

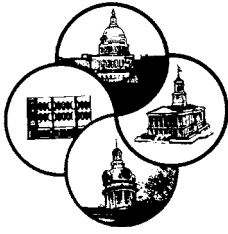
Report of the Tennessee Advisory Commission on Intergovernmental Relations



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



January 2022



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Tennessee Valley Authority's Payments in Lieu of Taxes

Annual Report to the Tennessee General Assembly

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Cliff Lippard, Executive Director

January 20, 2022

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The Honorable Paul Bailey
Chair, Senate Commerce and Labor Committee
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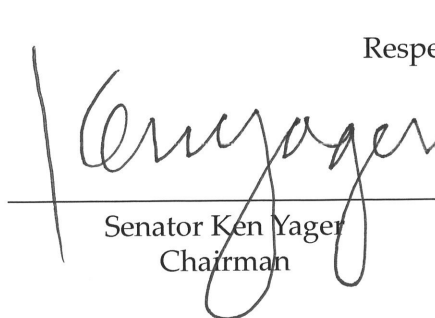
The Honorable Patsy Hazlewood
Chair, House Finance, Ways and Means Committee
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The Honorable Kevin Vaughan
Chair, House Commerce Committee
425 Rep. John Lewis Way N.
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Dear Chairmen:

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 Commission approved the report on January 20, 2022, and is hereby submitted for your consideration.

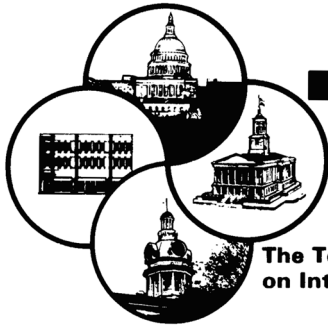
Respectfully yours,



Senator Ken Yager
Chairman



Cliff Lippard
Executive Director



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MEMORANDUM

TO: Commission Members

FROM: Cliff Lippard *Cliff*
Executive Director

DATE: 20 January 2022

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.

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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,¹ 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, and the Act put to rest immediate concerns about the potential loss of TVA revenue created by the 2009 law. The Act also renewed the requirement that the Commission monitor changes in wholesale power supply arrangements in TVA's service area that could affect TVA's payments to the state and its local governments and report to the General Assembly annually. This is the Commission's report for the 2022 legislative session.

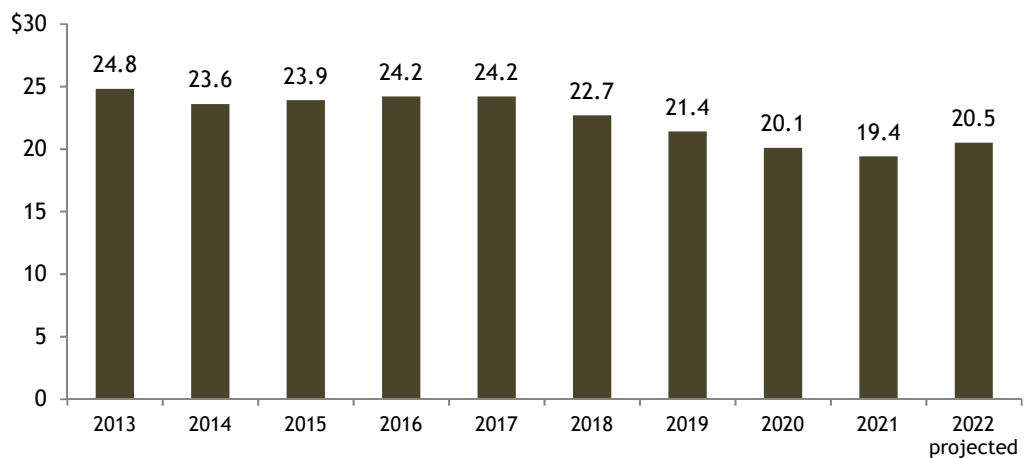
Among the factors that could significantly affect TVA revenue, the possibility that distributors might opt out of their TVA contracts and obtain power from other sources occasionally reappears. A few distributors in Tennessee—including TVA's largest municipal customer, Memphis Light, Gas and Water (MLGW)—are considering whether to leave the system. If a Tennessee distributor were to leave the TVA system, the overall effect on state and local revenue from TVA's PILOT and the equivalent payments required under the 2010 law would depend in part on the cost of wholesale power the distributor purchases from other providers. Regardless, local governments in the distributor's service area would see their share of this revenue decrease.

¹ Tennessee Advisory Commission on Intergovernmental Relations 2010.

TVA's payments in lieu of taxes to Tennessee continue to fluctuate and are estimated to increase by \$5.7 million for federal fiscal year 2021-22.

