

**Report of the Tennessee Advisory Commission on Intergovernmental Relations**



**Tennessee Valley Authority's Payments in Lieu of Taxes**  
*Annual Report to the Tennessee General Assembly*



**February 2019**



# TACIR Publication Policy

---

Reports approved by vote of the Tennessee Advisory Commission on Intergovernmental Relations are labeled as such on their covers with the following banner at the top: *Report of the Tennessee Advisory Commission on Intergovernmental Relations*. All other reports by Commission staff are prepared to inform members of the Commission and the public and do not necessarily reflect the views of the Commission. They are labeled *Staff Report to Members of the Tennessee Advisory Commission on Intergovernmental Relations* on their covers. *TACIR Fast Facts* are short publications prepared by Commission staff to inform members and the public.

**Tennessee Advisory Commission on Intergovernmental Relations**  
226 Capitol Boulevard Building · Suite 508 · Nashville, Tennessee 37243  
Phone: 615.741.3012 · Fax: 615.532.2443  
E-mail: [tacir@tn.gov](mailto:tacir@tn.gov) · Website: [www.tn.gov/tacir](http://www.tn.gov/tacir)

# **Tennessee Valley Authority's Payments in Lieu of Taxes**

## ***Annual Report to the Tennessee General Assembly***

Matthew Owen, Ph.D.  
Policy Coordinator



Mark McAdoo, M.S., M.S.M.  
Research Manager



Melissa Brown, M.Ed.  
Deputy Executive Director



Teresa Gibson  
Web Development & Publications Manager

**February 2019**

Recommended citation:

Tennessee Advisory Commission on Intergovernmental Relations. 2019. *Tennessee Valley Authority's Payments in Lieu of Taxes: Annual Report to the Tennessee General Assembly*.



Tennessee Advisory Commission on Intergovernmental Relations. This document was produced as an Internet publication.



State of Tennessee

Tennessee Advisory Commission on Intergovernmental Relations  
226 Anne Dallas Dudley Boulevard, Suite 508  
Nashville, Tennessee 37243



**Legislative Members**

Senator Jon Lundberg  
Bristol

Senator Katrina Robinson  
Memphis

Senator Ken Yager  
Kingston

Senator Jeff Yarbrow  
Nashville

Representative Mike Carter  
Ooltewah

Representative John Crawford  
Kingsport

Representative Harold M. Love Jr.  
Nashville

Representative Antonio Parkinson  
Memphis

**Statutory Members**

Senator Bo Watson  
Hixon

Representative Susan Lynn  
Mt. Juliet

Justin Wilson  
Comptroller of Treasury

**County Members**

Mayor Rogers Anderson  
Williamson County

Mayor Buddy Bradshaw  
Loudon County

County Executive Jeff Huffman  
Tipton County

Mayor Larry Waters, Vice Chair  
Sevier County

**Municipal Members**

Mayor Tom Bickers  
Louisville

Mayor Kevin Brooks  
Cleveland

Mayor A. Keith McDonald  
Bartlett

Vice-Mayor Kay Senter  
Morristown

**Other Local Government Members**

Mayor Brent Greer  
TN Development District Association

Charlie Cardwell  
County Officials Assn. of Tennessee

**Executive Branch Members**

Paula Davis, Asst. Comm. of Admin. Services  
Dept. of Economic and Community Dev.

Iliff McMahan, Jr., Northeast Regional Director  
Dept. of Economic and Community Dev.

**Private Citizen Members**

Christi Gibbs  
Nashville

Ken Young  
Franklin

**TACIR**

Cliff Lippard, Executive Director

February 1, 2019

The Honorable Bo Watson  
Chair, Senate Finance, Ways and Means Committee  
425 5th Avenue North  
Suite 706, Cordell Hull Building  
Nashville, TN 37243

The Honorable Paul Bailey  
Chair, Senate Commerce and Labor Committee  
425 5th Avenue North  
Suite 736, Cordell Hull Building  
Nashville, TN 37243

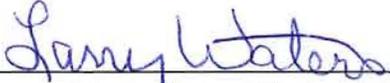
The Honorable Susan Lynn  
Chair, House Finance, Ways and Means Committee  
425 5th Avenue North  
Suite 662, Cordell Hull Building  
Nashville, TN 37243

The Honorable Timothy Hill  
Chair, House Commerce Committee  
425 5th Avenue North  
Suite 680, Cordell Hull Building  
Nashville, TN 37243

Dear Chairmen:

Transmitted herewith is the Commission's annual report evaluating the effect of Section 4 of Public Chapter 475, Acts of 2009, (the Electric Generation and Transmission Cooperative Act) as amended in Public Chapter 1035, Acts of 2010, on the Tennessee Valley Authority's payments in lieu of taxes with specific attention to changes in TVA's generating system. The report was approved February 1, 2019, and is hereby submitted for your consideration.

Respectfully yours,

  
\_\_\_\_\_  
Mayor Larry Waters  
Acting Chairman

  
\_\_\_\_\_  
Cliff Lippard  
Executive Director





226 Anne Dallas Dudley Blvd., Suite 508  
Nashville, Tennessee 37243-0760  
Phone: (615) 741-3012  
Fax: (615) 532-2443  
[www.tn.gov/tacir](http://www.tn.gov/tacir)

---

## ***MEMORANDUM***

**TO:** Commission Members

**FROM:** Cliff Lippard *Cliff*  
Executive Director

**DATE:** 1 February 2019

**SUBJECT:** Tennessee Valley Authority Payments in Lieu of Taxes—Annual Report for Approval

---

The attached Commission report is submitted for your approval. The report responds to Public Chapter 475, Acts of 2009, which directed the Commission to monitor changes in the wholesale distribution of electric power by the Tennessee Valley Authority and its distributors for possible effects on the Authority's payments in lieu of taxes to the states in the Valley region and to Public Chapter 1035, Acts of 2010, which made the report an annual requirement. There are no recommended actions to be taken by the General Assembly in this year's report.



## Contents

<b>Tennessee Valley Authority's Payments in Lieu of Taxes</b> .....	<b>1</b>
TVA's Payments in Lieu of Taxes Increase for Second Straight Year .....	3
TVA's Efforts to Meet Power Needs and Remain Within Its Debt Limit.....	5
Short-Term System-Management Strategies .....	5
Long-Term System-Management Strategies .....	6
The Shift Away from Coal: Environmental and Business Reasons.....	12
Fossil Plant Retirements Required by Environmental Agreements.....	13
Fossil Plant Retirements for Business Reasons.....	14
New Energy Sources to Meet the Region's Needs .....	16
<b>References</b> .....	<b>19</b>
<b>Appendix A: TVA's Allocation Formula</b> .....	<b>23</b>
<b>Appendix B: Tennessee's Allocation Formula</b> .....	<b>25</b>
<b>Appendix C: Distribution of Counties' Share of TVA Payments in Lieu of Taxes to Tennessee by Tennessee Fiscal Year</b> .....	<b>27</b>
<b>Appendix D: Distribution of Cities' Share of TVA Payments in Lieu of Taxes to Tennessee by Tennessee Fiscal Year</b> .....	<b>29</b>
<b>Appendix E: Impact Payments Distributed to Counties in Areas Affected by TVA Construction by Tennessee Fiscal Year</b> .....	<b>37</b>
<b>Appendix F: Impact Payments Distributed to Cities in Areas Affected by TVA Construction by Tennessee Fiscal Year</b> .....	<b>39</b>
<b>Appendix G: TVA 2015 IRP Recommendations by Resource Type</b> .....	<b>47</b>



## Tennessee Valley Authority's Payments in Lieu of Taxes

The Tennessee Advisory Commission on Intergovernmental Relations was directed by the Electric Generation and Transmission Cooperative Act of 2009 (Section 4 of Public Chapter 475, Acts of 2009) to monitor changes in the wholesale distribution of electric power by the Tennessee Valley Authority (TVA) and its distributors for possible effects on the Authority's payments in lieu of taxes (PILOTs) to the states in the Valley region. The Commission's report was to "include recommendations, if any, on adjustments to the state tax system that would keep the state and local governments whole from such future changes." The Act authorized the creation of nonprofit membership cooperatives to generate and transmit electricity in Tennessee. At the time, one such co-op already owned a power-generating facility in Mississippi, and the legislature was concerned that, having authorized them, they had opened the door to a potential decline in TVA's payments to the states if the co-ops began selling electricity directly to distributors.

After considering a number of options, including those developed by the Commission,<sup>1</sup> the Tennessee General Assembly passed Public Chapter 1035, Acts of 2010, requiring payments equivalent to TVA's Tennessee PILOT from any other entity providing wholesale electric current for resale within the state, such as the electric generation and transmission cooperatives authorized in 2009. Public Chapter 1035 was designed to ensure that revenue from power sales in the TVA region would not depend on who produced that power or who sold it. The Act also renewed the requirement that the Commission monitor the effects of the 2009 law and report to the General Assembly annually. This is the Commission's report for the 2019 legislative session.

Although the 2010 law put to rest immediate concerns about the potential loss of TVA revenue created by the 2009 law, concerns about the problems created by TVA's debt ceiling, which has not been raised since 1979,<sup>2</sup> and the threat of privatization continue to reappear from time to time. Both were among the reasons given by power distributors in the region for seeking authorization to form the generation and transmission cooperatives authorized by the 2009 Act. TVA's debt ceiling remains \$30 billion, which because of inflation now has the buying power that \$10 billion would have had in 1979,<sup>3</sup> but the threat of privatization has diminished at least for the time being.<sup>4</sup> Figure 1 shows the level of TVA's debt since 2010.

<sup>1</sup> Tennessee Advisory Commission on Intergovernmental Relations 2010.

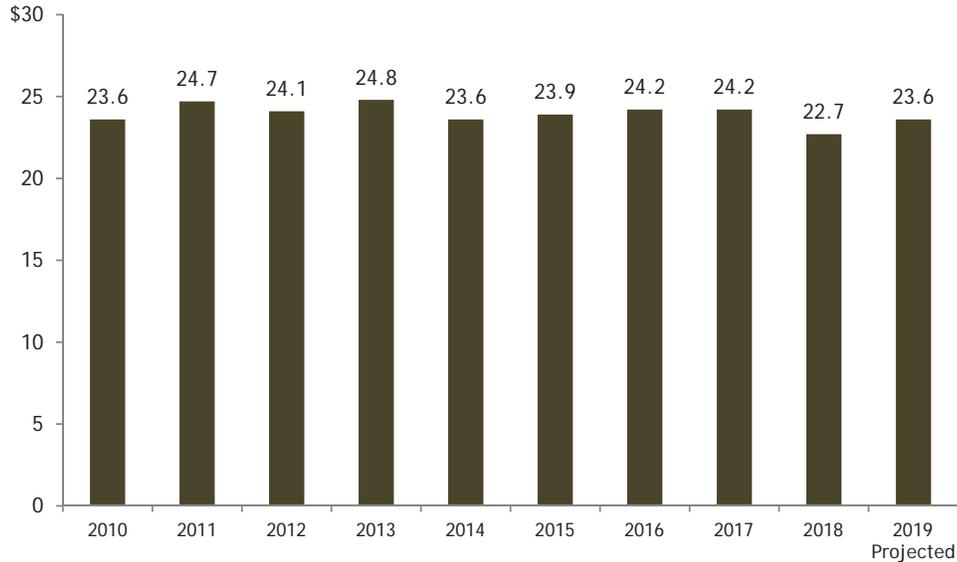
<sup>2</sup> 16 United States Code 831 n-4(a).

<sup>3</sup> US Department of Labor, Bureau of Labor Statistics "PPI Commodity Data for Fuels and Related Products and Power: Electric Power."

<sup>4</sup> Sher 2018; and Collins 2018.

TVA's payments in lieu of taxes to Tennessee are estimated to increase by \$20 million for federal fiscal year 2018-19, the second straight year payments have increased.

Figure 1. Tennessee Valley Authority Statutory Debt at Federal Fiscal Year End  
(in billions)



Source: Tennessee Valley Authority 2014a; Tennessee Valley Authority 2018b; and email from Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, November 27, 2018.

To manage within its \$30 billion debt limit, TVA has adopted a number of innovative but by its own account costly financing techniques, some of which can alter the amount of PILOT revenue paid directly to states. The lease-and-lease-back technique used so far to finance the expansion of power production in Tennessee does not affect the amount of the PILOT paid directly to Tennessee, but the sale-and-lease-back technique used at one of its plants in Mississippi reduced the amount paid directly to that state, and the potential for the same exists throughout the region. The difference is in who owns the property and whether it is subject to state and local taxes.

Changes in TVA's supply system continue to affect the balance of PILOTs across the region. TVA has shifted power production away from coal in response to economic factors and environmental mandates, retiring numerous coal-fired units at its power plants since 2012, while completing a second nuclear reactor at its Watts Bar facility in Rhea County and building or acquiring several new natural gas-fired facilities. In the states where these new or retired facilities are located, the changes have affected the value of TVA power property, one of two factors determining each state's share of the PILOT. TVA's investments in nuclear and natural gas in Tennessee combined with retirements of coal-fired units in Alabama and Kentucky have generally more than offset coal-fired facility retirements in Tennessee in recent years. And with the exception of federal fiscal year 2017-18 when investments in new natural gas-fired units in Kentucky shifted payments toward that state, these changes in TVA's supply system have shifted the balance of the PILOT toward Tennessee.

TVA's decision to make many of these changes predates but is consistent with the management strategy laid out in its 2015 Integrated Resource Plan (IRP), which TVA is in the process of updating.<sup>5</sup> The 2015 IRP calls for closing a number of old coal-fired generating plants, building or acquiring plants powered by natural gas, expanding nuclear-powered facilities, and relying more on renewable energy and energy efficiency. The plan's strategies for increasing energy efficiency, if successful, could reduce TVA revenues and ultimately the PILOT for all recipients, as could other factors, such as the economy and the weather. None of these changes appear to warrant legislative action at this time but should continue to be monitored.

### ***TVA's Payments in Lieu of Taxes Increase for Second Straight Year***

TVA's actual payments in lieu of taxes for federal fiscal year 2017-18 amounted to \$524 million, of which \$347 million was paid to Tennessee governments, including \$3.4 million in direct payments to counties. This was an increase of \$7 million over payments to all states in the previous fiscal year.<sup>6</sup> Payments for the current fiscal year, federal fiscal year 2018-19, are estimated to increase \$24 million to a total of \$548 million because of increased power sales and revenue, which TVA attributes to "weather conditions, including a colder than normal January and warmer than normal temperatures" during the summer.<sup>7</sup>

Payments to Tennessee are estimated to increase \$20 million to a total of \$367 million, of which \$3.4 million will again be paid directly to counties, in federal fiscal year 2018-19. Moreover, Tennessee's percentage of the Authority's overall payments increased primarily because TVA paid off debt remaining for its unfinished Bellefonte nuclear plant in Alabama and accelerated depreciation of the facility, which decreased the value of TVA power property in that state relative to the other states in the region.<sup>8</sup>

Total payments are based on 5% of prior-year gross proceeds<sup>9</sup> from power sales, and funds are divided among the eight states in which TVA owns power property<sup>10</sup> based both on revenues from power sold by TVA and on the value of TVA power property located in each state. Although TVA buys power from other sources, those purchases do not affect the amount

Tennessee receives more than 67% of the payments in lieu of taxes TVA distributes to states in the region, a percentage that with the exception of last year has been increasing since 2008-09.

<sup>5</sup> Tennessee Valley Authority 2015c.

<sup>6</sup> Tennessee Valley Authority 2018h.

<sup>7</sup> Tennessee Valley Authority 2018f.

<sup>8</sup> Email from Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, December 13, 2018; and Flessner 2018c.

<sup>9</sup> TVA interprets "gross proceeds" as the proceeds from the sale of power to municipalities, cooperatives, and industries. The TVA Act specifically excludes TVA's sales to federal agencies from the PILOT calculation.

<sup>10</sup> TVA interprets "power property" to include facilities that generate electricity, property used to transmit electricity, coal assets, and a portion of the overall value of TVA's reservoir properties.

each state receives from its PILOTs. See appendix A for an explanation of TVA's allocation formula.

Tennessee receives more than 67% of the total distributed through TVA's formula, a percentage that with the exception of last year has been increasing since 2008-09. Past increases in this percentage helped offset what would have otherwise been larger decreases in TVA's payments to Tennessee in federal fiscal years 2015-16 and 2016-17. See table 1.

Table 1. Tennessee Valley Authority Revenue Sharing  
Distribution to Tennessee by Federal Fiscal Year (in millions)

	2018-19*	2017-18	2016-17	2015-16	2014-15	2013-14
TVA's Overall PILOT	\$ 547.7	\$ 523.7	\$ 517.1	\$ 534.8	\$ 542.0	\$ 533.1
Tennessee's Percent	x 67.06%	66.33%	66.54%	65.78%	65.31%	62.83%
Tennessee's Amount	\$ 367.3	\$ 347.4	\$ 344.1	\$ 351.8	\$ 354.0	\$ 335.0
Direct Payment to Counties	- 3.4	3.4	3.4	3.4	3.4	3.4
Tennessee's Share	\$ 363.9	\$ 344.0	\$ 340.7	\$ 348.5	\$ 350.6	\$ 331.6

\* Estimate based on unaudited gross receipts. TVA distributes payments monthly from October through August based on this estimate then makes a final payment for the fiscal year in September based on audited revenue figures. It is not unusual for the final payment to be adjusted upward from the original estimated amount.

Note: Share distributed to Tennessee may not equal amount allocated to state minus direct payments to counties because of rounding.

Source: Tennessee Valley Authority

Tennessee's local governments continue to receive more than 40% of the amount TVA allocates to Tennessee for distribution through the state's own formula. Under Tennessee Code Annotated, Section 67-9-101 et seq., this formula distributes a portion of Tennessee's share to cities and counties with additional payments set aside for local governments in counties with TVA construction. The rest is reserved for the state. Distributions through the formula, which are calculated on a state fiscal year basis, are directly affected by the increasing total payments to Tennessee in federal fiscal year 2018-19 and by TVA construction projects. See appendix B for an explanation of Tennessee's allocation formula.

On a state fiscal year basis, the 2018-19 allocations—excluding impact payments that are set aside for local governments in counties with TVA construction—will increase by \$5.7 million for counties, by \$2.5 million for cities, and by \$7.9 million for the state's own agencies. Impact payments related to TVA construction, however, will decrease by \$343 thousand for counties and by \$106 thousand for cities because of recent project completions. While combined these amounts result in an overall increase, they total less than the estimated increase in payments to Tennessee for federal fiscal year 2018-19 because the state's fiscal year begins on July 1, three months earlier than the federal fiscal year. As a result, Tennessee's distribution to local governments and the state for state fiscal year 2018-19 includes TVA's payments for the last three months of federal fiscal year

2017-18, when the PILOT's increase was smaller. See appendixes C and D for the distribution to local governments within the state by county and city since state fiscal year 2011-12, excluding impact payments set aside for local governments in counties with TVA construction, which can be found in appendixes E and F.

