed below), recover some or all of the capital or operating costs of the resources through rates regulated by a state.<sup>11</sup>

### **Criteria for an in-state ZENR**

An in-state nuclear resource that also satisfies all of the following criteria is a ZENR:

- The resource has benefited the air quality profile of Ohio more than the predominant electric generation source with similar capacity and baseload characteristics as the resource as of the time the resource commenced operation.<sup>12</sup> Davis-Besse's operating license was issued April 22, 1977.<sup>13</sup> Perry's license was issued November 13, 1986.<sup>14</sup> Beaver Valley's operating licenses were issued July 2, 1976 and August 14, 1987.<sup>15</sup>
- All of the following could occur if the resource ceased operation and its capacity were replaced at the same location by the then predominant electric generation source with similar capacity and baseload characteristics:
  - The ability of Ohio, or one of its regions, to maintain or decrease existing intensity of fine particulate matter or to comply with one or more state or federal air pollution control programs, standards, or goals is reduced;
  - The carbon dioxide emissions intensity of Ohio is negatively impacted;
  - The ability of Ohio to maintain or decrease existing intensity of carbon monoxide, lead, ground-level ozone, particulate matter, nitrogen oxide, or sulfur dioxide is negatively impacted.<sup>16</sup>

---

<sup>11</sup> R.C. 4928.754(D).

<sup>12</sup> R.C. 4928.754(C)(1)(a).

<sup>13</sup> <https://www.nrc.gov/info-finder/reactors/davi.html>.

<sup>14</sup> <https://www.nrc.gov/info-finder/reactors/perr1.html>.

<sup>15</sup> <https://www.nrc.gov/info-finder/reactors/bv1.html> and <https://www.nrc.gov/info-finder/reactors/bv2.html>.

<sup>16</sup> R.C. 4928.754(C)(1)(b).

## **Criteria for out-of-state ZENRs**

A ZENR located outside of Ohio must be shown to provide no less than the same level of environmental benefits to Ohio as an in-state nuclear energy resource, under the above requirements.<sup>17</sup>

## **ZENR approval process**

### **Application**

Before providing ZENRs under the ZENR program, an entity that owns or operates a nuclear energy resource must file a written notice with the PUCO, stating that it meets the criteria described above. An entity must file the notice not later than 90 days after the commencement of the initial program period.<sup>18</sup>

### **In-state resources**

#### **Comments from interested parties**

With respect to the written notice filed relating to an in-state nuclear energy resource, any interested person may file comments with the PUCO not later than 20 days after the written notice is filed.<sup>19</sup>

#### **Reply to comments**

An entity that owns or operates a nuclear energy resource may file a response to any comment filed as described above, not later than ten days after the comment was filed with the PUCO.<sup>20</sup>

#### **Default for approval after 50 days**

The PUCO has 50 days from the initial filing regarding an in-state nuclear energy resource to designate the resource a ZENR if it satisfies the criteria described above. If the PUCO fails to issue timely order, the resource is deemed a ZENR.<sup>21</sup>

---

<sup>17</sup> R.C. 4928.754(C)(2).

<sup>18</sup> R.C. 4928.753.

<sup>19</sup> R.C. 4928.755.

<sup>20</sup> R.C. 4928.756.

<sup>21</sup> R.C. 4928.757.



## **Out-of-state resources**

The bill also requires the PUCO, under a procedure it adopts, to determine and issue the appropriate order regarding whether an out-of-state resource is a ZENR. The nuclear energy resource must submit an environmental study showing that it meets the criteria to be a ZENR. At a minimum, the adopted procedures must provide for the opportunity for comment and response similar to the provisions governing in-state resources.<sup>22</sup>

## **Continuation as a ZENR**

### **Continuation as ZENR if criteria met**

The bill provides that a nuclear energy resource determined to be a ZENR will continue to be considered a ZENR for all successive program periods as long as the resource continues to meet the criteria described above that is applicable to all ZENRs. The bill further provides that if a ZENR is sold, assigned, transferred, or conveyed, the bill's provisions apply to the new owner.<sup>23</sup>

### **Intent to continue**

The bill requires a ZENR to confirm with the PUCO its intent to continue to commit its credits to the ZENR program, not later than 30 days before a program period commences.<sup>24</sup>

## **ZENR market**

### **PUCO establishes price and supply**

Not later than 60 days after the first program period commences and not later than 30 days before a subsequent period commences, the PUCO sets the price for ZENCs applicable for that period. The bill establishes the initial program period price as \$17 per credit. For each subsequent program period, the price must be adjusted for inflation using the gross domestic product implicit price deflator as published by the U.S. Department of Commerce, Bureau of Economic analysis, index numbers 2007=100.<sup>25</sup>

---

<sup>22</sup> R.C. 4928.7511.