Concerns about the problems created by TVA's debt ceiling, which has not been raised since 1979,² and the threat of privatization also 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 approximate buying power that \$9 billion would have had in 1979,³ but the threat of privatization has diminished at least for the time being.⁴ Figure 1 shows the level of TVA's debt since 2013.

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



Source: Tennessee Valley Authority 2016a, 2019a, 2020a, and 2020b.

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 retired 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,

² 16 United States Code 831 n-4(a).

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

⁴ Sher 2018 and Collins 2018.

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 Tennessee combined with retirements in Alabama and Kentucky have generally more than offset coal-fired facility retirements in Tennessee in recent years, shifting the balance of the PILOT toward Tennessee. But this year, the balance of the PILOT shifted away from Tennessee slightly because TVA accelerated depreciation of its Bull Run facility, reducing its value, in advance of its planned retirement in 2023, and TVA made investments in new natural gas facilities in Alabama and Kentucky, increasing their value. These changes reduced the value of TVA power property in Tennessee relative to other states and were only partially offset by investments at TVA's Johnsonville facility in Humphreys County.⁵

TVA's decision to make many of these changes predates but is consistent with the management strategy laid out in its 2019 Integrated Resource Plan (IRP).⁶ The 2019 IRP calls for closing a number of old coal-fired generating plants, continuing to use existing nuclear-powered facilities, building or acquiring plants powered by natural gas, expanding solar power capacity, as well as other renewables, and encouraging more 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.

Changes in TVA's wholesale power contracts with its distributors also affect TVA's power revenue and, therefore, the PILOT. Rebates for distributors included in a new long-term contract option made available in 2019 have reduced revenue TVA otherwise would have received.⁷ Additionally, pandemic relief credits reduced revenue from all 153 LPCs in federal fiscal year 2021.⁸

None of these policy changes by TVA, nor the possibility that one or more of Tennessee's electric power distributors might leave the TVA system, appear to warrant legislative action at this time but should continue to be monitored.

TVA's Payments in Lieu of Taxes Continue to Fluctuate

TVA's actual payments in lieu of taxes for federal fiscal year 2020-21 amounted to \$500 million, of which \$340 million was paid to Tennessee governments, including \$3.4 million in direct payments to counties. This was a decrease of \$52 million over payments to all states in the previous

Tennessee receives more than 67% of the payments TVA distributes to states in the region, but that percentage decreased for only the second time since 2008-09.

⁵ Email from Betsy Hopson, taxes program manager, Tennessee Valley Authority, January 7, 2022. For Bull Run retirement see Tennessee Valley Authority 2021a.

⁶ Tennessee Valley Authority 2019c.

⁷ As of November 12, 2021, 145 of TVA's 153 local power companies had opted to sign these contracts. See Tennessee Valley Authority 2021a.

⁸ Tennessee Valley Authority 2021a.

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.

fiscal year.⁹ Payments for the current fiscal year, federal fiscal year 2021-22, are estimated to increase \$12 million to a total of \$512 million because of increased energy sales as the region's commercial and industrial customers recovered from COVID-19 shutdowns and new residents moved to the region, as well as increased fuel costs, which were partially offset by pandemic relief credits and rebates in TVA's long-term power contracts.¹⁰

Payments to Tennessee are estimated to increase by \$5.7 million to a total of \$345 million, of which \$3.4 million will again be paid directly to counties, in federal fiscal year 2021-22.¹¹ However, for only the second time since federal fiscal year 2008-09, Tennessee's percentage of the Authority's overall payments decreased.¹² This decrease is likely attributable to decreases in both the state's share of TVA's power revenue and the value of TVA power property.¹³

Total payments are based on 5% of prior-year gross proceeds¹⁴ from power sales, and funds are divided among the eight states in which TVA owns power property¹⁵ 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 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 has only decreased year-over-year two times since 2008-09.¹⁶ Past increases in this percentage helped offset what would have otherwise been larger decreases in TVA's payments to Tennessee, most recently in federal fiscal years 2020-21. See table 1.

⁹ Tennessee Valley Authority 2021c. See also letter from Elizabeth Hopson, taxes program manager, Tennessee Valley Authority, to Amanda McGraw, chief financial officer, Tennessee Department of Revenue, November 8, 2021.

¹⁰ Federal fiscal year 2021-22 PILOT estimate provided by TVA; email from Amanda McGraw, chief financial officer, Tennessee Department of Revenue, December 8, 2021. See table 1.

¹¹ Letter from Elizabeth Hopson, taxes program manager, Tennessee Valley Authority, to Amanda McGraw, chief financial officer, Tennessee Department of Revenue, November 8, 2021.