### ***TVA's Efforts to Meet Power Needs and Remain Within Its Debt Limit***

To meet the region's power demand, TVA must plan for both short-term and long-term fluctuations in the use of electricity while staying within its statutory debt limit of \$30 billion. The Authority has developed a number of strategies for managing its system to meet demand within these constraints. These strategies have and will continue to affect TVA's payments to Tennessee.

#### **Short-Term System-Management Strategies**

TVA meets short-term-demand increases that result from extreme weather by operating additional facilities that are used only in times of high demand, purchasing power from other utilities, and cutting off power to customers with interruptible contracts. These strategies enabled TVA to meet record power demands on January 8, 2015, when demand hit the third highest winter peak in TVA's history at 32,723 megawatts<sup>11</sup> and again on February 19, 2015, when demand set a record for that month at 32,109 megawatts.<sup>12</sup> According to the Authority, "meeting the demand required the combined effort of TVA's employees and generating facilities, coordination with the Valley's 155 local power companies and large industrial customers, and the cooperation of businesses and households to conserve."<sup>13</sup> TVA used natural gas plants to supplement the power provided by its coal-fired, nuclear, and hydroelectric facilities and purchased additional power from the open market to manage a similar period of peak demand in 2014.<sup>14</sup> But managing peak demand can require temporarily cutting off power to customers that have agreed to allow TVA and its distributors to interrupt service to them during emergencies<sup>15</sup> in exchange for credits on their power bills<sup>16</sup> as happened at Murray State University in 2014.<sup>17</sup> Extreme weather—in particular, prolonged periods of hotter or colder than normal temperatures—can affect the amount and distribution of TVA's payments to the states, though individual events may be too short-lived to have a noticeable effect.

TVA must plan for both short-term and long-term fluctuations in the use of electricity while staying within its statutory debt limit of \$30 billion.

<sup>11</sup> Tennessee Valley Authority 2015a.

<sup>12</sup> Tennessee Valley Authority 2015e.

<sup>13</sup> Ibid.

<sup>14</sup> Tennessee Valley Authority 2014c.

<sup>15</sup> Flessner 2014.

<sup>16</sup> Tennessee Valley Authority 2011.

<sup>17</sup> Canning, Lampe, and Null 2014.

TVA's long-term management strategies could affect the amount and distribution of its payments to the states in the future.

### Long-Term System-Management Strategies

TVA's long-term management strategies are laid out in its Integrated Resource Plan, which was last updated and approved by the TVA Board in August 2015. TVA plans to release another update to its IRP in 2019.<sup>18</sup> The 2015 update, a response to changes in the utility industry including lower-cost natural gas and renewables as well as decreased demand caused by economic changes and energy efficiency efforts,<sup>19</sup> analyzed five strategies for meeting demand.

- Traditional utility approaches for optimizing cost
- Planning to meet demand while also meeting an emissions target
- Purchasing additional power from other utilities to meet most demand increases
- Maximizing energy efficiency
- Maximizing renewables<sup>20</sup>

These strategies could affect the amount and distribution of the Authority's payments to the states in the future. TVA has been continually updating its generating system to meet the needs of the region's growing economy and tighter air-quality standards. As early as the 1960s and 1970s, TVA was investing heavily in nuclear power for both of these reasons. More recently, the Authority has invested in natural gas-powered facilities to meet periodic surges in demand caused by the weather. TVA's implementation of its long-term management strategies, which will affect the distribution of its PILOTs, will be affected by the economics of power production and the requirements of the Clean Air Act (CAA) and other environmental regulations as well as TVA's debt limit.

### *TVA's Debt Limit and Financing Arrangements*

Earlier concerns about TVA's financing arrangements for new generating capacity in the region and their potential effects on PILOTs in the region and across the state have diminished as the Authority has modified its strategies. In order to stay within the \$30 billion debt ceiling imposed on it by the Congress in 1979,<sup>21</sup> TVA began using new financing methods,<sup>22</sup> some of which affected the distribution of PILOT funds for some states, including the amount those states had available to allocate to their counties and cities. One technique is the leasing of generating facilities, an approach TVA has no current plans to expand.<sup>23</sup>

<sup>18</sup> Tennessee Valley Authority "2019 Integrated Resource Plan."

<sup>19</sup> Tennessee Valley Authority 2015f.

<sup>20</sup> Tennessee Valley Authority 2015c.

<sup>21</sup> 16 United States Code 831 n-4(a).

<sup>22</sup> US General Accounting Office 2003.

<sup>23</sup> For details on existing lease arrangements, see Tennessee Valley Authority 2018a.

Shortly before the Electric Generation and Transmission Cooperative Act was passed in 2009, TVA entered into an agreement with a group of its distributors organized as the Seven States Power Corporation, a nonprofit company.<sup>24</sup> Seven States purchased an interest in TVA's Southaven, Mississippi, power plant with the agreement that TVA would continue to operate it. TVA later bought back all of Seven States' interest in the plant.<sup>25</sup> Under the sale-and-lease-back arrangement, while it was active, all sales of electricity produced at Southaven were through TVA and, therefore, were accounted for as TVA revenues and subject to the PILOT allocation to states.

Leasing arrangements such as the one used in Southaven during this agreement do not change the total amount of the PILOT under the TVA formula, nor do they change the allocation across states. Section 15d(g) of the Tennessee Valley Authority Act of 1933 says that

*. . . power generating and related facilities operated by the Corporation under lease and lease-purchase agreements shall constitute power property held by the Corporation within the meaning of section 13 of this Act . . .*

This provision causes facilities operated by TVA under leases to be included in the calculation of the value of power property under Section 13, which means that the value of TVA property in a state does not change when TVA sells a facility and then leases it back as the Authority did with Southaven.<sup>26</sup>

Although the change in ownership of the Southaven plant did not affect the amount of TVA's PILOT allocated to each state, it did affect the PILOT distribution to the state of Mississippi. When TVA leases power property owned by other entities, it reduces the PILOT distributed to the state in which the property is located to the extent that it reimburses the plant owners for taxes they must pay to the state or local governments. This reduces the amount of TVA PILOT that goes through the state's own allocation formula. Section 15d(g) of the 1933 act goes on to say

*. . . that portion of the payment due for any fiscal year under said section 13 to a state where such facilities are located which is determined or estimated by the Board to result from holding such facilities or selling electric energy generated thereby shall be reduced by the amount of any taxes or tax equivalents applicable to such fiscal year paid by the owners or others on account of said facilities to said state and to local taxing jurisdictions therein.*

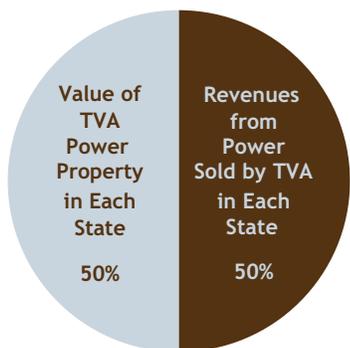
<sup>24</sup> Tennessee Valley Authority 2009.

<sup>25</sup> Tennessee Valley Authority 2013a.

<sup>26</sup> Moreover, this means that when TVA leases a facility that it did not previously own, such as the Caledonia plant in Mississippi, the value of TVA power property in the state where the facility is located actually increases.

The sale-and-lease-back technique used at one of TVA's plants in Mississippi reduced the amount paid to that state, and the potential for similar arrangements exists throughout the region.

**5% of TVA's Gross Proceeds Is Distributed to States Based on**



The initial sale-and-lease-back arrangement at the Southaven plant and the Authority's current lease arrangement at the privately owned Caledonia plant, also in Mississippi, illustrate the effect of this second provision. Privately owned plants are subject to state and local taxes. Consequently, the portion of the TVA PILOT paid directly to Mississippi, related to Caledonia, was reduced by approximately \$1 million in 2017-18 and will be reduced by an estimated \$1.2 million in 2018-19.<sup>27</sup> This works much like the \$3+ million in direct payments TVA makes to counties in Tennessee. Direct payments are taken off the top of TVA's PILOT to each state, reducing the amount allocated through the state's statutory formula.

The amount allocated through Tennessee's formula, including the amount retained by the state in its general fund, would be reduced by any taxes paid on account of any plant operated through a sale-and-lease-back arrangement if that were to occur. Tennessee might want to mitigate that reduction by modifying its allocation formula to offset the direct payments of taxes by, for example, reducing the allocation to any particular jurisdiction by the amount of the reimbursement TVA made to the plant owners. It is possible, of course, that the reimbursement amount to those jurisdictions could be greater than the allocation through the state formula, so considerable thought would need to go into making such a change.

TVA chose a somewhat different leasing strategy to raise funds for generating expansions in Tennessee without approaching its debt ceiling. Thus far, arrangements in Tennessee have been lease-and-lease-back agreements, which do not jeopardize the amount of the PILOT controlled by Tennessee's allocation formula. An example is the natural gas combined cycle plant built between 2010 and 2012 in Hawkins County next to the John Sevier fossil plant and leased to a private company in January 2012. The company paid TVA \$1 billion for the lease and then leased the plant back to TVA for 30 years.<sup>28</sup> This lease arrangement changes neither the ownership of the property nor TVA revenues and thus has no effect on the PILOT allocation across states or the amount distributed to Tennessee. Similarly, after repurchasing Seven States' 90% share of the Southaven plant, TVA then entered into a leasing arrangement with Southaven Combined Cycle Generation LLC in which the facility is leased to the company and, in turn, the facility is leased back to TVA.<sup>29</sup>

Currently, TVA has no reported plans for any new lease arrangements in Tennessee, including sale-lease-back arrangements that would affect the state's share of the Authority's PILOT, in the short-term.<sup>30</sup> However, the

<sup>27</sup> Email from Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, November 27, 2018; and Schoolfield 2017.

<sup>28</sup> Tennessee Valley Authority 2013a.

<sup>29</sup> Tennessee Valley Authority 2013c.

<sup>30</sup> Email from Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, November 27, 2018.

possibility exists that TVA could use leasing strategies in the future to finance new construction if its debt limit remains capped at \$30 billion. In its most recent *Form 10-K* filed with the US Securities and Exchange Commission, TVA acknowledges its use of these innovative financing techniques and says that it may eventually seek similar arrangements. But it mentions no immediate plans to do so.<sup>31</sup>

In the past, TVA has said that

while such leasing transactions allow TVA to diversify its asset financing program, financing an asset by using the proceeds of leasing transactions is typically more costly to TVA than financing an asset with the proceeds of Bonds.<sup>32</sup>

In April 2015, TVA purchased Quantum Utility Generation's Choctaw combined-cycle natural gas plant near Ackerman, Mississippi. Although the purchase used traditional forms of financing, the acquisition allows for future ownership by Seven States Power Corporation, which could affect the PILOT depending on the type of sale or lease arrangement adopted.<sup>33</sup>

### *Rebalancing Power Sources and Increasing Efficiency Could Affect PILOTs*

As TVA continues to rebalance its generating fleet, the resulting changes could cause shifts in the value of power property from state to state and from county to county, which could affect each state's and county's share of TVA's PILOT. Many of these changes—consistent with environmental mandates, the economics of power production, and the recommendations in TVA's 2015 IRP—involve the retirement of existing coal-fired units at TVA power plants. Because retired units are no longer used to produce power, TVA accelerates their depreciation so that only their residual value is included in the PILOT distribution formula.<sup>34</sup>

Changes in TVA's generating fleet in recent years have generally increased the value of TVA power property in Tennessee relative to other states in the region.<sup>35</sup> Although TVA retired coal-fired units at its John Sevier plant in Hawkins County in 2012 and 2014, at its Johnsonville plant in Humphreys County in 2015 and 2017, and at its Allen plant in Memphis in 2018, the resulting reductions in these plants' values have been more than offset both by TVA's investments in its Tennessee facilities and by its retirement

TVA has no current plans for any sales-lease-back arrangements in Tennessee that would affect the state's share of TVA's PILOT.

<sup>31</sup> Tennessee Valley Authority 2018a.

<sup>32</sup> Tennessee Valley Authority 2013a.

<sup>33</sup> Tennessee Valley Authority 2015d.

<sup>34</sup> Email from Stephen Schoolfield, senior program manager-taxes, Tennessee Valley Authority, January 6, 2016.

<sup>35</sup> Email from Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, November 27, 2018.

TVA continues to rebalance its generation fleet, which could cause shifts in the value of power property from state to state and in each state's share of TVA's PILOT.

of additional coal-fired units in other states. Recent investments in TVA's Tennessee facilities include natural gas-fired units completed in 2012 at its John Sevier plant and in 2018 at its Allen plant, a second nuclear unit completed in 2016 at its Watts Bar plant in Rhea County, and ongoing construction begun in 2015 at Boone Dam on the border of Sullivan and Washington counties. TVA also retired coal-fired units at its Colbert and Widows Creek plants in Alabama between 2013 and 2016 and at its Shawnee and Paradise plants in Kentucky in 2014 and 2017, though it replaced its retired coal-fired units at Paradise with natural-gas fired units.<sup>36</sup> And as discussed above, TVA paid off debt remaining for its unfinished Bellefonte nuclear plant in Alabama and accelerated depreciation of the facility in 2018, which decreased the value of TVA power property in that state relative to others in the region, including Tennessee.<sup>37</sup>

Future changes, however, could reduce Tennessee's share of TVA power property and the PILOT—which last occurred in 2017-18 when TVA's investments in new natural gas-fired units at Paradise shifted payments toward Kentucky<sup>38</sup>—unless they are offset by increases in the value of TVA power property from investments in Tennessee or by net reductions in other states. This fall, TVA announced it would evaluate whether to retire the lone coal-fired unit at its Bull Run plant in Anderson County and the lone remaining coal-fired unit at its Paradise plant in Kentucky.<sup>39</sup>

Shifts involving other types of power property similarly could affect the share of TVA's PILOT that each state and county receives. For example, TVA has announced plans to relocate its power control center from an existing facility in Hamilton County to a new facility to be built in Meigs County. To the extent that investment in the new facility increases the value of TVA power property in Tennessee relative to other states, it would shift the balance of the PILOT toward Tennessee. Moreover, because a county's direct payments from TVA are based on the power property TVA owns in it, the planned relocation has already resulted in an increase in direct payments to Meigs County for the land TVA has purchased there for the new facility. TVA has "not yet calculated" the effect of the relocation, if any, on its direct payments to Hamilton County.<sup>40</sup>

TVA's 2015 IRP also calls for energy efficiency savings of between 900 and 1,300 megawatts by 2023 and between 2,000 and 2,800 megawatts by

<sup>36</sup> Tennessee Valley Authority 2017b; Tennessee Valley Authority 2018a; Tennessee Valley Authority 2016e; and Flessner 2017.

<sup>37</sup> Email from Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, December 13, 2018; and Flessner 2018c.

<sup>38</sup> Email from Stephen Schoolfield, senior program manager-taxes, Tennessee Valley Authority, January 11, 2018.

<sup>39</sup> Tennessee Valley Authority 2018c; Tennessee Valley Authority 2018d; and Tennessee Valley Authority 2018g.

<sup>40</sup> Email from Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, December 13, 2018; and Flessner 2018e.

2033.<sup>41</sup> Some of that improved efficiency will occur through upgrading power transmission and distribution systems; some will occur in private homes and businesses. As customers update their homes, commercial and industrial facilities, and electrical appliances and equipment, those changes reduce existing power demand, which could reduce TVA revenues and ultimately the PILOT for all recipients if the amount of electricity consumed does not continue to grow with the population and the economy. TVA forecasts a 13% decrease in demand for electricity in its service area in 2027 compared with 20 years earlier.<sup>42</sup>

TVA's response to increases in energy efficiency includes a change to the way it charges local utilities for wholesale electric service, which it approved in May 2018. Describing the reason for its new rate structure in its most recent *Form 10-K* filed with the US Securities and Exchange Commission, TVA says that

consistent with national trends, energy demand in the areas served by TVA . . . has been essentially flat over the past five years. TVA anticipates this trend to continue as technological advances, consumer demand for generation, energy management technologies, and distributed energy increase. To accommodate this trend, TVA began working . . . on its long-term pricing and product development strategies in the fall of 2013. . . . At its May 10, 2018 meeting, the TVA Board approved a change to the structure of its wholesale electric power rates.<sup>43</sup>

TVA's existing wholesale rate structure includes a

- demand charge, based on a utility's peak monthly demand;
- energy charge, based on the kilowatt-hours used; and a
- separate adjustment for fuel costs.<sup>44</sup>

The new rate structure will add a grid access charge, which TVA says will "better recover fixed costs" of providing electricity and "reduce the variability in revenues caused by weather."<sup>45</sup> Some environmental and consumer groups have criticized the new structure, saying that it reduces the potential savings to consumers from energy conservation and renewable energy and that it is "disproportionately burdensome to low-energy users and low-income ratepayers."<sup>46</sup> According to TVA, the change

Because TVA's new rate structure is intended to be revenue neutral, TVA does not anticipate it will affect the overall PILOT, and any shifts in the distribution of payments among states should be minor.

<sup>41</sup> Tennessee Valley Authority 2015c. By way of comparison, TVA's combined-cycle natural gas plant in Ackerman, Mississippi, is capable of producing 705 megawatts of electricity, enough to power more than 400,000 homes; see, <https://www.tva.gov/Energy/Our-Power-System/Natural-Gas/Ackerman-Combined-Cycle-Plant>.

<sup>42</sup> Flessner 2018b.

<sup>43</sup> Tennessee Valley Authority 2018a.

<sup>44</sup> *Ibid.*

<sup>45</sup> *Ibid.*

<sup>46</sup> Flessner 2018d; and Flessner 2018a.

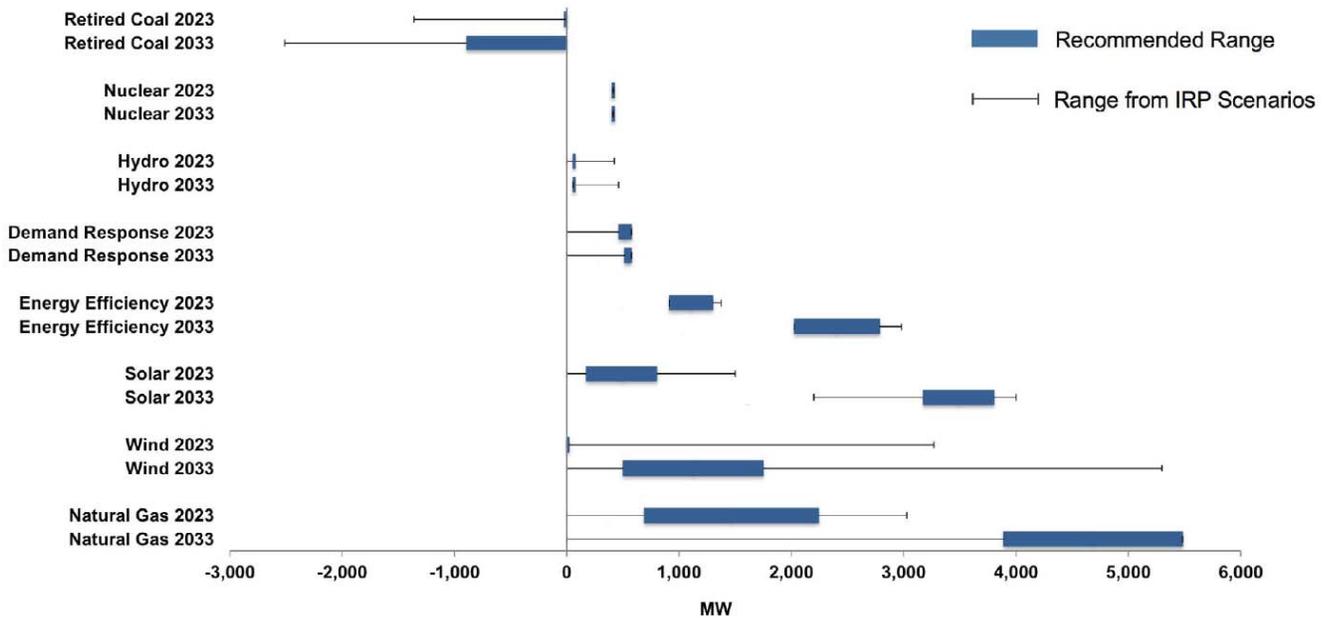
is intended to be revenue neutral, and the grid access charge will be “offset by a reduction to the energy charge.”<sup>47</sup>

Because the new rate structure is intended to be revenue neutral, TVA does not anticipate that it will result in any changes to the overall amount of the PILOT, and while there may be some changes in the distribution of payments among states, TVA says these should be minor.<sup>48</sup> Of the 154 municipal utilities and electric cooperatives in the region that purchase power from TVA, 79 chose to switch to the new rate structure in October 2018, while the remainder will switch in October 2019.<sup>49</sup> TVA’s PILOT is based on power revenue from the previous fiscal year, so any effects from the switch would not be seen until federal fiscal year 2019-20 at the earliest.