<sup>23</sup> R.C. 4928.7513.

<sup>24</sup> R.C. 4928.7514.

<sup>25</sup> R.C. 4928.7520.

The bill requires the PUCO, at the same time it sets the ZENC credit price, to also determine the maximum number of credits to be purchased by EDUs during the program period. The amount set must equal  $\frac{1}{3}$  of the "Total End User Consumption" in megawatt-hours over the previous two calendar years as shown on PUCO Form D1 of each participating EDU's most recently filed long-term forecast report.<sup>26</sup>

### **ZENR transfers credits**

The bill requires a ZENR, not later than seven days following the close of each quarter of a program period, to transfer all of its ZENCs generated that quarter to the PUCO, which must hold the credits for the sole purpose of administering the ZENR program.<sup>27</sup>

### **PUCO notification of ZENC supply**

Not later than seven days after the ZENR transfers its credits, the PUCO must notify each participating EDU of the total amount of ZENCs received from ZENRs.<sup>28</sup>

### **Sale of ZENCs**

The bill requires all participating EDUs to purchase all ZENCs transferred to the PUCO, up to the maximum number of credits determined by the PUCO, and to pay the price for each ZENC purchased. The PUCO must allocate the amounts to be purchased by each participating utility based on the "Total End User Consumption" in megawatt-hours over the previous two calendar years as shown on PUCO form D1 of each participating EDU's most recently filed long-term forecast report.<sup>29</sup>

The bill provides that if the owner, as of December 31, 2016, of a ZENR sells or transfers it, the PUCO must reduce the number of ZENCs to be purchased from that ZENR during the program period and, if necessary, successive program periods, to reflect an adjustment equal to  $\frac{1}{2}$  of the dollar amount of any net proceeds available after the payment or provision for the seller's known obligations. In no instance, however, shall that adjustment apply to the sale or transfer in bankruptcy.<sup>30</sup>

---

<sup>26</sup> R.C. 4928.7521.

<sup>27</sup> R.C. 4928.7522.

<sup>28</sup> R.C. 4928.7523.

<sup>29</sup> R.C. 4928.7524(A).

<sup>30</sup> R.C. 4928.7524(B).

## **Non-transferability of ZENCs**

The bill prohibits ZENCs purchased by participating EDUs from being transferred, sold, or assigned to any other entity.<sup>31</sup>

## **PUCO processing sale**

The bill requires the PUCO to deposit all payments for ZENCs into the ZENR fund created under the bill (see "**ZENR custodial fund**" discussed below").<sup>32</sup>

Not later than seven days after receipt of the payments, the PUCO must pay from the ZENR fund the amount paid for each ZENC that was purchased to the corresponding ZENR that generated the ZENCs.<sup>33</sup>

## **Nonbypassable rider to recover ZENC costs**

The bill requires each participating EDU to recover any and all direct and indirect costs for the purchase of ZENCs through a nonbypassable rider, charged to all of its retail electric service customers. The rider must be established not later than 60 days after the bill's effective date. The charge must be designed so no retail electric service customer has an increase in the total retail electric service bill of more than 5%, as compared to June 2015.

The bill also requires the participating EDU to defer as a regulatory asset an amount equal to the revenue reduction from the 5% limit on customer bill increases and recover the deferral plus carrying charges through a nonbypassable charge assessed over a 12-month period.<sup>34</sup>

## **ZENR custodial fund**

The bill creates the ZENR fund, to be in the custody of the Treasurer, but not part of the state treasury. The fund is to consist of all money collected by the PUCO from purchases of ZENCs. The amounts deposited shall be used to pay the ZENC purchase price to the ZENRs that generated the credits. The Treasurer must transfer all investment earnings from the ZENR fund to the General Revenue Fund.<sup>35</sup>

---

<sup>31</sup> R.C. 4928.7527.