¹² Email from Elizabeth Hopson, taxes program manager, Tennessee Valley Authority, to Rayna Ware, assistant director of financial control, Tennessee Department of Revenue, November 15, 2021. See table 1 for previous year. See Tennessee Advisory Commission on Intergovernmental Relations 2014 for decreased share in federal fiscal year 2008-09.

¹³ Email from Rebecca Jones, Tennessee Valley Authority, December 23, 2021.

¹⁴ 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.

¹⁵ 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.

¹⁶ See Tennessee Advisory Commission on Intergovernmental Relations 2014 for federal fiscal year 2008-09 decrease.

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

	2021-22*	2020-21	2019-20	2018-19	2017-18	2016-17
TVA's Overall PILOT	\$ 512.0	\$ 499.6	\$ 551.7	\$ 547.7	\$ 523.7	\$ 517.1
Tennessee's Percent	x 67.43%	67.97%	67.58%	67.06%	66.33%	66.54%
Tennessee's Amount	\$ 345.2	\$ 339.5	\$ 372.8	\$ 367.3	\$ 347.4	\$ 344.1
Direct Payment to Counties	- 3.4	3.4	3.4	3.4	3.4	3.4
Tennessee's Share	\$ 341.8	\$ 336.1	\$ 369.4	\$ 363.9	\$ 344.0	\$ 340.7

* 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 payment to Tennessee in federal fiscal year 2021-22 and by TVA construction projects. See appendix B for an explanation of Tennessee's allocation formula.

On a state fiscal year basis, however, the 2021-22 allocations—excluding impact payments that are set aside for local governments in counties with TVA construction—will decrease by an estimated \$1.6 million for counties, by \$688 thousand for cities, and by \$2.0 million for the state's own agencies. Impact payments related to TVA construction will decrease by \$281 thousand for counties and by \$189 thousand for cities because of recent project completions. Combined these amounts result in an overall decrease of about \$4.7 million from state fiscal year 2020-21. These amounts are decreasing for the state fiscal year despite increasing for the federal fiscal year because the state's fiscal year begins on July 1, three months earlier than the federal fiscal year, so state fiscal year 2021-22 includes distributions from the last three months of federal fiscal year 2020-21 when the PILOT was lower. See appendixes C and D for the distribution to local governments within the state by county and city since state fiscal year 2014-15, excluding impact payments set aside for local governments in counties with TVA construction, which can be found in appendixes E and F.

TVA reported that the COVID-19 pandemic "had little impact on TVA's sales volume" in federal fiscal year 2020-21, and it "does not anticipate sales volume will be materially impacted due to the COVID-19 pandemic

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

beyond 2021.”¹⁷ TVA projections shared at its August 2021 board of directors meeting show revenue increasing slightly over the next three federal fiscal years but remaining below federal fiscal year 2018-19.¹⁸ The pandemic relief credit approved by the TVA board in August 2020 accounted for \$221 million in foregone revenue in federal fiscal year 2020-21. This credit was extended through the 2021-22 federal fiscal year and is expected to reduce revenue by a similar amount. In November 2021, the board approved a reduced pandemic recovery credit for federal fiscal year 2022-23, which TVA estimates will reduce revenue by \$133 million.¹⁹

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 during a severe cold snap in January 2018, “when temperatures fell into single digits in parts of the Tennessee Valley,” and “TVA customers consumed more power than on any single day in the 85-year history of TVA.” TVA said it was able to handle the increased demand “by operating all of its available generation, buying power from independent power producers and other utilities, and implementing some of its interruptible power contracts for customers who agree to curtail consumption during peak demand periods.”²⁰ 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 emergencies²¹ in exchange for credits on their power bills.²² 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.

¹⁷ Tennessee Valley Authority 2021a.

¹⁸ Tennessee Valley Authority 2021c.

¹⁹ Tennessee Valley Authority 2021a.

²⁰ Flessner 2018d.

²¹ Flessner 2014.

²² Tennessee Valley Authority 2011.

Long-Term System-Management Strategies

TVA's long-term management strategies are laid out in its most recent Integrated Resource Plan, which was approved by the TVA Board in August 2019.²³ The update, a response to changes in the utility industry including lower-cost natural gas and renewables as well as increased energy conservation efforts,²⁴ analyzed five strategies for meeting demand within six future scenarios (see figure 2).