### **The Shift Away from Coal: Environmental and Business Reasons**

Since the 1950s, coal-fired plants have been TVA’s largest single source of power, but because of their age and changing air-quality requirements, the Authority is shifting emphasis from coal to other power sources (see figure 2 from the 2015 IRP and appendix G). As its coal-fired power plants age,

Figure 2. TVA Capacity Changes in Megawatts by 2023 and 2033



Source: Tennessee Valley Authority 2015c.

<sup>47</sup> Tennessee Valley Authority 2018a.

<sup>48</sup> Email from Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, November 27, 2018.

<sup>49</sup> Tennessee Valley Authority 2018a.

TVA must either retire them or install costly upgrades to meet new air-quality standards that tighten restrictions on the emission of particulates, sulfur dioxide, nitrogen oxides, mercury, lead, and carbon—the major byproducts of burning coal. The cost of upgrading existing coal-fired facilities, the relative cleanliness of other fuels, and the decreasing cost of natural gas have also resulted in a competitive advantage for other methods of generating electricity.

### Fossil Plant Retirements Required by Environmental Agreements

To resolve a series of legal challenges brought under the Clean Air Act by several states, including Tennessee, and environmental groups, TVA entered into two settlements in April 2011 in which it agreed to retire 18 of its 59 coal-fired units before 2018. All of the affected units were retired prior to January 2018. They include two of four coal-fired units at TVA's John Sevier plant in Hawkins County, which as noted above were replaced by a combined-cycle gas plant on an adjacent site, all 10 coal-fired units at its Johnsonville plant in Humphreys County, and six of eight coal-fired units at its Widows Creek plant in Alabama.<sup>50</sup> See table 2.

Table 2. Tennessee Valley Authority Coal-Fired Units Retired Under Environmental Agreements

Fossil Plant	Units Affected	Existing Scrubbers and SCRs*	Requirements Under Environmental Agreements	Retirements Implemented by TVA as a Result of Environmental Agreements
John Sevier	2 of 4	None	<ul style="list-style-type: none"> <li>Retire two units no later than December 31, 2012</li> </ul>	<ul style="list-style-type: none"> <li>Retired Units 1 and 2 on December 31, 2012</li> </ul>
Johnsonville	10 of 10	None	<ul style="list-style-type: none"> <li>Retire six units no later than December 31, 2015</li> <li>Retire four units no later than December 31, 2017</li> </ul>	<ul style="list-style-type: none"> <li>Retired Units 5-10 on December 31, 2015</li> <li>Retired Units 1-4 on December 31, 2017</li> </ul>
Widows Creek	6 of 8	None	<ul style="list-style-type: none"> <li>Retire two of Units 1-6 no later than July 31, 2013</li> <li>Retire two of Units 1-6 no later than July 31, 2014</li> <li>Retire two of Units 1-6 no later than July 31, 2015</li> </ul>	<ul style="list-style-type: none"> <li>Retired Units 3 and 5 on July 31, 2013</li> <li>Retired Units 1, 2, 4, and 6 on July 31, 2014</li> </ul>

\* Selective catalytic reduction systems ("SCR")

Source: Tennessee Valley Authority 2014b; Tennessee Valley Authority 2017b; and Tennessee Valley Authority 2018a.

<sup>50</sup> Tennessee Valley Authority 2014b; Tennessee Valley Authority 2017b; and Tennessee Valley Authority 2018a.

### Fossil Plant Retirements for Business Reasons

Because of the competitive advantage over coal of other methods of generating electricity, TVA has retired 15 additional coal-fired units since 2013. The units retired for business reasons include the two remaining coal-fired units at TVA's John Sevier plant in Hawkins County and one of the 10 units at its Shawnee plant in Kentucky in 2014, the last two units at its Widows Creek plant in Alabama in 2015, and all five coal-fired units at its Colbert plant in Alabama in 2016. TVA retired two of the three coal-fired units at its Paradise plant in Kentucky in 2017 and all three coal-fired units at the Allen plant in Memphis in March 2018 following the completion of new natural gas-fired units at each site.<sup>51</sup> See table 3.

Table 3. Tennessee Valley Authority Coal-Fired Units Retired for Business Reasons

Fossil Plant	Units Affected	Existing Scrubbers and SCRs*	Requirements Under Environmental Agreements	Retirements Implemented by TVA for Business Reasons
Allen	3 of 3	SCRs on all three units	<ul style="list-style-type: none"> <li>• Install scrubbers or retire no later than December 31, 2018</li> </ul>	<ul style="list-style-type: none"> <li>• New gas-fired plant built at site of Allen coal-fired plant began operation on April 30, 2018</li> <li>• Retired Units 1-3 of coal-fired plant on March 31, 2018</li> </ul>
Colbert	5 of 5	SCR on Unit 5	<ul style="list-style-type: none"> <li>• Remove from service, control, convert, or retire Units 1-4 no later than June 30, 2016</li> <li>• Remove from service, control, or retire Unit 5 no later than December 31, 2015</li> <li>• Control or retire removed from service units within three years</li> </ul>	<ul style="list-style-type: none"> <li>• Retired Units 1-5 on April 16, 2016</li> </ul>
John Sevier	2 of 4	None	<ul style="list-style-type: none"> <li>• Remove from service two units no later than December 31, 2012 and control, convert, or retire those units no later than December 31, 2015</li> </ul>	<ul style="list-style-type: none"> <li>• Retired Units 3 and 4 on June 25, 2014</li> </ul>
Paradise	2 of 3	Scrubbers and SCRs on all three units	<ul style="list-style-type: none"> <li>• Upgrade scrubbers on Units 1 and 2 no later than December 31, 2012</li> <li>• Continuously operate emission control equipment on Units 1-3</li> </ul>	<ul style="list-style-type: none"> <li>• New gas-fired plant built at site of Paradise coal-fired plant began operation on April 7, 2017</li> <li>• Retired Units 1 and 2 of coal-fired plant on April 15, 2017</li> </ul>
Shawnee	1 of 10	None	<ul style="list-style-type: none"> <li>• Control, convert, or retire Units 1 and 4 no later than December 31, 2017</li> </ul>	<ul style="list-style-type: none"> <li>• Retired Unit 10 on June 30, 2014</li> </ul>
Widows Creek	2 of 8	Scrubbers and SCRs on Units 7 and 8	<ul style="list-style-type: none"> <li>• Continuously operate existing emissions control equipment on Units 7 and 8</li> </ul>	<ul style="list-style-type: none"> <li>• Retired Units 7 and 8 on September 30, 2015</li> </ul>

\* Selective catalytic reduction systems ("SCR")

Source: Tennessee Valley Authority 2014b; Tennessee Valley Authority 2017b; Tennessee Valley Authority 2018a; and Associated Press 2018.

<sup>51</sup> Tennessee Valley Authority 2014b; Tennessee Valley Authority 2017b; and Tennessee Valley Authority 2018a.

TVA continues to operate 26 coal-fired units, though it has sought public input on the potential environmental and socioeconomic effects of retiring two of them—the lone unit at its Bull Run plant in Anderson County and the lone remaining unit at its Paradise plant in Kentucky. The other remaining units that will continue to be operated include both units at its Cumberland plant in Stewart County, all four units at its Gallatin plant in Sumner County, all nine units at its Kingston plant in Roane County, and the nine remaining units at its Shawnee plant in Kentucky. TVA decided to add pollution control devices to two of the units at Shawnee and all four units at Gallatin rather than retire them—TVA had the option to control or retire these units under the environmental settlements it agreed to in 2011 and has now completed all requirements of these settlements.<sup>52</sup> See table 4.

Table 4. Tennessee Valley Authority Coal-Fired Units that Continue to be Operated and Other Actions Taken or Planned

Fossil Plant	Units Affected	Existing Scrubbers and SCRs*	Requirements Under Environmental Agreements	Other Actions Taken or Planned
Bull Run	1 of 1	Scrubber and SCRs on unit	<ul style="list-style-type: none"> <li>Continuously operate existing emission control equipment</li> </ul>	<ul style="list-style-type: none"> <li>Continuously operate existing emission control equipment</li> <li>Evaluate for potential retirement in 2023</li> </ul>
Cumberland	2 of 2	Scrubbers and SCRs on both units	<ul style="list-style-type: none"> <li>Continuously operate existing emission control equipment</li> </ul>	<ul style="list-style-type: none"> <li>Continuously operate existing emission control equipment</li> </ul>
Gallatin	4 of 4	None	<ul style="list-style-type: none"> <li>Control, convert, or retire all four units no later than December 31, 2017</li> </ul>	<ul style="list-style-type: none"> <li>Added scrubbers and SCRs on all four units</li> </ul>
Kingston	9 of 9	Scrubbers and SCRs on all nine units	<ul style="list-style-type: none"> <li>Continuously operate existing emission control equipment</li> </ul>	<ul style="list-style-type: none"> <li>Continuously operate existing emission control equipment</li> </ul>
Paradise	1 of 3	Scrubbers and SCRs on all three units	<ul style="list-style-type: none"> <li>Upgrade scrubbers on Units 1 and 2 no later than December 31, 2012</li> <li>Continuously operate emission control equipment on Units 1-3</li> </ul>	<ul style="list-style-type: none"> <li>Continuously operate existing emission control equipment on Unit 3</li> <li>Evaluate for potential retirement in 2020</li> </ul>
Shawnee	9 of 10	None	<ul style="list-style-type: none"> <li>Control, convert, or retire Units 1 and 4 no later than December 31, 2017</li> </ul>	<ul style="list-style-type: none"> <li>Added scrubbers and SCRs on Units 1 and 4</li> </ul>

\* Selective catalytic reduction systems ("SCR")

Source: Tennessee Valley Authority 2014b; Tennessee Valley Authority 2017b; Tennessee Valley Authority 2018a; Tennessee Valley Authority 2018c; Tennessee Valley Authority 2018d; and Tennessee Valley Authority 2018g.

<sup>52</sup> Tennessee Valley Authority 2017b; Tennessee Valley Authority 2018a; and Tennessee Valley Authority 2018g.

TVA is gradually moving from coal to other power sources because of the age of its coal-fired power plants, air-quality requirements, and the changing economics of power production.

## New Energy Sources to Meet the Region's Needs

As TVA retires existing coal-fired units, new energy sources—including natural gas, nuclear, wind, and solar—are being developed to meet the region's electricity needs. As noted above, new natural gas-fired units became commercially operational at TVA's Paradise plant in Kentucky in 2017 and at its Allen plant in Memphis in 2018. A second nuclear reactor at TVA's Watts Bar plant in Rhea County also became commercially operational in 2016.<sup>53</sup> While TVA cited no need for another large nuclear facility when it announced the sale of its unfinished Bellefonte nuclear plant in Alabama in November 2016,<sup>54</sup> it submitted an application with the US Nuclear Regulatory Commission earlier that year for the future placement of nuclear units known as small modular reactors at a site near Oak Ridge, though TVA acknowledges it is "still several years away from any potential construction decision."<sup>55</sup> TVA has contracts to purchase electricity from eight wind farms.<sup>56</sup> It entered contracts for solar power from projects being developed in Shelby County<sup>57</sup> and Alabama in 2016,<sup>58</sup> completed construction of a solar facility at its Allen plant in Memphis in 2017,<sup>59</sup> and announced agreements in 2018 with two companies that are building solar facilities in Lincoln County and Alabama.<sup>60</sup>

TVA continues to modify its renewable energy incentive programs both within the changing market for renewables, such as wind, solar, and hydroelectric, and as part of its ongoing effort to rebalance its generating system. These programs have no effect on TVA's gross revenues, nor do they affect power sales in any state, and so have little to no effect on PILOTs to the several states. Participants continue to buy power from their local power companies and sell all of the power they generate through a system called dual metering to TVA. Their only potential effect would be the extent to which they reduce the Authority's acquisition of new power property in any particular state.

TVA is making substantial changes in these incentive programs as it implements its 2015 IRP. The Authority has said in the past that

as renewable energy system costs continue to decrease and become more affordable, there is less need for subsidies for small-scale renewable generation. TVA wants to promote sustainable growth in small-scale renewable generation

<sup>53</sup> Tennessee Valley Authority 2016e.

<sup>54</sup> Tennessee Valley Authority 2016a.

<sup>55</sup> Tennessee Valley Authority 2016d.

<sup>56</sup> Tennessee Valley Authority 2018a.

<sup>57</sup> Tennessee Valley Authority 2016c.

<sup>58</sup> Tennessee Valley Authority 2016b.

<sup>59</sup> Tennessee Valley Authority 2017a.

<sup>60</sup> Tennessee Valley Authority 2018e.

while continuing to support local industry and provide a smooth path to grid parity.<sup>61</sup>

TVA continues to encourage the private sector to develop small renewable energy projects by buying electricity from participants in its Green Power Providers program, which remains open to new applicants in 2019. The Green Power Providers program buys power from homeowners and businesses who install small renewable energy projects—including solar, wind, biomass, and hydro—with individual capacities of 50 kilowatts or less.<sup>62</sup> A 50-kilowatt solar installation can provide enough power for approximately five average-sized homes in Tennessee.<sup>63</sup> Two other programs—Distributed Solar Solutions and the Renewable Standard Offer—purchase power from medium-sized projects, but they no longer accept new applicants.<sup>64</sup>

TVA has controlled the cost of its renewable energy programs by limiting participation and capacity and by reducing subsidies over time. For example, TVA will limit the Green Power Providers program to a total of 7.5 megawatts of new capacity in 2019,<sup>65</sup> a decrease from the cap of 10 megawatts of new capacity per year that had been in place since TVA first placed a cap on the program in 2012.<sup>66</sup>

TVA has reduced the rates paid to new Green Power Providers participants in the years since the program began. New residential and smaller non-residential participants in 2019 with systems greater than 500 watts but no greater than 10 kilowatts will receive nine cents per kilowatt-hour; all other new participants will receive 7.5 cents per kilowatt-hour.<sup>67</sup> Prior to 2018, new Green Power Providers participants had received at least the retail rate,<sup>68</sup> which on average in Tennessee is approximately 10.7 cents per kilowatt-hour for residential customers, 10.6 cents per kilowatt-hour for commercial customers, and 5.8 cents per kilowatt-hour for industrial customers, according to the US Energy Information Administration.<sup>69</sup> Prior to 2016, new participants also received an additional premium above

New energy sources, including nuclear, natural gas, wind, and solar, are being developed to meet the region's electricity needs.

<sup>61</sup> Tennessee Valley Authority 2013b.

<sup>62</sup> Tennessee Valley Authority "Green Power Providers."

<sup>63</sup> Email from Grace Robertson, marketing manager, Lightwave Solar, February 23, 2015.

<sup>64</sup> Tennessee Valley Authority 2017b; Tennessee Valley Authority "Guidelines for Renewable Standard Offer"; and Tennessee Valley Authority "Guidelines for Distributed Solar Solutions (2017)."

<sup>65</sup> Tennessee Valley Authority "Green Power Providers."

<sup>66</sup> Telephone interview with Neil Placer, senior manager, Renewable Energy Solutions, Tennessee Valley Authority, February 20, 2015.

<sup>67</sup> Tennessee Valley Authority "Green Power Providers." Under the program, smaller non-residential customers are those subject to the GSA-1 rate schedule. In general, the GSA-1 rate schedule is for businesses that not only have contracted demand or actual demand no greater than 50 kilowatts but also have used no more than 15,000 kilowatt-hours of electricity in any of the last 12 months.

<sup>68</sup> Tennessee Valley Authority "Green Power Providers Program Participation Guidelines (2017)."

<sup>69</sup> US Energy Information Administration "Electricity Data Browser."

TVA has controlled the cost of its renewable energy programs by limiting participation and capacity and by reducing subsidies over time.

the retail rate for the first 10 years they participated in the program, though TVA had reduced this premium over the years to two cents per kilowatt-hour for new participants in 2015<sup>70</sup> from its original 12 cents in 2012.<sup>71</sup>

According to TVA's October 2015 report on efforts to develop a method for assessing the benefits and costs associated with various forms of distributed power-generation like the ones supported by these programs, the average value for solar generation for TVA was just over seven cents per kilowatt-hour, which was less than the average retail rate charged in 2015.<sup>72</sup> In order to develop the method, TVA assembled a cross-section of participants from the Tennessee Valley region, including local power companies, the Tennessee Valley Public Power Association, various environmentally focused non-governmental entities, solar industry representatives, academia, state governments, and national research institutions. Response to the report has been mixed. Among participants who were critical of the report, while generally complimentary of the process and the effort, the Southern Environmental Law Center said the analysis did not properly consider solar power's environmental and health benefits,<sup>73</sup> and the Southern Alliance for Clean Energy, agreeing with that assessment, expressed concern that TVA already "lags behind neighboring states like Georgia and North Carolina in developing a strong solar market."<sup>74</sup> But others urged TVA to pursue the least cost source of power to keep its electric rates as low and competitive as possible.<sup>75</sup>

---

<sup>70</sup> Tennessee Valley Authority "Green Power Providers Program Participation Guidelines (2015)."

<sup>71</sup> Smith and Coggeshall 2013.

<sup>72</sup> Flessner 2015; and Tennessee Valley Authority 2015b.

<sup>73</sup> Southern Environmental Law Center 2015.

<sup>74</sup> Nelson 2015.

<sup>75</sup> Flessner 2015.