<sup>32</sup> R.C. 4928.7525.

<sup>33</sup> R.C. 4928.7526.

<sup>34</sup> R.C. 4928.7530.

<sup>35</sup> R.C. 4928.7532.

## **ZENR program timeline**

The bill establishes a 16-year lifespan for the ZENR program. It begins on the bill's effective date, and is broken into eight consecutive two-year program periods, terminating on the last day of the eighth program period.<sup>36</sup>

The bill also provides that in no case shall the ZENR program terminate earlier than the last day of the second program period (equal to four years after the effective date) (see **COMMENT 2**).<sup>37</sup>

## **Requirements for ZENRs during program periods**

### **Keep headquarters in Ohio**

The bill requires an entity that (1) owns or operates a ZENR receiving payments for ZENCs and (2) has its corporate headquarters located in Ohio, to keep its headquarters in Ohio during each program period it receives such payments.<sup>38</sup>

### **Maintain employees**

The bill requires, during each program period in which a ZENR receives payment for ZENCs, that the employment levels at the ZENR must continue to be similar to that of nuclear energy resources constructed prior to 1990 in the U.S. with the same reactor type, similar nameplate capacity, and single-unit location. A "full-time employee" is defined as an individual who is employed for consideration for at least 35 hours per week, or who renders any other standard of service generally accepted by custom or specified by contract as full-time employment.<sup>39</sup>

## **Certain information not public records**

The bill provides that all financial statements, financial data, or trade secrets submitted to or received by the PUCO for purposes of satisfying the criteria as a ZENR, and any information taken for any purposes from the statements, data, or trade secrets are not a public record under Ohio's public records law.<sup>40</sup>

---

<sup>36</sup> R.C. 4928.752.

<sup>37</sup> R.C. 4928.7534.

<sup>38</sup> R.C. 4928.7533.

<sup>39</sup> R.C. 4928.7540.

<sup>40</sup> R.C. 4928.7515; R.C. 149.43, not in the bill.



## Study

The bill requires the PUCO, in years six and eleven of the program, to evaluate the ZENC price to discern (1) whether the program is achieving the policy goals, and (2) whether those policy goals are being met through other federal environmental laws, programs, rules or regulations, or through amendments to the federal tax code. On the conclusion of the evaluation, the PUCO must report the results to the standing committees of both houses of the General Assembly that have primary jurisdiction over public utility legislation.

## State competitive retail electric service policy changes

### Energy diversity

The bill expands Ohio's competitive retail electric service policy to ensure a diversity of resources, including ZENRs that provide fuel diversity and environmental and other benefits.<sup>41</sup> Under continuing law, Ohio's policy is to ensure diversity of electricity supplies and suppliers, by giving consumers effective choices over the selection of those supplies and suppliers and by encouraging the development of distributed and small generation facilities.<sup>42</sup>

### Mitigating the policy of competitive electricity markets

The bill amends the policy requiring the state to recognize the continuing emergence of competitive electricity markets through the development and implementation of flexible regulatory treatment by requiring the state to continue to do that "while simultaneously recognizing the need" for nuclear energy resources and resources that provide fuel diversity and environmental and other benefits.

---

## COMMENT

1. The bill requires an Ohio EDU that has a ZENR located in its certified territory to participate in the ZENR program. The bill also provides that all EDUs in the same holding company system must participate jointly.<sup>43</sup> It is not clear whether this means the Beaver Valley units would be included in the ZENR program. However, the bill permits out-of-state nuclear energy resources to qualify and participate as ZENRs.<sup>44</sup>

---

<sup>41</sup> R.C. 4928.02(C)(2).

<sup>42</sup> R.C. 4928.02(C)(1).

<sup>43</sup> R.C. 4928.751.

<sup>44</sup> R.C. 4928.754(C)(2).



2. R.C. 4928.7534 provides that "[i]n no case shall the zero-emissions nuclear resource program terminate earlier than the last day of the second program period." A future General Assembly, however, under the authority of Article II, Sections 1 and 15 of the Ohio Constitution could amend the law and terminate the program earlier.

---

## HISTORY

ACTION	DATE
Introduced	04-10-17

H0178-I-132.docx/ks