## References

- Associated Press. 2018. "TVA's New Gas Plant in Tennessee Ready to Run." *Chattanooga Times Free Press*, May 1. <https://www.timesfreepress.com/news/breakingnews/story/2018/may/01/tvas-new-gas-plant-tennessee-ready-run/469660/>.
- Canning, Rob, Chad Lampe, and John Null. 2014. "Damage to at Least 40% of MSU's Main Buildings Due to Power Outage and Freezing Temps." WKMS, January 7. <http://wkms.org/post/damage-least-40-msus-main-buildings-due-power-outage-and-freezing-temps>.
- Collins, Michael. 2018. "Alexander Calls Proposal to Sell TVA Assets 'Loony Idea.'" *Knoxville News Sentinel*, February 13. <https://www.knoxnews.com/story/news/2018/02/12/trump-eyes-sale-tennessee-valley-authority/329682002/>.
- Flessner, Dave. 2014. "'Arctic Blast' Pushes TVA Power Use to All-Time High." *Chattanooga Times Free Press*, January 8. <http://www.timesfreepress.com/news/business/aroundregion/story/2014/jan/08/arctic-blast-pushes-tva-power-use-all-time-high/128523/>.
- . 2015. "Study find value of solar power less than what TVA pays." *Chattanooga Times Free Press*, October 21. <http://www.timesfreepress.com/news/business/aroundregion/story/2015/oct/21/study-find-value-solar-power-less-whtvpays/331624/>.
- . 2017. "Boone Dam Repairs to Cost TVA \$450 Million." *Chattanooga Times Free Press*, August 10. <http://www.timesfreepress.com/news/business/aroundregion/story/2017/aug/10/boone-dam-repairs-cost-tv450-million/442797/>.
- . 2018a. "Higher Fixed Charges by TVA Draws Fire." *Chattanooga Times Free Press*, February 17. <https://www.timesfreepress.com/news/business/aroundregion/story/2018/feb/17/higher-fixed-charges-tvdraws-firerate-realign/463961/>.
- . 2018b. "TVA Chief: Economics, Efficiency of Natural Gas Lessen Coal's Power Production Role." *Chattanooga Times Free Press*, March 16. <https://www.timesfreepress.com/news/business/aroundregion/story/2018/mar/16/war-coaleconomics-shift-lessen-role-coal/466059/>.
- . 2018c. "TVA Earns More Than \$1.1 Billion, Pays Off Bellefonte Debt." *Chattanooga Times Free Press*, November 15. <https://www.timesfreepress.com/news/breakingnews/story/2018/nov/15/tva-earns-more-11-billion-pays-bellefonte-debt/483098/>.
- . 2018d. "TVA Proposes Grid Access Fee, Lower Energy Costs in Rate Revamp." *Chattanooga Times Free Press*, March 9. <https://www.timesfreepress.com/news/breakingnews/story/2018/mar/09/tva-proposed-grid-access-fee-lower-energy-costs-rate-revamp/465572/>.
- . 2018e. "TVA's New \$300 Million Power Control Center Would Shift Nearly 200 Workers Out of Chattanooga." *Chattanooga Times Free Press*, August 30. <https://www.timesfreepress.com/news/business/aroundregion/story/2018/aug/30/tvas-power-shift-meigs-county-get-praises-cri/478120/>.
- Nelson, Toni. 2015. "TVA Undermines Distributed Solar and Disregards Its Own Stakeholder Process." Footprints on the Path to Clean Energy (blog), Southern Alliance for Clean Energy, November 11. <http://blog.cleanenergy.org/2015/11/11/tva-undermines-distributed-solar-and-disregards-its-own-stakeholder-process/>.
- Schoolfield, Stephen. 2017. "TACIR Commission—TVA's PILOT." Presentation at TACIR meeting, December 14.

- Sher, Andy. 2018. "Alexander, Corker Urge Trump to Pull Plug on Plan to Sell TVA Electric Transmission Lines." *Chattanooga Times Free Press*, June 21. <https://www.timesfreepress.com/news/breakingnews/story/2018/jun/21/tennessee-senators-urge-trump-abandon-effort-sell-tva-transmission-assets/473576/>.
- Smith, Stephen A. and Charlie Coggeshall. 2013. "TVA Continues to Mismanage Solar." Footprints on the Path to Clean Energy (blog), Southern Alliance for Clean Energy, May 10. <http://blog.cleanenergy.org/2013/05/10/tva-continues-to-mismanage-solar-power/>.
- Southern Environmental Law Center. 2015. "New TVA Analysis Takes First Step Toward Recognizing the Value of Solar." News release, October 20. <https://www.southernenvironment.org/news-and-press/news-feed/new-tva-analysis-takes-first-step-toward-recognizing-the-value-of-solar>.
- Tennessee Advisory Commission on Intergovernmental Relations. 2010. *The Electric Generation and Transmission Cooperative Act of 2009 and Its Possible Impact on the Tennessee Valley Authority's Payments in Lieu of Taxes*. [https://www.tn.gov/content/dam/tn/tacir/documents/electric\\_generation\\_cooperative\\_act.pdf](https://www.tn.gov/content/dam/tn/tacir/documents/electric_generation_cooperative_act.pdf).
- Tennessee Valley Authority. 2009. *Form 10-Q for the Quarterly Period Ended June 30, 2009*.
- . 2011. *Environmental Impact Statement for TVA's Integrated Resource Plan: TVA's Environmental & Energy Future, Volume 1*.
- . 2013a. *Form 10-K*.
- . 2013b. "Green Power Providers: Frequently Asked Questions." Accessed February 10, 2015. [http://www.tva.com/greenpowerswitch/providers/pdf/gpp\\_faq.pdf](http://www.tva.com/greenpowerswitch/providers/pdf/gpp_faq.pdf) (link discontinued).
- . 2013c. "TVA Secures Lease-Purchase Financing for Mississippi Gas Plant." News release, August 9. [http://www.tva.gov/news/releases/julsep13/miss\\_gas\\_plant.htm](http://www.tva.gov/news/releases/julsep13/miss_gas_plant.htm) (link discontinued).
- . 2014a. *Budget Proposal and Management Agenda: For the Fiscal Year Ending September 30, 2015*. [https://www.tva.gov/file\\_source/TVA/Site%20Content/About%20TVA/Guidelines%20and%20Reports/budget\\_proposal\\_2015.pdf](https://www.tva.gov/file_source/TVA/Site%20Content/About%20TVA/Guidelines%20and%20Reports/budget_proposal_2015.pdf).
- . 2014b. *Form 10-K*.
- . 2014c. "TVA System Meets Single-Day Electricity Record." News release, January 8. <https://www.tva.gov/Newsroom/Press-Releases/TVA-System-Meets-SingleDay-Electricity-Record> (link discontinued).
- . 2015a. "Conservation, Preparation Key to Meeting High Electric Power Demand." News release, January 8. <https://www.tva.gov/Newsroom/Press-Releases/Conservation,-Preparation-Key-to-Meeting-High-Electric-Power-Demand>.
- . 2015b. *Distributed Generation – Integrated Value (DG-IV): A Methodology to Value DG on the Grid*. [https://www.tva.gov/file\\_source/TVA/Site%20Content/Energy/Renewables/dgiv\\_document\\_october\\_2015-2.pdf](https://www.tva.gov/file_source/TVA/Site%20Content/Energy/Renewables/dgiv_document_october_2015-2.pdf).
- . 2015c. *Integrated Resource Plan*.
- . 2015d. "TVA Completes Purchase of Mississippi Natural Gas Plant." News release, April 14. <https://www.tva.gov/Newsroom/Press-Releases/TVA-Completes-Purchase-of-Mississippi-Natural-Gas-Plant>.
- . 2015e. "TVA Meets February Record Peak Demand." News release, February 19. <https://www.tva.gov/Newsroom/Press-Releases/TVA-Meets-February-Record-Peak-Demand>.

- . 2015f. "TVA's Integrated Resource Plan Calls for Low-Cost, Reliable Energy Choices." News release, July 13. <https://www.tva.gov/Newsroom/Press-Releases/TVA%E2%80%99s-Integrated-Resource-Plan-Calls-for-Low%E2%80%93Cost,-Reliable-Energy-Choices>.
- . 2016a. "TVA Completes Bellefonte Sale." News release, November 14. <https://www.tva.gov/Newsroom/Press-Releases/TVA-Completes-Bellefonte-Sale>.
- . 2016b. "TVA, NextEra Energy Resources Celebrate Commissioning of Alabama's Largest Solar Energy Project." News release, November 18. <https://www.tva.gov/Newsroom/Press-Releases/TVA-NextEra-Energy-Resources-Celebrate-Commissioning-of-Alabamas-Largest-Solar-Energy-Project>.
- . 2016c. "TVA and Silicon Ranch Partner on Large-Scale Solar Farm at NSA Mid-South." News release, April 18. <https://www.tva.gov/Newsroom/Press-Releases/TVA-and-Silicon-Ranch-Partner-on-Large%E2%80%93Scale-Solar-Farm-at-NSA-Mid%E2%80%93South>.
- . 2016d. "TVA Submits Early Site Permit Application for Clinch River SMRs." News release, May 13. <https://www.tva.gov/Newsroom/Press-Releases/TVA-Submits-Early-Site-Permit-Application-For-Clinch-River-SMRs>.
- . 2016e. "TVA's Watts Bar Unit 2 Achieves Commercial Operation." News release, October 19. <https://www.tva.gov/Newsroom/Press-Releases/TVAs-Watts-Bar-Unit-2-Achieves-Commercial-Operation>.
- . 2017a. "Allen Site Reflects TVA's Changing Portfolio." News Release, August 31. <https://www.tva.gov/Energy/Allen-Site-Reflects-TVAs-Changing-Portfolio>.
- . 2017b. *Form 10-K*.
- . 2018a. *Form 10-K*.
- . 2018b. *FY 2019 Budget Proposal and Management Agenda and FY 2017 Performance Report*. [https://www.tva.gov/file\\_source/TVA/Site%20Content/About%20TVA/Guidelines%20and%20Reports/fiscal\\_year\\_2019.pdf](https://www.tva.gov/file_source/TVA/Site%20Content/About%20TVA/Guidelines%20and%20Reports/fiscal_year_2019.pdf).
- . 2018c. *Potential Bull Run Fossil Plant Retirement: Draft Environmental Assessment*. [https://www.tva.gov/file\\_source/TVA/Site%20Content/Environment/Environmental%20Stewardship/Environmental%20Reviews/Potential%20Retirement%20of%20%20Bull%20Run%20Fossil%20Plant/TVA%20Bull%20Run%20EA\\_11202018.pdf](https://www.tva.gov/file_source/TVA/Site%20Content/Environment/Environmental%20Stewardship/Environmental%20Reviews/Potential%20Retirement%20of%20%20Bull%20Run%20Fossil%20Plant/TVA%20Bull%20Run%20EA_11202018.pdf).
- . 2018d. *Potential Paradise Fossil Plant Retirement: Draft Environmental Assessment*. [https://www.tva.gov/file\\_source/TVA/Site%20Content/Environment/Environmental%20Stewardship/Environmental%20Reviews/Potential%20Retirement%20of%20Paradise%20Fossil%20Plant/TVA%20Paradise%20EA\\_20181116.pdf](https://www.tva.gov/file_source/TVA/Site%20Content/Environment/Environmental%20Stewardship/Environmental%20Reviews/Potential%20Retirement%20of%20Paradise%20Fossil%20Plant/TVA%20Paradise%20EA_20181116.pdf).
- . 2018e. "TVA Announces Largest Valley Solar Installations—Built for Facebook." News release, November 2. <https://www.tva.gov/Newsroom/Press-Releases/TVA-Announces-Largest-Valley-Solar-InstallationsBuilt-for-Facebook>.
- . 2018f. "TVA Delivers Strong Financial Results in Fiscal Year 2018." News release, November 15. <https://www.tva.gov/Newsroom/Press-Releases/TVA-Delivers-Strong-Financial-Results-in-Fiscal-Year-2018>.
- . 2018g. "TVA Seeks Input on Future of Bull Run and Paradise Fossil Plants." News release, November 19. <https://www.tva.gov/Newsroom/Press-Releases/TVA-Seeks-Input-on-Future-of-Bull-Run-and-Paradise-Fossil-Plants>.

- . 2018h. "TVA Tax Equivalent Payments Total Nearly \$524 Million in 2018." News release, August 22. <https://www.tva.gov/Newsroom/Press-Releases/TVA-Tax-Equivalent-Payments-Total-Nearly-524-Million-in-2018>.
  - . "Green Power Providers." Accessed January 14, 2019. <https://www.tva.gov/Energy/Valley-Renewable-Energy/Green-Power-Providers>.
  - . "Green Power Providers Program Participation Guidelines (Effective January 1, 2015)." Accessed December 28, 2015. [https://www.tva.gov/file\\_source/TVA/Site%20Content/Energy/Renewables/Green%20Power%20Providers/GPP\\_Guidelines\\_2015.pdf](https://www.tva.gov/file_source/TVA/Site%20Content/Energy/Renewables/Green%20Power%20Providers/GPP_Guidelines_2015.pdf).
  - . "Green Power Providers Program Participation Guidelines (Effective January 1, 2017)." Accessed January 4, 2018. [https://www.tva.gov/file\\_source/TVA/Site%20Content/Energy/Renewables/Green%20Power%20Providers/gpp\\_guidelines\\_2017.pdf](https://www.tva.gov/file_source/TVA/Site%20Content/Energy/Renewables/Green%20Power%20Providers/gpp_guidelines_2017.pdf).
  - . "Guidelines for Distributed Solar Solutions (2017)." Accessed October 26, 2017. [https://www.tva.gov/file\\_source/TVA/Site%20Content/Economic%20Development/Our%20Team%20and%20Partners/PDFs/2017\\_dss\\_guidelines\\_.pdf](https://www.tva.gov/file_source/TVA/Site%20Content/Economic%20Development/Our%20Team%20and%20Partners/PDFs/2017_dss_guidelines_.pdf). (link discontinued).
  - . "Guidelines for Renewable Standard Offer." Accessed December 28, 2015. [https://www.tva.gov/file\\_source/TVA/Site%20Content/Energy/Renewables/Renewable%20Standard%20Offer/guidelines.pdf](https://www.tva.gov/file_source/TVA/Site%20Content/Energy/Renewables/Renewable%20Standard%20Offer/guidelines.pdf). (link discontinued).
  - . "2019 Integrated Resource Plan." Accessed January 14, 2019. <https://www.tva.gov/Environment/Environmental-Stewardship/Integrated-Resource-Plan>.
- US Department of Labor, Bureau of Labor Statistics. "PPI Commodity Data for Fuels and Related Products and Power: Electric Power." *Databases, Tables & Calculators by Subject*. Accessed January 8, 2019. <https://www.bls.gov/ppi/data.htm>.
- US Energy Information Administration. "Electricity Data Browser." Accessed January 2, 2019. <https://www.eia.gov/electricity/data/browser/>.
- US General Accounting Office. 2003. *Tennessee Valley Authority: Information on Lease-Leaseback and Other Financing Arrangements*. GAO-03-784, June.

## Appendix A: TVA's Allocation Formula

### Section 13 - In Lieu of Tax Payments Overview

#### Overview:

Section 13 of the TVA Act requires TVA to pay 'tax equivalent payments' to states in which its power operations are carried out and to counties in which it has acquired reservoir land, allocable to power purposes, or power properties that were formerly subject to local ad valorem taxation. Power operations are determined to be carried out if TVA has power sales and/or holds power property in a given state.

#### Calculation:

The total tax equivalent payments to be paid to the states and counties is determined by taking 5 percent of gross proceeds from the sale of power, from the prior fiscal year, (excluding sales to federal agencies, off-system sales, and interdivisional sales). The resulting amount is essentially the "bucket" of tax equivalent payments that are to be distributed to the states and counties which TVA carries out its power operations. Currently, the eight states in which TVA carries out its power operations are: Alabama, Georgia, Illinois, Kentucky, Mississippi, North Carolina, Tennessee, and Virginia. The percentage amount to be allocated to each state is determined by a two-part calculation; **1.)** 50 percent is based on the ratio of TVA power property within the respective state, compared to TVA's total net book value of power properties for the prior fiscal year, and **2.)** 50 percent is based on the ratio of power sales within the respective state, compared to TVA's total power sales for the prior fiscal year. The two percentages, calculated above, are then averaged and the resulting percentage is multiplied by the total "bucket" of tax equivalent payments to be distributed, and the resulting dollar amount represents the payments to be distributed to the respective state during TVA's fiscal year.

#### *Direct Payments to counties:*

The TVA Act also requires TVA to directly make payments to counties in which TVA has acquired/purchased reservoir land, allocable to power purposes, or power property from a privately owned and operated utility company. (E.g. TVA purchases a power plant from Southern Company in order to serve a given load in the TVA service territory. Whereas Southern Company has historically paid property taxes to the county in which this power property is located, TVA is not subject to taxation and therefore the county cannot levy property taxes for this power property. However, in an effort to keep the county whole, the TVA Act requires TVA to make payments "in-lieu" of taxes to the county.) The amount to be paid to the county is determined by taking the average of the prior two years property tax bills and the resulting amount is paid, annually, to the county for as long as TVA owns the property. In addition, any direct payments to a county reduce the amount paid directly to the state by TVA. While this reduces the total amount paid directly to the state, it doesn't change the overall tax equivalent payments that the state is due, determined above.

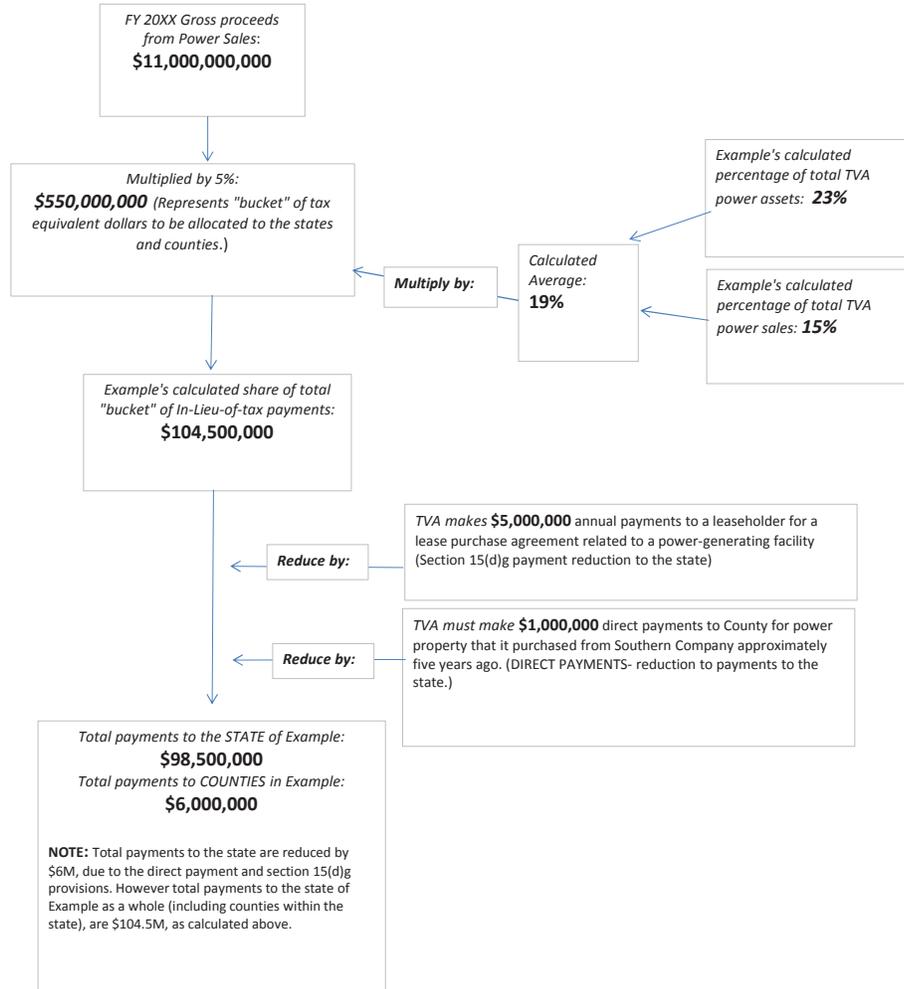
#### *Section 15(d)g of the TVA Act:*

This section recognizes that generating facilities operated by TVA under lease or lease purchase agreements constitute power property held by TVA within the meaning of Section 13. As such, any property taxes reimbursed by TVA to the leaseholder, as a result of the negotiated lease agreement, will reduce the overall amount owed to the state by TVA. This section essentially prevents a "double-dipping" on the tax payments to the county/state since TVA has already reimbursed the leaseholder for the property taxes.

#### Additional Facts:

- The TVA Board, each November, approves the estimated (based on unaudited financial numbers) payments, for the current fiscal year, to be paid during the months of October through August.
- In addition, the Board approves the "final" payment for September of the prior fiscal year which is based off audited financial data.
- Each state redistributes the tax equivalent payments to the counties based upon each state's individual legislation.
- Once TVA has remitted the tax equivalent payments to the individual states it has no authority to dictate how the monies are redistributed.

**Example: State of Example's Tax Equivalent Payments for FY20XX**



**NOTE:** Amounts above are for illustrative purposes only and do NOT represent actual amounts for a specific fiscal year.

Source: Schoolfield 2017.

## Appendix B: Tennessee's Allocation Formula

The TVA Act of 1933 (TVA Act) specifically directs that 5% of the Authority's "gross proceeds" be paid as payments in lieu of taxes (PILOTs) to states and local governments where the authority owns and operates property. (48 Stat. 58-59, 16 USC. § 831.) TVA interprets "gross proceeds" as their operating revenues from the sale of power to municipalities, cooperatives, and industries. The TVA Act specifically excludes sales to federal agencies from the PILOT calculation. Payments to each state are based on the amount of TVA-owned property and sales in each state. Tennessee's share based on those two factors has been more than 60% of the total each year since federal fiscal year 2010-11.

Each state determines its own method of distributing the payments. The following chart shows the formula used by the State of Tennessee in distributing the funds among the state government, its agencies, counties, and cities.

Tennessee Valley Authority (Tennessee State Revenue Sharing Act)  
Title 67, Chapter 9, Part 1  
From the Allocation of TVA Payments in Lieu of Taxes in Tennessee  
(after direct payments to counties and 1977-78 base payment to state, counties, and cities)

	Basis of Apportionment (\$67-9-101)	Proration to Counties and Municipalities (\$67-9-102)
Paid to areas with TVA construction <i>(remainder allocated to CTAS, TACIR and Tennessee Central Economic Authority)</i>	3%	
Retained by the State	48.5%	
Paid to Local Governments	48.5%	
<i>Counties—70% of Local Share</i>		
· <i>Based on Percent of State Population</i>		30% <i>(14.55% of total)</i>
· <i>Based on Percent of State Land</i>		30% <i>(14.55% of total)</i>
· <i>Based on County's Percent of TVA Acreage in Tennessee</i>		10% <i>(4.85% of total)</i>
<i>Municipalities—30% of Local Share Based on Percent of State Population</i>		30% <i>(14.55% of total)</i>
Total Allocated by State	100%	

## Appendix C: Distribution of Counties' Share of TVA Payments in Lieu of Taxes to Tennessee by Tennessee Fiscal Year

County	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12
Anderson	\$ 1,209,200	\$ 1,148,257	\$ 1,140,471	\$ 1,173,627	\$ 1,157,568	\$ 1,107,511	\$ 1,136,571	\$ 1,147,126
Bedford	853,927	806,433	800,352	826,171	813,673	774,647	797,382	806,367
Benton	1,822,570	1,725,938	1,714,385	1,766,920	1,741,324	1,662,030	1,708,401	1,727,685
Bledsoe	525,639	496,430	492,676	508,555	500,872	476,869	490,848	496,357
Blount	1,538,002	1,454,729	1,443,998	1,489,557	1,467,505	1,398,641	1,438,757	1,454,611
Bradley	1,121,118	1,059,194	1,051,291	1,084,953	1,068,668	1,017,788	1,047,433	1,058,574
Campbell	1,392,427	1,316,850	1,307,542	1,348,530	1,328,569	1,266,520	1,302,746	1,317,495
Cannon	391,265	370,065	367,340	378,865	373,289	355,867	366,014	370,013
Carroll	832,797	786,049	780,040	805,454	793,157	754,741	777,115	785,932
Carter	879,608	831,239	825,098	851,393	838,655	798,916	822,077	831,293
Cheatham	591,333	558,137	553,870	571,916	563,184	535,905	551,793	558,053
Chester	424,574	400,739	397,676	410,633	404,364	384,777	396,185	400,680
Claiborne	1,005,159	950,425	943,604	973,360	958,919	913,968	940,195	950,780
Clay	294,798	278,249	276,122	285,118	280,766	267,166	275,086	278,207
Cocke	795,345	754,642	749,426	771,553	760,844	727,398	746,880	754,576
Coffee	1,027,328	969,841	962,603	993,854	978,703	931,481	959,016	970,045
Crockett	382,618	361,141	358,381	370,056	364,407	346,771	357,050	361,100
Cumberland	1,112,664	1,050,235	1,042,213	1,076,151	1,059,729	1,006,632	1,036,458	1,048,212
Davidson	4,900,954	4,628,778	4,593,798	4,741,771	4,670,173	4,446,488	4,576,766	4,628,107
Decatur	658,650	624,479	620,217	638,793	629,779	601,716	618,088	624,690
DeKalb	438,393	413,787	410,625	424,001	417,529	397,308	409,085	413,726
Dickson	864,514	816,079	809,854	836,184	823,445	783,642	806,824	816,097
Dyer	815,685	769,896	764,011	788,979	776,934	739,302	761,219	769,856
Fayette	1,011,838	955,036	947,735	978,614	963,673	916,995	944,181	954,893
Fentress	651,704	615,119	610,417	630,305	620,682	590,617	608,127	615,027
Franklin	1,183,321	1,120,924	1,113,088	1,147,012	1,130,560	1,079,303	1,109,196	1,121,190
Gibson	980,440	925,401	918,328	948,247	933,771	888,542	914,884	925,264
Giles	855,804	808,090	801,957	827,896	815,345	776,135	798,972	807,970
Grainger	1,036,650	983,113	976,602	1,005,707	991,550	947,604	973,279	983,827
Greene	1,172,530	1,107,440	1,099,096	1,134,480	1,117,355	1,063,869	1,095,024	1,107,326
Grundy	481,224	454,442	450,999	465,559	458,514	436,505	449,323	454,374
Hamblen	946,369	895,606	889,305	916,902	903,504	861,818	886,145	895,993
Hamilton	3,658,020	3,458,866	3,433,751	3,542,017	3,489,550	3,326,019	3,421,361	3,459,494
Hancock	283,481	267,569	265,524	274,174	269,989	256,913	264,528	267,529
Hardeman	899,025	848,556	842,070	869,506	856,231	814,757	838,912	848,431
Hardin	1,146,888	1,085,003	1,077,274	1,110,917	1,094,593	1,043,767	1,073,418	1,085,365
Hawkins	1,356,948	1,291,118	1,282,909	1,318,698	1,301,342	1,247,268	1,278,803	1,291,456
Haywood	707,991	668,267	663,010	684,599	674,151	641,516	660,525	668,026
Henderson	893,489	843,627	837,362	864,648	851,486	810,501	834,487	844,041
Henry	1,777,904	1,682,427	1,670,799	1,722,705	1,697,459	1,619,085	1,664,871	1,683,664
Hickman	834,577	788,690	782,792	807,737	795,667	757,959	779,742	788,395
Houston	440,770	417,012	414,070	426,986	420,714	401,205	412,591	417,208
Humphreys	1,648,788	1,562,903	1,552,477	1,599,168	1,576,452	1,505,955	1,547,147	1,564,093
Jackson	406,675	383,846	380,911	393,322	387,317	368,556	379,483	383,788
Jefferson	1,055,684	1,006,702	1,000,580	1,027,208	1,014,289	974,060	997,527	1,006,976
Johnson	521,881	494,271	490,759	505,769	498,499	475,815	489,034	494,287
Knox	3,735,811	3,532,625	3,506,590	3,617,045	3,564,161	3,397,172	3,493,517	3,531,930
Lake	233,251	220,157	218,474	225,592	222,148	211,388	217,655	220,124
Lauderdale	694,284	655,321	650,313	671,477	661,229	629,212	647,859	655,207
Lawrence	945,560	892,645	885,845	914,610	900,692	857,208	882,533	892,513

Tennessee Valley Authority's Payments in Lieu of Taxes  
Annual Report to the Tennessee General Assembly

Distribution of Counties' Share of TVA Payments in Lieu of Taxes to Tennessee  
by Tennessee Fiscal Year

County	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12
Lewis	385,957	364,473	361,711	373,390	367,739	350,084	360,367	364,419
Lincoln	841,293	794,397	788,370	813,863	801,528	762,990	785,435	794,280
Loudon	1,189,182	1,137,478	1,131,078	1,159,187	1,145,537	1,103,081	1,127,861	1,137,769
Macon	479,044	452,186	448,729	463,349	456,275	434,174	447,046	452,119
Madison	1,275,651	1,204,133	1,194,946	1,233,824	1,214,961	1,156,193	1,190,421	1,203,913
Marion	1,242,589	1,180,630	1,172,933	1,206,616	1,190,264	1,139,383	1,169,001	1,181,424
Marshall	619,527	585,272	580,870	599,491	590,481	562,331	578,726	585,187
Maury	1,249,817	1,180,372	1,171,466	1,209,217	1,190,947	1,133,882	1,167,122	1,180,242
McMinn	944,436	895,732	889,511	915,988	903,169	863,151	886,466	895,699
McNairy	775,931	732,372	726,774	750,453	738,589	702,813	723,650	731,860
Meigs	833,143	789,534	779,845	803,409	791,935	756,365	777,159	785,769
Monroe	1,679,319	1,596,020	1,585,671	1,630,983	1,608,999	1,540,592	1,580,511	1,596,657
Montgomery	1,759,965	1,661,232	1,648,543	1,702,216	1,676,246	1,595,111	1,642,365	1,660,987
Moore	216,533	204,769	203,279	209,673	206,575	196,911	202,544	204,788
Morgan	709,774	670,131	664,854	686,398	675,974	643,406	662,374	669,848
Obion	802,361	757,329	751,541	776,021	764,176	727,170	748,723	757,216
Overton	611,335	577,016	572,606	591,262	582,235	554,033	570,458	576,930
Perry	703,299	665,771	661,077	681,478	671,581	640,758	658,738	665,973
Pickett	203,537	192,111	190,643	196,854	193,849	184,459	189,928	192,082
Polk	832,290	794,851	790,102	810,455	800,594	769,837	787,770	794,908
Putnam	921,975	870,259	863,646	891,761	878,158	835,657	860,410	870,164
Rhea	1,219,463	1,157,939	1,150,431	1,183,879	1,167,614	1,117,108	1,146,610	1,158,702
Roane	1,687,870	1,604,918	1,594,781	1,639,940	1,620,023	1,551,797	1,591,648	1,607,852
Robertson	962,217	908,258	901,323	930,656	916,354	872,017	897,839	908,015
Rutherford	2,476,705	2,338,930	2,321,247	2,396,046	2,359,854	2,246,782	2,312,637	2,338,588
Scott	712,926	672,904	667,760	689,517	678,990	646,101	665,256	672,804
Sequatchie	388,389	367,092	364,355	375,932	370,330	352,829	363,022	367,039
Sevier	1,323,002	1,249,557	1,240,164	1,280,090	1,260,762	1,200,413	1,235,571	1,249,480
Shelby	7,422,378	7,016,977	6,964,888	7,185,270	7,078,634	6,745,491	6,939,521	7,015,996
Smith	510,067	482,866	479,384	494,172	487,014	464,662	477,683	482,832
Stewart	2,946,487	2,791,312	2,772,961	2,857,324	2,816,181	2,688,874	2,763,366	2,783,192
Sullivan	1,891,853	1,788,290	1,775,264	1,831,340	1,804,161	1,719,425	1,768,826	1,788,563
Sumner	1,739,358	1,642,536	1,624,332	1,676,777	1,651,393	1,572,119	1,618,297	1,636,538
Tipton	902,844	852,219	845,712	873,233	859,917	818,315	842,544	852,092
Trousdale	223,026	211,912	210,501	216,542	213,616	204,485	209,807	211,923
Unicoi	323,508	305,365	303,033	312,896	308,124	293,214	301,897	305,319
Union	1,126,542	1,069,374	1,062,503	1,093,583	1,078,448	1,031,532	1,058,960	1,070,325
Van Buren	353,285	333,888	331,407	341,952	336,847	320,909	330,195	333,869
Warren	796,824	754,461	749,031	772,074	760,921	726,089	746,379	754,395
Washington	1,231,386	1,163,691	1,155,001	1,191,801	1,173,993	1,118,365	1,150,766	1,163,545
Wayne	906,454	855,624	849,097	876,736	863,361	821,581	845,916	855,513
Weakley	864,107	815,671	809,450	835,781	823,040	783,237	806,419	815,559
White	618,027	583,823	579,453	598,047	589,045	560,941	577,315	583,797
Williamson	1,902,192	1,796,604	1,783,034	1,840,433	1,812,660	1,725,892	1,776,427	1,796,341
Wilson	1,407,649	1,329,458	1,319,411	1,361,917	1,341,350	1,277,095	1,314,518	1,329,268
<b>Total</b>	<b>\$ 105,652,995</b>	<b>\$ 99,936,128</b>	<b>\$ 99,201,346</b>	<b>\$ 102,309,124</b>	<b>\$ 100,805,418</b>	<b>\$ 96,107,481</b>	<b>\$ 98,843,609</b>	<b>\$ 99,921,756</b>

## Appendix D: Distribution of Cities' Share of TVA Payments in Lieu of Taxes to Tennessee by Tennessee Fiscal Year

City	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12
Adams	\$ 7,496	\$ 7,178	\$ 7,142	\$ 7,428	\$ 7,337	\$ 7,003	\$ 7,219	\$ 7,314
Adamsville	26,248	25,139	25,015	26,012	25,693	24,530	25,281	25,615
Alamo	29,149	27,912	27,773	28,886	28,529	27,233	28,071	28,443
Alcoa	100,053	95,807	95,330	99,149	97,925	93,477	96,351	97,629
Alexandria	11,439	10,954	10,899	11,336	11,196	10,687	11,016	11,162
Algood	41,388	39,632	39,434	41,014	40,508	38,667	39,856	40,385
Allardt	7,508	7,189	7,153	7,440	7,348	7,014	7,230	7,326
Altamont	12,375	11,850	11,791	12,263	12,112	11,561	11,917	12,075
Ardmore	14,364	13,755	13,686	14,235	14,059	13,420	13,833	14,016
Arlington	156,516	137,094	136,411	141,876	140,125	133,759	131,338	133,080
Ashland City	61,886	51,493	51,236	53,289	52,631	50,240	51,785	52,472
Athens	159,514	152,751	151,990	158,074	156,125	149,039	153,617	155,653
Atoka	112,191	107,430	94,630	98,422	97,207	92,791	95,644	96,912
Atwood	11,108	10,636	10,583	11,007	10,872	10,378	10,697	10,839
Auburntown	3,186	3,050	3,035	3,157	3,118	2,976	3,068	3,108
Baileyton	5,104	4,887	4,863	5,058	4,995	4,768	4,915	4,980
Baneberry	5,708	5,466	5,438	5,656	5,586	5,333	5,497	5,570
Bartlett	668,931	640,545	637,351	662,887	654,705	604,217	622,796	631,057
Baxter	16,164	15,478	15,401	16,018	15,821	15,102	15,566	15,773
Bean Station	36,165	34,631	34,458	35,839	35,257	33,656	34,303	32,655
Beersheba Spring	5,649	5,409	5,382	5,598	5,529	5,277	5,440	5,512
Bell Buckle	5,921	5,670	5,641	5,868	5,795	5,532	5,702	5,778
Belle Meade	34,484	33,021	32,856	34,172	33,751	32,217	33,208	33,648
Bells	28,859	27,634	27,497	28,598	28,245	26,962	27,791	28,160
Benton	16,401	15,705	15,627	16,253	16,052	15,323	15,794	16,004
Berry Hill	11,404	10,920	10,865	6,302	6,224	5,941	6,124	6,205
Bethel Springs	8,503	8,142	8,101	8,426	8,322	7,944	8,188	8,297
Big Sandy	7,276	6,996	6,964	7,216	7,135	6,842	7,032	7,116
Blaine	21,979	21,046	20,941	21,780	21,511	20,534	21,165	21,446
Bluff City	20,972	20,101	20,003	20,787	20,536	19,623	20,213	20,475
Bolivar	64,148	61,426	61,120	63,569	62,784	59,932	61,774	62,594
Braden	3,339	3,198	3,182	3,309	3,268	3,120	3,216	3,259
Bradford	12,434	11,907	11,848	12,322	12,170	11,618	11,975	12,133
Brentwood	519,734	458,127	455,842	474,106	429,531	410,018	422,625	428,231
Brighton	32,388	31,013	30,859	32,095	31,699	30,259	31,189	31,603
Bristol	319,767	306,349	304,839	316,910	313,042	298,983	308,066	312,105
Brownsville	122,043	116,871	116,289	120,942	119,451	114,032	117,533	119,090
Bruceton	17,502	16,760	16,676	17,344	17,130	16,352	16,855	17,078
Bulls Gap	8,739	8,369	8,327	8,660	8,554	8,165	8,416	8,528
Burlison	5,033	4,819	4,795	4,987	4,926	4,702	4,847	4,911
Burns	17,384	16,646	16,563	17,227	17,014	16,241	16,741	16,963
Byrdstown	9,509	9,106	9,060	9,423	9,307	8,884	9,157	9,279
Calhoun	5,803	5,556	5,529	5,750	5,679	5,421	5,588	5,662
Camden	42,418	40,618	40,416	42,035	41,516	39,630	40,848	41,390
Carthage	27,308	26,149	26,018	27,061	26,727	25,513	26,297	26,646
Caryville	27,201	26,047	25,917	26,955	26,623	25,413	26,195	26,542
Cedar Hill	3,718	3,561	3,543	3,685	3,639	3,474	3,581	3,628
Celina	17,704	16,953	16,868	17,544	17,327	16,540	17,049	17,275
Centertown	2,878	2,755	2,742	2,852	2,816	2,688	2,771	2,808
Centerville	43,310	41,479	41,273	42,921	42,393	40,474	41,714	42,265
Chapel Hill	17,112	16,386	16,304	16,957	16,748	15,987	16,479	16,697

Tennessee Valley Authority's Payments in Lieu of Taxes  
Annual Report to the Tennessee General Assembly

Distribution of Cities' Share of TVA Payments in Lieu of Taxes to Tennessee  
by Tennessee Fiscal Year

City	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12
Charleston	7,709	7,382	7,345	7,639	7,545	7,202	7,424	7,522
Charlotte	14,625	14,004	13,934	14,493	14,314	13,664	14,084	14,271
Chattanooga	2,028,614	1,944,355	1,934,875	2,010,675	1,986,387	1,898,099	1,955,139	1,980,503
Church Hill	79,780	76,394	76,013	79,059	78,083	74,536	76,827	77,847
Clarksburg	4,654	4,456	4,434	4,612	4,555	4,348	4,482	4,541
Clarksville	1,574,193	1,507,393	1,499,878	1,559,970	1,540,715	1,470,723	1,515,943	1,536,051
Cleveland	489,660	468,913	466,579	485,242	479,262	457,524	471,568	477,813
Clifton	31,902	30,549	30,396	31,614	31,224	29,805	30,722	31,129
Clinton	118,667	113,722	113,165	117,614	116,189	111,007	114,355	115,843
Coalmont	9,959	9,537	9,489	9,869	9,747	9,305	9,591	9,718
Collegedale	98,075	93,914	93,445	97,189	95,990	91,629	94,446	95,699
Collierville	539,403	516,514	513,938	534,530	527,932	503,948	519,443	508,019
Collinwood	11,629	11,135	11,080	11,524	11,382	10,864	11,199	11,347
Columbia	416,597	399,169	397,208	412,886	407,863	389,602	401,400	406,646
Cookeville	368,926	353,270	351,509	365,593	361,080	344,676	348,409	351,679
Coopertown	50,660	48,510	48,268	50,202	49,583	47,330	48,785	49,433
Copperhill	4,192	4,014	3,994	4,154	4,103	3,917	4,037	4,090
Cornersville	14,139	13,539	13,472	14,012	13,839	13,210	13,616	13,797
Cottage Grove	1,042	998	993	1,033	1,020	974	1,004	1,017
Covington	107,028	102,486	101,975	106,061	104,752	99,993	103,068	104,435
Cowan	20,819	19,946	19,848	20,633	20,382	19,467	20,058	20,321
Crab Orchard	8,905	8,527	8,485	8,825	8,716	8,320	8,576	8,689
Cross Plains	20,297	19,436	19,339	20,114	19,866	18,963	19,546	19,805
Crossville	136,941	124,984	124,361	129,343	127,747	119,432	123,104	124,737
Crump	16,910	16,193	16,112	16,758	16,551	15,799	16,285	16,501
Cumberland City	16,849	16,693	16,676	16,816	16,771	16,607	16,713	16,760
Cumberland Gap	5,850	5,602	5,574	5,797	5,726	5,465	5,633	5,708
Dandridge	34,110	32,697	32,538	33,809	33,402	31,921	32,878	33,303
Dayton	87,708	84,094	83,688	86,938	85,897	82,110	84,557	85,645
Decatur	18,924	18,121	18,030	18,753	18,521	17,680	18,223	18,465
Decaturville	10,343	9,907	9,858	10,250	10,124	9,668	9,963	10,094
Decherd	27,980	26,794	26,660	27,727	27,385	26,142	26,945	27,303
Dickson	172,159	164,853	164,032	170,604	168,498	160,843	165,789	167,988
Dover	16,780	16,068	15,988	16,629	16,423	15,677	16,159	16,374
Dowelltown	4,204	4,026	4,005	4,166	4,115	3,928	4,048	4,102
Doyle	6,359	6,089	6,059	6,302	6,224	5,941	6,124	6,205
Dresden	35,585	34,075	33,905	35,264	34,828	33,246	34,268	34,723
Ducktown	5,625	5,386	5,359	5,574	5,505	5,255	5,417	5,489
Dunlap	57,042	54,622	54,350	56,527	55,829	53,294	54,932	55,661
Dyer	27,722	26,546	26,413	27,472	27,133	25,900	26,696	27,050
Dyersburg	203,031	194,415	193,446	201,197	198,713	189,686	195,518	198,112
Eagleville	7,153	6,849	6,815	7,088	7,000	6,682	6,888	6,979
East Ridge	248,433	237,891	236,705	246,189	243,150	232,104	239,240	242,414
Eastview	8,349	7,994	7,954	8,273	8,171	7,800	8,040	8,146
Elizabethton	169,161	162,037	161,236	167,644	165,591	158,127	162,949	165,094
Elkton	6,845	6,554	6,522	6,783	6,699	6,395	6,591	6,679
Englewood	19,333	18,563	18,476	19,169	18,947	18,140	18,661	18,893
Enville	2,238	2,143	2,132	2,218	2,191	2,091	2,155	2,184
Erin	15,679	15,013	14,939	15,537	15,345	14,648	15,099	15,299
Erwin	72,225	69,161	68,816	71,573	70,690	67,479	69,553	70,476
Estill Springs	26,733	25,700	25,584	26,513	26,215	25,133	25,832	26,143

Distribution of Cities' Share of TVA Payments in Lieu of Taxes to Tennessee  
by Tennessee Fiscal Year

City	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12
Ethridge	5,507	5,273	5,247	5,457	5,389	5,145	5,303	5,373
Etowah	41,329	39,575	39,377	40,955	40,450	38,612	39,799	40,327
Fairview	94,760	90,739	90,286	90,594	89,476	85,411	88,037	89,205
Farragut	268,529	257,134	255,852	242,633	239,638	228,751	235,785	238,913
Fayetteville	80,898	77,467	77,081	80,167	79,178	75,584	77,906	78,939
Finger	3,529	3,379	3,362	3,497	3,454	3,297	3,398	3,443
Forest Hills	59,684	57,151	56,866	59,144	58,414	55,761	54,875	55,603
Franklin	839,835	804,202	748,991	778,995	769,381	691,474	712,731	722,184
Friendship	7,915	7,580	7,542	7,844	7,747	7,395	7,623	7,724
Friendsville	10,812	10,353	10,301	10,714	10,582	10,101	10,412	10,550
Gadsden	5,566	5,330	5,303	5,515	5,447	5,200	5,360	5,431
Gainesboro	11,392	10,909	10,854	11,289	11,150	10,643	10,970	11,116
Gallatin	408,229	390,906	388,957	355,313	350,927	334,984	345,284	349,864
Gallaway	8,053	7,711	7,672	7,980	7,881	7,523	7,755	7,857
Garland	3,671	3,515	3,498	3,638	3,593	3,430	3,535	3,582
Gates	7,662	7,337	7,300	7,593	7,499	7,158	7,378	7,476
Gatlinburg	46,705	44,723	44,500	46,283	45,712	43,635	44,977	45,573
Germantown	475,137	454,974	452,706	470,844	465,032	443,906	457,555	448,845
Gibson	4,689	4,490	4,468	4,647	4,590	4,381	4,516	4,576
Gilt Edge	5,649	5,409	5,382	5,598	5,529	5,277	5,440	5,512
Gleason	17,112	16,386	16,304	16,957	16,748	15,987	16,479	16,697
Goodlettsville	188,537	180,536	179,636	186,833	184,527	176,144	181,560	183,968
Gordonsville	14,364	13,755	13,686	14,235	14,059	13,420	13,833	14,016
Grand Junction	3,849	3,685	3,667	3,814	3,767	3,596	3,706	3,755
Greenville	17,787	17,032	16,947	17,626	17,408	16,618	17,129	17,356
Greenback	12,600	12,065	12,005	12,486	12,332	11,772	12,134	12,295
Greenbrier	76,180	72,947	72,583	75,491	74,560	71,172	73,361	74,334
Greeneville	178,581	171,012	170,160	176,969	174,788	166,857	171,981	174,259
Greenfield	25,839	24,743	24,619	25,606	25,290	24,141	24,883	25,213
Gruetli-Laager	21,470	20,558	20,456	21,276	21,013	20,058	20,675	20,949
Guys	5,518	5,284	5,258	5,469	5,401	5,156	5,314	5,385
Halls	26,704	25,571	25,443	26,462	26,136	24,948	25,716	26,057
Harriman	78,195	75,004	74,645	77,516	76,596	73,252	75,412	76,373
Harrogate	51,975	49,769	49,521	51,505	50,869	48,558	50,051	50,715
Hartsville	28,054	26,863	26,729	27,800	27,457	26,210	27,016	27,374
Henderson	74,711	71,541	71,184	74,036	73,122	69,800	71,947	72,901
Hendersonville	608,348	582,532	579,628	602,851	595,410	568,360	585,836	593,607
Henning	11,191	10,716	10,662	11,090	10,953	10,455	10,777	10,920
Henry	5,495	5,262	5,235	5,445	5,378	5,134	5,291	5,362
Hickory Valley	1,172	1,123	1,117	1,162	1,147	1,095	1,129	1,144
Hohenwald	44,744	42,856	42,644	44,342	43,798	41,820	43,098	43,666
Hollow Rock	8,503	8,142	8,101	8,426	8,322	7,944	8,188	8,297
Hornbeak	6,312	6,044	6,014	6,255	6,178	5,897	4,835	4,899
Hornsby	3,588	3,436	3,419	3,556	3,512	3,352	3,455	3,501
Humboldt	100,092	95,845	95,367	99,188	97,964	93,513	96,388	97,667
Huntingdon	47,190	45,188	44,963	46,764	46,187	44,089	45,444	46,047
Huntland	10,326	9,888	9,839	10,233	10,107	9,647	9,944	10,076
Huntsville	18,746	17,950	17,861	18,577	18,023	17,204	17,482	15,310
Jacksboro	23,921	22,906	22,792	23,705	23,412	22,349	23,036	23,341
Jackson	773,789	741,019	737,332	766,812	757,366	723,030	745,213	755,078
Jamestown	23,198	22,214	22,103	22,989	22,705	21,674	22,340	22,636

Tennessee Valley Authority's Payments in Lieu of Taxes  
Annual Report to the Tennessee General Assembly

Distribution of Cities' Share of TVA Payments in Lieu of Taxes to Tennessee  
by Tennessee Fiscal Year

City	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12
Jasper	39,351	37,681	37,493	38,995	38,514	36,278	37,393	37,889
Jefferson City	100,971	96,705	96,225	100,063	98,833	94,363	92,199	93,416
Jellico	27,888	26,704	26,571	27,636	27,295	26,055	26,856	27,212
Johnson City	750,858	719,123	715,553	744,102	734,954	701,702	723,185	732,738
Jonesborough	59,814	57,276	56,990	59,274	58,542	55,882	57,601	58,365
Kenton	15,170	14,526	14,453	15,033	14,847	14,173	14,608	14,802
Kimball	16,520	15,819	15,740	16,370	16,168	15,434	15,908	16,119
Kingsport	607,187	581,421	578,522	601,701	594,274	567,165	576,588	569,376
Kingston	73,090	70,108	69,772	72,455	71,595	68,471	70,490	71,387
Kingston Springs	32,637	31,252	31,096	32,342	31,942	30,491	31,429	31,846
Knoxville	2,155,743	2,065,855	2,055,742	2,136,605	2,110,695	2,016,510	2,077,360	2,104,418
Lafayette	52,981	50,733	50,480	52,502	51,854	49,499	51,021	51,697
LaFollette	88,458	84,711	84,289	87,660	86,580	82,654	85,190	86,318
Lagrange	1,575	1,508	1,501	1,561	1,541	1,471	1,517	1,537
Lakeland	147,196	140,950	140,247	145,866	144,066	137,521	141,749	143,630
Lakesite	21,624	20,706	20,603	21,428	21,164	20,202	20,823	21,100
La Vergne	407,531	369,531	367,689	382,421	377,700	360,541	371,627	376,557
Lawrenceburg	123,488	118,248	117,659	122,373	120,862	115,371	118,919	120,496
Lebanon	388,398	371,949	370,099	308,125	304,331	290,541	299,451	303,412
Lenoir City	103,863	99,520	99,032	102,938	101,687	97,136	100,076	101,383
Lewisburg	132,119	126,541	125,914	130,931	129,324	123,479	127,255	128,934
Lexington	90,814	86,969	86,536	89,995	88,887	84,858	87,461	88,618
Liberty	3,671	3,515	3,498	3,638	3,593	3,430	3,535	3,582
Linden	10,759	10,303	10,252	10,662	10,531	10,053	10,362	10,499
Livingston	48,055	46,016	45,786	47,621	47,033	44,896	46,277	46,890
Lobelville	10,622	10,172	10,121	10,526	10,396	9,924	10,229	10,365
Lookout Mountain	21,695	20,774	20,670	21,499	21,233	20,269	20,892	21,169
Loretto	20,297	19,436	19,339	20,114	19,866	18,963	19,546	19,805
Loudon	66,994	64,290	63,986	66,419	65,639	62,806	64,636	65,450
Louisville	47,605	45,585	45,357	47,175	28,268	26,984	27,814	28,183
Luttrell	12,718	12,179	12,118	12,603	12,448	11,882	12,248	12,410
Lynchburg	6,847	6,560	6,527	6,786	6,703	6,402	6,596	6,683
Lynnville	3,454	3,310	3,294	3,424	3,382	3,231	3,328	3,372
Madisonville	54,201	51,901	51,642	53,711	53,048	50,638	52,195	52,888
Manchester	119,628	114,551	113,980	118,547	117,084	111,765	115,201	116,729
Martin	136,276	130,511	129,862	135,049	133,387	127,346	131,249	132,984
Maryville	326,081	312,244	310,687	323,135	319,147	304,648	314,015	318,180
Mason	19,054	18,245	18,154	18,882	18,649	17,801	18,349	18,592
Maury City	7,982	7,643	7,605	7,909	7,812	7,457	7,686	7,788
Maynardville	28,575	27,362	27,226	28,317	27,967	26,697	27,517	27,882
McEwen	20,877	19,997	19,898	20,690	20,436	19,515	20,110	20,375
McKenzie	62,881	60,213	59,912	62,313	61,544	58,748	60,554	61,357
McLemoresville	4,168	3,992	3,972	4,131	4,080	3,894	4,014	4,067
McMinnville	161,369	154,532	153,763	159,913	157,943	150,779	155,407	157,465
Medina	57,102	54,679	49,487	51,470	50,834	38,490	39,674	40,200
Medon	2,676	2,563	2,550	2,652	2,619	2,500	2,577	2,057
Memphis	7,857,488	7,532,413	7,495,841	7,788,276	7,694,573	7,353,958	7,574,020	7,671,873
Michie	6,999	6,702	6,668	6,935	6,850	6,539	6,740	6,829
Middleton	8,360	8,006	7,966	8,285	8,183	7,811	8,051	8,158
Milan	92,972	89,026	88,582	92,132	90,994	86,860	89,531	90,719
Milledgeville	3,138	3,005	2,990	3,110	3,071	2,932	3,022	3,062

Distribution of Cities' Share of TVA Payments in Lieu of Taxes to Tennessee  
by Tennessee Fiscal Year

City	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12
Millersville	76,263	73,026	72,662	75,573	74,641	71,250	73,441	74,415
Millington	131,825	126,231	125,602	130,634	129,022	115,526	116,045	117,584
Minor Hill	6,359	6,089	6,059	6,302	6,224	5,941	6,124	6,205
Mitchellville	2,238	2,143	2,132	2,218	2,191	2,091	2,155	2,184
Monteagle	14,116	13,517	13,449	13,988	13,815	13,188	13,593	13,774
Monterey	33,818	32,386	32,224	33,513	33,100	31,599	32,569	33,000
Morrison	8,218	7,870	7,830	8,144	8,044	7,678	7,914	8,019
Morristown	345,041	330,399	328,751	341,923	337,703	322,361	332,273	336,680
Moscow	6,584	6,305	6,273	6,525	6,444	6,151	6,341	6,425
Mosheim	27,971	26,784	26,650	27,718	27,376	26,132	26,936	27,293
Mount Carmel	64,290	61,562	61,255	63,709	62,923	60,064	61,911	62,732
Mount Juliet	371,555	319,309	317,717	330,446	284,515	271,590	279,941	273,520
Mount Pleasant	60,678	52,086	51,828	53,890	53,230	50,828	52,380	53,070
Mountain City	29,972	28,700	28,557	29,701	29,335	28,002	28,863	29,246
Munford	72,355	69,284	66,874	69,553	68,695	65,574	67,590	68,487
Murfreesboro	1,456,362	1,237,287	1,231,123	1,280,412	1,264,619	1,207,209	1,244,300	1,257,603
Nashville	5,333,483	4,876,338	4,852,060	5,046,186	4,983,984	4,757,875	4,903,958	4,968,915
New Hope	12,813	12,269	12,208	12,697	12,541	11,971	12,339	12,503
New Johnsonville	23,590	22,610	22,499	23,381	23,099	22,071	22,735	23,030
New Market	15,797	15,127	15,051	15,655	15,461	14,759	15,213	15,414
New Tazewell	35,964	34,438	34,266	35,639	35,199	33,600	34,633	35,093
Newbern	39,233	37,568	37,380	38,878	38,398	36,654	37,781	38,282
Newport	82,388	78,898	78,505	81,645	80,639	76,982	79,345	80,395
Niota	9,958	9,597	9,556	9,881	9,777	9,399	9,643	9,752
Nolensville	131,411	89,990	89,541	93,129	67,930	64,844	66,838	67,724
Normandy	1,670	1,599	1,591	1,655	1,634	1,560	1,608	1,629
Norris	19,291	18,472	18,380	19,116	18,880	18,023	18,577	18,257
Oak Hill	55,527	53,171	52,906	55,025	54,346	50,107	51,648	52,333
Oak Ridge	350,609	335,870	334,212	347,471	343,222	327,779	337,756	342,193
Oakdale	2,511	2,404	2,392	2,488	2,457	2,345	2,418	2,450
Oakland	78,430	75,101	74,727	77,721	76,762	73,274	75,527	76,529
Obion	13,251	12,689	12,626	13,131	12,969	12,380	12,761	12,930
Oliver Springs	38,262	36,638	36,455	37,916	37,448	35,747	36,846	37,334
Oneida	44,431	42,546	42,334	44,030	43,486	41,511	42,787	43,355
Orlinda	10,172	9,741	9,692	10,080	9,956	9,504	9,796	9,926
Orme	1,492	1,429	1,422	1,479	1,460	1,394	1,437	1,456
Palmer	7,958	7,620	7,582	7,886	7,789	7,435	7,663	7,765
Paris	120,267	115,164	114,590	119,181	117,710	112,362	115,817	117,353
Parkers Crossroads	3,908	3,742	3,723	3,873	3,825	3,651	3,763	3,813
Parrottsville	3,114	2,982	2,967	3,086	3,048	2,910	2,999	3,039
Parsons	28,595	27,403	27,268	28,341	27,997	26,748	27,555	27,914
Pegram	24,785	23,734	23,615	24,561	24,258	23,156	23,868	24,185
Petersburg	6,823	6,549	6,518	6,764	6,686	6,399	6,584	6,666
Philadelphia	7,768	7,439	7,402	7,698	7,603	7,258	7,481	7,580
Pigeon Forge	69,572	66,619	66,287	68,943	68,092	64,999	66,997	67,886
Pikeville	19,042	18,234	18,143	18,870	18,637	17,790	18,337	18,581
Piperton	19,326	18,506	18,414	16,957	16,748	15,987	16,479	16,697
Pittman Center	5,945	5,692	5,664	5,891	5,818	5,554	5,725	5,801
Plainview	25,164	24,096	23,976	24,937	24,629	23,510	24,233	24,555
Pleasant Hill	6,667	6,384	6,352	6,607	6,525	6,229	6,420	6,506
Pleasant View	49,997	47,875	46,813	48,689	48,088	45,903	47,314	47,942

Tennessee Valley Authority's Payments in Lieu of Taxes  
Annual Report to the Tennessee General Assembly

Distribution of Cities' Share of TVA Payments in Lieu of Taxes to Tennessee  
by Tennessee Fiscal Year

City	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12
Portland	135,946	130,177	129,528	134,718	133,055	127,010	130,916	132,652
Powells Crossroads	15,655	14,991	14,916	15,514	15,322	14,626	15,076	15,276
Pulaski	93,197	89,242	88,797	92,355	91,215	87,071	89,748	90,938
Puryear	7,946	7,609	7,571	7,874	7,777	7,424	7,652	7,753
Ramer	3,778	3,617	3,599	3,743	3,697	3,529	3,638	3,686
Red Bank	137,971	132,116	131,458	136,725	135,037	128,902	132,866	134,628
Red Boiling Springs	13,168	12,610	12,547	13,049	12,888	12,303	12,681	12,849
Ridgely	21,256	20,354	20,253	21,064	20,804	19,859	20,470	20,741
Ridgeside	4,618	4,422	4,400	4,577	4,520	4,315	4,447	4,506
Ridgetop	24,323	23,291	23,175	21,991	21,720	20,733	21,371	21,654
Ripley	100,006	95,762	95,285	99,102	97,879	93,432	96,305	97,583
Rives	3,860	3,697	3,678	3,826	3,778	3,607	3,718	3,767
Rockford	10,137	9,707	9,658	10,045	9,921	9,470	9,762	9,891
Rockwood	65,865	63,070	62,756	65,270	64,464	61,536	63,428	64,269
Rocky Top	21,590	20,696	20,595	21,400	21,142	20,204	20,810	21,079
Rogersville	52,342	50,121	49,871	51,869	51,229	48,901	50,405	51,073
Rossville	10,670	10,217	10,166	7,792	7,696	7,346	7,572	7,673
Rutherford	13,630	13,052	12,987	13,507	13,340	12,734	13,126	13,300
Rutledge	15,383	14,730	14,657	15,244	15,056	14,372	14,814	12,965
Saltito	6,951	6,656	6,623	6,888	6,803	6,494	6,694	3,501
Samburg	2,570	2,461	2,448	2,547	2,515	2,401	2,475	2,507
Sardis	4,512	4,320	4,299	4,471	4,416	4,215	4,345	4,402
Saulsbury	1,326	1,270	1,264	1,314	1,298	1,239	924	936
Savannah	82,884	79,376	78,981	82,137	81,126	77,449	79,825	80,881
Scotts Hill	11,653	11,158	11,102	11,547	11,405	10,887	11,221	11,370
Selmer	52,063	49,854	49,605	51,593	50,956	48,641	50,137	50,802
Sevierville	175,345	167,904	167,067	173,760	171,616	163,819	168,856	171,096
Sharon	11,218	10,744	10,690	11,117	10,980	10,483	10,805	10,947
Shelbyville	244,762	234,544	233,394	242,587	239,641	228,934	235,852	238,928
Signal Mountain	99,035	94,832	94,359	98,140	96,929	92,525	86,144	87,287
Silerton	1,314	1,259	1,252	1,303	1,287	1,228	1,266	1,283
Slayden	2,108	2,018	2,008	2,089	2,063	1,969	2,030	2,057
Smithville	53,644	51,368	51,112	53,160	52,503	50,118	51,659	52,344
Smyrna	562,744	538,864	536,177	469,095	463,305	442,257	455,856	461,902
Sneedville	16,425	15,728	15,649	16,276	16,076	15,345	15,817	16,027
Soddy Daisy	150,559	144,170	143,451	149,199	147,357	140,663	144,988	146,911
Somerville	36,639	35,084	34,909	36,308	35,860	34,231	35,283	35,751
South Carthage	15,655	14,991	14,916	15,514	15,322	14,626	15,076	15,276
South Fulton	27,876	26,693	26,560	27,624	27,283	26,044	26,845	27,201
South Pittsburg	35,751	34,247	34,078	35,430	34,997	33,422	34,439	34,892
Sparta	60,430	57,882	57,595	59,888	59,153	56,483	58,208	57,288
Spencer	18,959	18,155	18,064	18,788	18,556	17,713	18,257	18,500
Spring City	24,830	23,834	23,722	24,618	24,331	23,288	23,962	24,261
Spring Hill	478,843	414,231	412,166	376,142	371,499	321,243	331,121	335,513
Springfield	194,683	186,421	185,492	192,924	190,542	181,886	187,479	189,965
St. Joseph	9,260	8,867	8,823	9,177	9,064	8,652	8,918	9,036
Stanton	5,353	5,125	5,100	5,304	5,239	5,001	5,155	5,223
Stantonville	3,351	3,209	3,193	3,321	3,280	3,131	3,227	3,270
Sunbright	6,537	6,259	6,228	6,478	6,398	6,107	6,295	6,378
Surgoinsville	21,327	20,422	20,321	21,135	20,874	19,926	20,538	20,811
Sweetwater	71,648	68,628	68,288	71,005	70,135	66,970	69,015	67,081

Distribution of Cities' Share of TVA Payments in Lieu of Taxes to Tennessee  
by Tennessee Fiscal Year

City	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12
Tazewell	26,301	25,185	25,059	26,063	25,742	24,572	25,328	25,629
Tellico Plains	10,459	10,017	9,967	10,365	10,238	9,774	10,074	10,207
Tennessee Ridge	16,200	15,512	15,435	16,054	15,855	15,135	15,600	15,807
Thompson's Station	55,965	53,590	30,250	31,462	31,073	24,274	25,020	25,352
Three Way	20,238	19,379	19,283	20,055	19,808	18,908	19,489	19,748
Tiptonville	52,863	50,619	50,367	52,385	51,738	49,388	50,907	51,582
Toone	4,310	4,128	4,107	4,272	4,219	4,027	4,151	4,206
Townsend	5,305	5,080	5,055	5,257	5,192	4,957	5,109	5,177
Tracy City	17,538	16,794	16,710	17,380	17,165	16,385	16,889	17,113
Trenton	50,494	48,352	48,110	50,038	49,420	47,175	48,626	49,271
Trezevant	10,172	9,741	9,692	10,080	9,956	9,504	9,796	9,926
Trimble	7,543	7,223	7,187	7,475	7,383	7,048	7,264	7,361
Troy	16,235	15,546	15,469	16,089	15,890	15,168	15,635	15,842
Tullahoma	221,587	212,212	211,158	219,591	216,889	207,066	213,412	216,234
Tusculum	31,535	30,197	30,046	31,250	30,865	29,462	30,368	30,771
Unicoi	43,010	41,185	40,980	42,622	42,095	40,183	41,419	41,968
Union City	129,019	123,544	122,928	127,853	126,275	120,538	124,244	125,892
Vanleer	4,678	4,479	4,457	4,635	4,578	4,370	4,505	4,564
Viola	1,551	1,485	1,478	1,537	1,518	1,449	1,494	1,514
Vonore	17,455	16,714	16,631	17,297	17,084	16,308	16,809	17,032
Walden	22,476	21,522	21,415	22,273	21,998	20,999	21,644	21,932
Wartburg	10,871	10,410	10,358	10,773	10,640	10,156	10,469	10,608
Wartrace	7,709	7,382	7,345	7,639	7,545	7,202	7,424	7,522
Watauga	5,424	5,193	5,168	5,375	5,308	5,067	5,223	5,292
Watertown	17,491	16,748	16,665	17,333	17,119	16,341	16,843	17,067
Waverly	48,611	46,549	46,317	48,172	47,578	45,416	46,813	47,434
Waynesboro	29,001	27,770	27,632	28,739	28,384	27,095	27,928	28,298
Westmoreland	26,123	25,015	24,890	25,887	25,568	24,406	25,157	25,490
White Bluff	37,965	36,354	36,173	37,622	37,158	35,470	36,561	37,046
White House	137,367	131,538	115,707	120,343	118,857	113,457	116,946	118,497
White Pine	26,005	24,902	24,777	25,770	25,452	24,296	25,043	25,375
Whiteville	54,923	52,593	52,330	54,427	53,755	51,313	52,891	53,592
Whitwell	20,120	19,266	19,170	19,938	19,692	18,797	19,375	19,632
Williston	4,678	4,479	4,457	4,635	4,578	4,370	4,505	4,564
Winchester	104,046	99,760	99,278	103,134	101,898	97,407	100,308	101,599
Winfield	12,375	11,850	11,791	12,263	12,112	11,561	11,917	12,075
Woodbury	31,737	30,390	30,238	31,450	31,062	29,651	30,562	30,968
Woodland Mills	4,476	4,286	4,265	4,436	4,381	4,182	4,311	4,368
Yorkville	3,387	3,243	3,227	3,356	3,315	3,164	3,261	3,305
<b>Total</b>	<b>\$ 44,002,320</b>	<b>\$ 41,552,235</b>	<b>\$ 41,237,328</b>	<b>\$ 42,569,233</b>	<b>\$ 41,924,787</b>	<b>\$ 39,911,386</b>	<b>\$ 41,084,012</b>	<b>\$ 41,546,075</b>

## Appendix E: Impact Payments Distributed to Counties in Areas Affected by TVA Construction by Tennessee Fiscal Year

County	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12
Anderson	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bedford	-	-	-	-	-	-	-	-
Benton	-	-	-	-	-	-	-	-
Bledsoe	-	-	-	-	-	-	-	-
Blount	-	-	-	-	-	-	-	-
Bradley	-	-	-	-	-	-	-	-
Campbell	-	-	-	-	-	-	-	-
Cannon	-	-	-	-	-	-	-	-
Carroll	-	-	-	-	-	-	-	-
Carter	-	-	-	-	-	-	-	-
Cheatham	-	-	-	-	-	-	-	-
Chester	-	-	-	-	-	-	-	-
Claiborne	-	-	-	-	-	-	-	-
Clay	-	-	-	-	-	-	-	-
Cocke	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-
Crockett	-	-	-	-	-	-	-	-
Cumberland	-	-	-	-	-	-	-	-
Davidson	-	-	-	-	-	-	-	-
Decatur	-	-	-	-	-	-	-	-
DeKalb	-	-	-	-	-	-	-	-
Dickson	-	-	-	-	-	-	-	-
Dyer	-	-	-	-	-	-	-	-
Fayette	-	-	-	-	-	-	-	-
Fentress	-	-	-	-	-	-	-	-
Franklin	-	-	-	-	-	-	-	-
Gibson	-	-	-	-	-	-	-	-
Giles	-	-	-	-	-	-	-	-
Grainger	-	-	-	-	-	-	-	-
Greene	-	-	-	-	-	-	-	-
Grundy	-	-	-	-	-	-	-	-
Hamblen	-	-	-	-	-	-	-	-
Hamilton	-	-	-	-	-	-	-	-
Hancock	-	-	-	-	-	-	-	-
Hardeman	-	-	-	-	-	-	-	-
Hardin	-	-	-	-	-	-	-	-
Hawkins	-	-	94,093	192,291	291,767	371,390	382,108	391,021
Haywood	-	-	-	-	138,513	264,448	270,577	411,110
Henderson	-	-	-	-	-	-	-	-
Henry	-	-	-	-	-	-	-	-
Hickman	-	-	-	-	-	-	-	-
Houston	-	-	-	-	-	-	-	-
Humphreys	-	-	-	-	-	-	-	-
Jackson	-	-	-	-	-	-	-	-
Jefferson	-	-	-	-	-	-	-	-
Johnson	-	-	-	-	-	-	-	-
Knox	-	-	-	-	-	-	-	-
Lake	-	-	-	-	-	-	-	-

Impact Payments Distributed to Counties in Areas Affected by TVA Construction  
 by Tennessee Fiscal Year

County	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12
Lauderdale	-	-	-	-	-	-	-	-
Lawrence	-	-	-	-	-	-	-	-
Lewis	-	-	-	-	-	-	-	-
Lincoln	-	-	-	-	-	-	-	-
Loudon	-	-	-	-	-	-	-	-
Macon	-	-	-	-	-	-	-	-
Madison	-	-	-	-	-	-	-	-
Marion	-	-	-	-	-	-	-	-
Marshall	-	-	-	-	-	-	-	-
Maury	-	-	-	-	-	-	-	-
McMinn	26	9,785	39,170	160,097	158,150	150,970	154,469	156,465
McNairy	-	-	-	-	-	-	-	-
Meigs	200,358	380,086	569,656	776,106	766,666	731,857	748,819	758,495
Monroe	22	8,363	33,425	136,614	134,953	128,825	131,811	134,088
Montgomery	-	-	-	-	-	-	-	-
Moore	-	-	-	-	-	-	-	-
Morgan	-	-	-	-	-	-	-	-
Obion	-	-	-	-	-	-	-	-
Overton	-	-	-	-	-	-	-	-
Perry	-	-	-	-	-	-	-	-
Pickett	-	-	-	-	-	-	-	-
Polk	-	-	-	-	-	-	-	-
Putnam	-	-	-	-	-	-	-	-
Rhea	170,414	323,282	484,521	660,117	652,088	622,481	636,908	645,138
Roane	117,906	223,672	335,230	456,721	451,166	430,682	440,663	446,358
Robertson	-	-	-	-	-	-	-	-
Rutherford	-	-	-	-	-	-	-	-
Scott	-	-	-	-	-	-	-	-
Sequatchie	-	-	-	-	-	-	-	-
Sevier	-	-	-	-	-	-	-	-
Shelby	481,630	457,129	456,750	-	-	-	-	-
Smith	-	-	-	-	-	-	-	-
Stewart	-	-	-	-	-	-	-	-
Sullivan	610,017	578,612	578,132	-	-	-	-	-
Sumner	528,545	501,334	501,840	501,559	495,459	472,964	-	-
Tipton	-	-	-	-	-	-	-	-
Trousdale	-	-	-	-	-	-	-	-
Unicoi	-	-	-	-	-	-	-	-
Union	-	-	-	-	-	-	-	-
Van Buren	-	-	-	-	-	-	-	-
Warren	-	-	-	-	-	-	-	-
Washington	590,350	559,958	559,493	-	-	-	-	-
Wayne	-	-	-	-	-	-	-	-
Weakley	-	-	-	-	-	-	-	-
White	-	-	-	-	-	-	-	-
Williamson	-	-	-	-	-	-	-	-
Wilson	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ 2,699,268</b>	<b>\$ 3,042,223</b>	<b>\$ 3,652,310</b>	<b>\$ 2,883,505</b>	<b>\$ 3,088,761</b>	<b>\$ 3,173,617</b>	<b>\$ 2,765,335</b>	<b>\$ 2,942,675</b>

## Appendix F: Impact Payments Distributed to Cities in Areas Affected by TVA Construction by Tennessee Fiscal Year

City	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12
Adams	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Adamsville	-	-	-	-	-	-	-	-
Alamo	-	-	-	-	-	-	-	-
Alcoa	-	-	-	-	-	-	-	-
Alexandria	-	-	-	-	-	-	-	-
Algood	-	-	-	-	-	-	-	-
Allardt	-	-	-	-	-	-	-	-
Altamont	-	-	-	-	-	-	-	-
Ardmore	-	-	-	-	-	-	-	-
Arlington	6,862	5,958	5,953	-	-	-	-	-
Ashland City	-	-	-	-	-	-	-	-
Athens	7	2,520	10,086	41,224	40,722	38,873	39,774	40,288
Atoka	-	-	-	-	-	-	-	-
Atwood	-	-	-	-	-	-	-	-
Auburntown	-	-	-	-	-	-	-	-
Baileyton	-	-	-	-	-	-	-	-
Baneberry	-	-	-	-	-	-	-	-
Bartlett	29,328	27,836	27,813	-	-	-	-	-
Baxter	-	-	-	-	-	-	-	-
Bean Station	-	-	5,056	10,333	-	-	-	-
Beersheba Spring	-	-	-	-	-	-	-	-
Bell Buckle	-	-	-	-	-	-	-	-
Belle Meade	-	-	-	-	-	-	-	-
Bells	-	-	-	-	-	-	-	-
Benton	-	-	-	-	-	-	-	-
Berry Hill	-	-	-	-	-	-	-	-
Bethel Springs	-	-	-	-	-	-	-	-
Big Sandy	-	-	-	-	-	-	-	-
Blaine	-	-	-	-	-	-	-	-
Bluff City	6,741	6,394	6,389	-	-	-	-	-
Bolivar	-	-	-	-	-	-	-	-
Braden	-	-	-	-	-	-	-	-
Bradford	-	-	-	-	-	-	-	-
Brentwood	-	-	-	-	-	-	-	-
Brighton	-	-	-	-	-	-	-	-
Bristol	103,867	98,519	98,438	-	-	-	-	-
Brownsville	-	-	-	-	75,881	144,872	148,229	225,217
Bruceton	-	-	-	-	-	-	-	-
Bulls Gap	-	-	1,222	2,497	3,789	4,823	4,962	5,078
Burlison	-	-	-	-	-	-	-	-
Burns	-	-	-	-	-	-	-	-
Byrdstown	-	-	-	-	-	-	-	-
Calhoun	0.24	92	367	1,501	1,483	1,415	1,448	1,467
Camden	-	-	-	-	-	-	-	-
Carthage	-	-	-	-	-	-	-	-
Caryville	-	-	-	-	-	-	-	-
Cedar Hill	-	-	-	-	-	-	-	-
Celina	-	-	-	-	-	-	-	-

Impact Payments Distributed to Cities in Areas Affected by TVA Construction  
 by Tennessee Fiscal Year

City	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12
Centertown	-	-	-	-	-	-	-	-
Centerville	-	-	-	-	-	-	-	-
Chapel Hill	-	-	-	-	-	-	-	-
Charleston	-	-	-	-	-	-	-	-
Charlotte	-	-	-	-	-	-	-	-
Chattanooga	-	-	-	-	-	-	-	-
Church Hill	-	-	11,154	22,794	34,586	44,025	45,295	46,352
Clarksburg	-	-	-	-	-	-	-	-
Clarksville	-	-	-	-	-	-	-	-
Cleveland	-	-	-	-	-	-	-	-
Clifton	-	-	-	-	-	-	-	-
Clinton	-	-	-	-	-	-	-	-
Coalmont	-	-	-	-	-	-	-	-
Collegedale	-	-	-	-	-	-	-	-
Collierville	23,649	22,446	22,428	-	-	-	-	-
Collinwood	-	-	-	-	-	-	-	-
Columbia	-	-	-	-	-	-	-	-
Cookeville	-	-	-	-	-	-	-	-
Coopertown	-	-	-	-	-	-	-	-
Copperhill	-	-	-	-	-	-	-	-
Cornersville	-	-	-	-	-	-	-	-
Cottage Grove	-	-	-	-	-	-	-	-
Covington	-	-	-	-	-	-	-	-
Cowan	-	-	-	-	-	-	-	-
Crab Orchard	-	-	-	-	-	-	-	-
Cross Plains	-	-	-	-	-	-	-	-
Crossville	-	-	-	-	-	-	-	-
Crump	-	-	-	-	-	-	-	-
Cumberland City	-	-	-	-	-	-	-	-
Cumberland Gap	-	-	-	-	-	-	-	-
Dandridge	-	-	-	-	-	-	-	-
Dayton	38,525	73,084	109,535	149,231	147,416	140,723	143,985	145,845
Decatur	27,242	51,679	77,453	105,523	104,240	99,507	101,813	103,129
Decaturville	-	-	-	-	-	-	-	-
Decherd	-	-	-	-	-	-	-	-
Dickson	-	-	-	-	-	-	-	-
Dover	-	-	-	-	-	-	-	-
Dowelltown	-	-	-	-	-	-	-	-
Doyle	-	-	-	-	-	-	-	-
Dresden	-	-	-	-	-	-	-	-
Ducktown	-	-	-	-	-	-	-	-
Dunlap	-	-	-	-	-	-	-	-
Dyer	-	-	-	-	-	-	-	-
Dyersburg	-	-	-	-	-	-	-	-
Eagleville	-	-	-	-	-	-	-	-
East Ridge	-	-	-	-	-	-	-	-
Eastview	-	-	-	-	-	-	-	-
Elizabethton	-	-	-	-	-	-	-	-

Impact Payments Distributed to Cities in Areas Affected by TVA Construction  
by Tennessee Fiscal Year

City	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12
Elkton	-	-	-	-	-	-	-	-
Englewood	1	287	1,148	4,693	4,636	4,425	4,528	4,586
Enville	-	-	-	-	-	-	-	-
Erin	-	-	-	-	-	-	-	-
Erwin	-	-	-	-	-	-	-	-
Estill Springs	-	-	-	-	-	-	-	-
Ethridge	-	-	-	-	-	-	-	-
Etowah	2	653	2,616	10,690	10,560	10,081	10,314	10,448
Fairview	-	-	-	-	-	-	-	-
Farragut	-	-	-	-	-	-	-	-
Fayetteville	-	-	-	-	-	-	-	-
Finger	-	-	-	-	-	-	-	-
Forest Hills	-	-	-	-	-	-	-	-
Franklin	-	-	-	-	-	-	-	-
Friendship	-	-	-	-	-	-	-	-
Friendsville	-	-	-	-	-	-	-	-
Gadsden	-	-	-	-	-	-	-	-
Gainesboro	-	-	-	-	-	-	-	-
Gallatin	113,421	107,582	107,690	94,533	93,383	89,143	-	-
Galloway	-	-	-	-	-	-	-	-
Garland	-	-	-	-	-	-	-	-
Gates	-	-	-	-	-	-	-	-
Gatlinburg	-	-	-	-	-	-	-	-
Germantown	20,832	19,772	19,756	-	-	-	-	-
Gibson	-	-	-	-	-	-	-	-
Gilt Edge	-	-	-	-	-	-	-	-
Gleason	-	-	-	-	-	-	-	-
Goodlettsville	18,431	17,482	17,500	49,708	49,103	46,874	-	-
Gordonsville	-	-	-	-	-	-	-	-
Grand Junction	-	-	-	-	-	-	-	-
Graysville	8,047	15,265	22,879	31,170	30,791	29,393	30,074	30,463
Greenback	-	-	-	-	-	-	-	-
Greenbrier	-	-	-	-	-	-	-	-
Greeneville	-	-	-	-	-	-	-	-
Greenfield	-	-	-	-	-	-	-	-
Gruetli-Laager	-	-	-	-	-	-	-	-
Guys	-	-	-	-	-	-	-	-
Halls	-	-	-	-	-	-	-	-
Harriman	13,819	26,214	39,289	53,528	52,877	50,476	51,646	52,313
Harrogate	-	-	-	-	-	-	-	-
Hartsville	-	-	-	-	-	-	-	-
Henderson	-	-	-	-	-	-	-	-
Hendersonville	169,021	160,320	160,481	160,392	158,441	151,247	-	-
Henning	-	-	-	-	-	-	-	-
Henry	-	-	-	-	-	-	-	-
Hickory Valley	-	-	-	-	-	-	-	-
Hohenwald	-	-	-	-	-	-	-	-
Hollow Rock	-	-	-	-	-	-	-	-

Impact Payments Distributed to Cities in Areas Affected by TVA Construction  
 by Tennessee Fiscal Year

City	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12
Hornbeak	-	-	-	-	-	-	-	-
Hornsby	-	-	-	-	-	-	-	-
Humboldt	-	-	-	-	-	-	-	-
Huntingdon	-	-	-	-	-	-	-	-
Huntland	-	-	-	-	-	-	-	-
Huntsville	-	-	-	-	-	-	-	-
Jacksboro	-	-	-	-	-	-	-	-
Jackson	-	-	-	-	-	-	-	-
Jamestown	-	-	-	-	-	-	-	-
Jasper	-	-	-	-	-	-	-	-
Jefferson City	-	-	-	-	-	-	-	-
Jellico	-	-	-	-	-	-	-	-
Johnson City	296,811	281,531	281,297	-	-	-	-	-
Jonesborough	24,247	22,999	22,980	-	-	-	-	-
Kenton	-	-	-	-	-	-	-	-
Kimball	-	-	-	-	-	-	-	-
Kingsport	188,346	178,650	263,392	173,482	263,229	334,998	339,940	339,020
Kingston	12,913	24,497	36,715	50,021	49,413	47,169	48,262	48,886
Kingston Springs	-	-	-	-	-	-	-	-
Knoxville	-	-	-	-	-	-	-	-
Lafayette	-	-	-	-	-	-	-	-
Lafollette	-	-	-	-	-	-	-	-
Lagrange	-	-	-	-	-	-	-	-
Lakeland	6,454	6,125	6,120	-	-	-	-	-
Lakesite	-	-	-	-	-	-	-	-
La Vergne	-	-	-	-	-	-	-	-
Lawrenceburg	-	-	-	-	-	-	-	-
Lebanon	-	-	-	-	-	-	-	-
Lenoir City	-	-	-	-	-	-	-	-
Lewisburg	-	-	-	-	-	-	-	-
Lexington	-	-	-	-	-	-	-	-
Liberty	-	-	-	-	-	-	-	-
Linden	-	-	-	-	-	-	-	-
Livingston	-	-	-	-	-	-	-	-
Lobelville	-	-	-	-	-	-	-	-
Lookout Mountain	-	-	-	-	-	-	-	-
Loretto	-	-	-	-	-	-	-	-
Loudon	-	-	-	-	-	-	-	-
Louisville	-	-	-	-	-	-	-	-
Luttrell	-	-	-	-	-	-	-	-
Lynchburg	-	-	-	-	-	-	-	-
Lynnville	-	-	-	-	-	-	-	-
Madisonville	2	860	3,436	14,045	13,874	13,245	13,551	13,786
Manchester	-	-	-	-	-	-	-	-
Martin	-	-	-	-	-	-	-	-
Maryville	-	-	-	-	-	-	-	-
Mason	-	-	-	-	-	-	-	-
Maury City	-	-	-	-	-	-	-	-

Impact Payments Distributed to Cities in Areas Affected by TVA Construction  
by Tennessee Fiscal Year

City	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12
Maynardville	-	-	-	-	-	-	-	-
McEwen	-	-	-	-	-	-	-	-
McKenzie	-	-	-	-	-	-	-	-
McLemoresville	-	-	-	-	-	-	-	-
McMinnville	-	-	-	-	-	-	-	-
Medina	-	-	-	-	-	-	-	-
Medon	-	-	-	-	-	-	-	-
Memphis	335,863	318,777	318,513	-	-	-	-	-
Michie	-	-	-	-	-	-	-	-
Middleton	-	-	-	-	-	-	-	-
Milan	-	-	-	-	-	-	-	-
Milledgeville	-	-	-	-	-	-	-	-
Millersville	16,375	15,532	15,548	15,539	15,350	14,653	-	-
Millington	5,780	5,486	5,481	-	-	-	-	-
Minor Hill	-	-	-	-	-	-	-	-
Mitchellville	622	590	590	590	583	556	-	-
Monteagle	-	-	-	-	-	-	-	-
Monterey	-	-	-	-	-	-	-	-
Morrison	-	-	-	-	-	-	-	-
Morristown	-	-	-	-	-	-	-	-
Moscow	-	-	-	-	-	-	-	-
Mosheim	-	-	-	-	-	-	-	-
Mount Carmel	-	-	8,988	18,369	27,871	35,477	36,501	37,352
Mount Juliet	-	-	-	-	-	-	-	-
Mount Pleasant	-	-	-	-	-	-	-	-
Mountain City	-	-	-	-	-	-	-	-
Munford	-	-	-	-	-	-	-	-
Murfreesboro	-	-	-	-	-	-	-	-
Nashville	-	-	-	-	-	-	-	-
New Hope	-	-	-	-	-	-	-	-
New Johnsonville	-	-	-	-	-	-	-	-
New Market	-	-	-	-	-	-	-	-
New Tazewell	-	-	-	-	-	-	-	-
Newbern	-	-	-	-	-	-	-	-
Newport	-	-	-	-	-	-	-	-
Niota	-	135	539	2,202	2,176	2,077	2,125	2,152
Nolensville	-	-	-	-	-	-	-	-
Normandy	-	-	-	-	-	-	-	-
Norris	-	-	-	-	-	-	-	-
Oak Hill	-	-	-	-	-	-	-	-
Oak Ridge	63,827	121,081	181,471	247,239	244,231	233,143	238,546	241,628
Oakdale	-	-	-	-	-	-	-	-
Oakland	-	-	-	-	-	-	-	-
Obion	-	-	-	-	-	-	-	-
Oliver Springs	7,031	13,338	19,991	27,236	26,905	25,683	26,278	26,618
Oneida	-	-	-	-	-	-	-	-
Orlinda	-	-	-	-	-	-	-	-
Orme	-	-	-	-	-	-	-	-

Impact Payments Distributed to Cities in Areas Affected by TVA Construction  
 by Tennessee Fiscal Year

City	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12
Palmer	-	-	-	-	-	-	-	-
Paris	-	-	-	-	-	-	-	-
Parkers Crossroads	-	-	-	-	-	-	-	-
Parrottsville	-	-	-	-	-	-	-	-
Parsons	-	-	-	-	-	-	-	-
Pegram	-	-	-	-	-	-	-	-
Petersburg	-	-	-	-	-	-	-	-
Philadelphia	-	-	-	-	-	-	-	-
Pigeon Forge	-	-	-	-	-	-	-	-
Pikeville	-	-	-	-	-	-	-	-
Piperton	-	-	-	-	-	-	-	-
Pittman Center	-	-	-	-	-	-	-	-
Plainview	-	-	-	-	-	-	-	-
Pleasant Hill	-	-	-	-	-	-	-	-
Pleasant View	-	-	-	-	-	-	-	-
Portland	37,583	35,648	35,684	35,842	35,406	33,799	-	-
Powells Crossroads	-	-	-	-	-	-	-	-
Pulaski	-	-	-	-	-	-	-	-
Puryear	-	-	-	-	-	-	-	-
Ramer	-	-	-	-	-	-	-	-
Red Bank	-	-	-	-	-	-	-	-
Red Boiling Springs	-	-	-	-	-	-	-	-
Ridgely	-	-	-	-	-	-	-	-
Ridgeside	-	-	-	-	-	-	-	-
Ridgetop	-	-	-	-	-	-	-	-
Ripley	-	-	-	-	-	-	-	-
Rives	-	-	-	-	-	-	-	-
Rockford	-	-	-	-	-	-	-	-
Rockwood	12,104	22,961	34,413	46,885	46,315	44,212	45,237	45,821
Rocky Top	-	-	-	-	-	-	-	-
Rogersville	-	-	7,318	14,955	22,691	28,884	29,717	30,410
Rossville	-	-	-	-	-	-	-	-
Rutherford	-	-	-	-	-	-	-	-
Rutledge	-	-	-	-	-	-	-	-
Saltillo	-	-	-	-	-	-	-	-
Samburg	-	-	-	-	-	-	-	-
Sardis	-	-	-	-	-	-	-	-
Saulsbery	-	-	-	-	-	-	-	-
Savannah	-	-	-	-	-	-	-	-
Scotts Hill	-	-	-	-	-	-	-	-
Selmer	-	-	-	-	-	-	-	-
Sevierville	-	-	-	-	-	-	-	-
Sharon	-	-	-	-	-	-	-	-
Shelbyville	-	-	-	-	-	-	-	-
Signal Mountain	-	-	-	-	-	-	-	-
Silerton	-	-	-	-	-	-	-	-
Slayden	-	-	-	-	-	-	-	-
Smithville	-	-	-	-	-	-	-	-

Impact Payments Distributed to Cities in Areas Affected by TVA Construction  
by Tennessee Fiscal Year

City	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12
Smyrna	-	-	-	-	-	-	-	-
Sneedville	-	-	-	-	-	-	-	-
Soddy Daisy	-	-	-	-	-	-	-	-
Somerville	-	-	-	-	-	-	-	-
South Carthage	-	-	-	-	-	-	-	-
South Fulton	-	-	-	-	-	-	-	-
South Pittsburg	-	-	-	-	-	-	-	-
Sparta	-	-	-	-	-	-	-	-
Spencer	-	-	-	-	-	-	-	-
Spring City	10,613	20,133	30,175	41,111	40,611	38,767	39,665	40,178
Spring Hill	-	-	-	-	-	-	-	-
Springfield	-	-	-	-	-	-	-	-
St. Joseph	-	-	-	-	-	-	-	-
Stanton	-	-	-	-	3,333	6,362	6,510	9,891
Stantonville	-	-	-	-	-	-	-	-
Sunbright	-	-	-	-	-	-	-	-
Surgoinsville	-	-	2,982	6,094	9,246	11,769	12,109	12,391
Sweetwater	3	1,129	4,512	18,443	18,218	17,391	17,794	17,361
Tazewell	-	-	-	-	-	-	-	-
Tellico Plains	0.44	165	661	2,700	2,668	2,546	2,605	2,651
Tennessee Ridge	-	-	-	-	-	-	-	-
Thompson's Station	-	-	-	-	-	-	-	-
Three Way	-	-	-	-	-	-	-	-
Tiptonville	-	-	-	-	-	-	-	-
Toone	-	-	-	-	-	-	-	-
Townsend	-	-	-	-	-	-	-	-
Tracy City	-	-	-	-	-	-	-	-
Trenton	-	-	-	-	-	-	-	-
Trezevant	-	-	-	-	-	-	-	-
Trimble	-	-	-	-	-	-	-	-
Troy	-	-	-	-	-	-	-	-
Tullahoma	-	-	-	-	-	-	-	-
Tusculum	-	-	-	-	-	-	-	-
Unicoi	-	-	-	-	-	-	-	-
Union City	-	-	-	-	-	-	-	-
VanLeer	-	-	-	-	-	-	-	-
Viola	-	-	-	-	-	-	-	-
Vonore	1	277	1,107	4,523	4,468	4,265	4,364	4,440
Walden	-	-	-	-	-	-	-	-
Wartburg	-	-	-	-	-	-	-	-
Wartrace	-	-	-	-	-	-	-	-
Watauga	418	396	396	-	-	-	-	-
Watertown	-	-	-	-	-	-	-	-
Waverly	-	-	-	-	-	-	-	-
Waynesboro	-	-	-	-	-	-	-	-
Westmoreland	7,258	6,884	6,891	6,887	6,804	6,495	-	-
White Bluff	-	-	-	-	-	-	-	-
White House	19,142	18,157	16,588	16,579	16,377	15,633	-	-

Impact Payments Distributed to Cities in Areas Affected by TVA Construction  
 by Tennessee Fiscal Year

City	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12
White Pine	-	-	-	-	-	-	-	-
Whiteville	-	-	-	-	-	-	-	-
Whitwell	-	-	-	-	-	-	-	-
Williston	-	-	-	-	-	-	-	-
Winchester	-	-	-	-	-	-	-	-
Winfield	-	-	-	-	-	-	-	-
Woodbury	-	-	-	-	-	-	-	-
Woodland Mills	-	-	-	-	-	-	-	-
Yorkville	-	-	-	-	-	-	-	-
<b>Total</b>	<b>\$ 1,625,188</b>	<b>\$ 1,731,456</b>	<b>\$ 2,053,041</b>	<b>\$ 1,480,559</b>	<b>\$ 1,657,675</b>	<b>\$ 1,773,001</b>	<b>\$ 1,445,274</b>	<b>\$ 1,537,771</b>

Note: For cities that cross multiple counties, individual amounts calculated under state distribution formula for portion of city in each county have been combined by TACIR staff and are reported in appendix as a single total.

## Appendix G: TVA 2015 IRP Recommendations by Resource Type

**Coal:** Continue with announced plans to retire units at Allen, Colbert, Johnsonville, Paradise and Widows Creek. Evaluate the potential retirement of Shawnee Fossil Plant in the mid-2020s if additional environmental controls are required. Consider retirements of fully controlled units if cost effective.

**Nuclear:** Pursue additional power uprates at all three Browns Ferry units by 2023. Continue work on Small Modular Reactors as part of technology innovation efforts and look for opportunities for cost sharing to render these more cost-effective for our ratepayers.

**Hydroelectric:** Pursue an additional 50 MW of hydro capacity at TVA facilities and consider additional hydro opportunities where feasible.

**Demand Response:** Add between 450 and 575 MWs of demand reduction by 2023 and similar amounts by 2033, dependent on availability and cost of this customer-owned resource.

**Energy Efficiency:** Achieve savings between 900 and 1,300 MW by 2023 and between 2,000 and 2,800 MWs by 2033. Work with our local power company partners to refine delivery mechanisms, program designs and program efficiencies with the goal of lowering total cost and increasing deliveries of efficiency programs.

**Solar:** Add between 150 and 800 MW of large-scale solar by 2023 and between 3,150 and 3,800 MW of large-scale solar by 2033. The trajectory and timing of solar additions will be highly dependent on pricing, performance and integration costs.

**Wind:** Add between 500 and 1,750 MW by 2033, dependent on pricing, performance and integration costs. Given the variability of wind selections in the scenarios, evaluate accelerating wind deliveries into the first 10 years of the plan if operational characteristics and pricing result in lower-cost options.

**Natural Gas (Combustion Turbine and Combined Cycle):** Add between 700 and 2,300 MW by 2023 and between 3,900 and 5,500 MW by 2033. The key determinants of future natural gas needs are trajectories on natural gas pricing and energy efficiency and renewables pricing and availability.

Source: Tennessee Valley Authority, *Integrated Resource Plan* (2015), 116-17.