Figure 2. Planning Scenarios and Strategies Used in TVA's 2019 IRP

SCENARIOS		STRATEGIES	
1	CURRENT OUTLOOK which represents TVA's current forecast for these key uncertainties and reflects modest economic growth offset by increasing efficiencies;	A	BASE CASE which represents TVA's current assumptions for resource costs and applies a planning reserve margin constraint. This constraint applies in every strategy and represents the minimum amount of capacity required to ensure reliable power;
2	ECONOMIC DOWNTURN which represents a prolonged stagnation in the economy, resulting in declining loads (customers using less power) and delayed expansion of new generation;	B	PROMOTE DISTRIBUTED ENERGY RESOURCES which incents DER to achieve higher, long-term penetration levels. The DER options include energy efficiency, demand response, combined heat and power, distributed solar and storage;
3	VALLEY LOAD GROWTH which represents economic growth driven by migration into the Valley and a technology-driven boost to productivity, underscored by increased electrification of industry and transportation;	C	PROMOTE RESILIENCY which incents small, agile capacity to maximize operational flexibility and the ability to respond to short-term disruptions on the power system;
4	DECARBONIZATION which is driven by a strong push to curb greenhouse gas emissions due to concern over climate change, resulting in high CO ₂ emission penalties and incentives for non-emitting technologies;	D	PROMOTE EFFICIENT LOAD SHAPE which incents targeted electrification (by incentivizing customers to increase electricity usage in off-peak hours) and demand response (by incentivizing customers to reduce electricity usage during peak hours). This strategy promotes efficient energy usage for all customers, including those with low income;
5	RAPID DER ADOPTION which is driven by growing consumer awareness and preference for energy choice, coupled with rapid advances in technologies, resulting in high penetration of distributed generation, storage and energy management;	E	PROMOTE RENEWABLES which incents renewables at all scales (from utility size to residential) to meet growing or existing consumer demand for renewable energy.
6	NO NUCLEAR EXTENSIONS which is driven by a regulatory challenge to relicense existing nuclear plants and construct new, large-scale nuclear. This scenario also assumes subsidies to drive small modular reactor (SMR) technology advancements and improved economics.		

Source: Tennessee Valley Authority 2019c.

²³ Tennessee Valley Authority 2019c; and Tennessee Valley Authority "2019 Integrated Resource Plan."

²⁴ Tennessee Valley Authority 2019e.

The-sale-and-leaseback technique used at one of TVA's plants in Mississippi reduced the amount paid to the state, and the potential exists throughout the region.

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 PILOT, 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 1979,²⁵ TVA began using new financing methods,²⁶ 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.²⁷

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.²⁸ 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.²⁹ 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

²⁵ 16 United States Code 831 n-4(a).

²⁶ US General Accounting Office 2003.

²⁷ Email from Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, October 29, 2019. For details on existing lease arrangements, see Tennessee Valley Authority 2021a.

²⁸ Tennessee Valley Authority 2009.

²⁹ Tennessee Valley Authority 2013a.

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.³⁰

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.

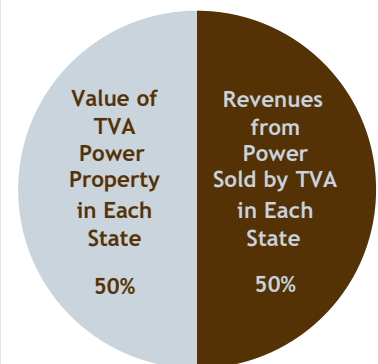
The initial sale-and-lease-back arrangement at the Southaven plant and the Authority's current lease arrangement at the privately-owned Caledonia plant, also in Mississippi, illustrate the effect of this second provision. Privately owned plants are subject to state and local taxes. Consequently, the portion of the TVA PILOT paid directly to Mississippi, related to Caledonia, was reduced by approximately \$1.0 million in federal fiscal year 2020-21 and will again be reduced by an estimated \$1.0 million in 2021-22.³¹ 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

³⁰ 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 increases.

³¹ Email from Betsy Hopson, program manager-taxes, Tennessee Valley Authority, January 6, 2022; and Schoolfield 2017.

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



TVA has no current plans for any sale-leaseback arrangements in Tennessee that would affect the distribution of the state's PILOT.

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.³² 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.³³

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.³⁴ However, the 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.³⁵

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.³⁶

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

³² Tennessee Valley Authority 2013a.

³³ Tennessee Valley Authority 2013b.

³⁴ Email from Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, October 29, 2019.

³⁵ Tennessee Valley Authority 2021a.

³⁶ Tennessee Valley Authority 2013a.

future ownership by Seven States Power Corporation, which could affect the PILOT depending on the type of sale or lease arrangement adopted.³⁷

Rebalancing Power Sources and Increasing Efficiency

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 2019 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.³⁸

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.³⁹ Although since 2011 TVA has retired coal-fired units at its John Sevier plant in Hawkins County, its Johnsonville plant in Humphreys County, and its Allen plant in Memphis, 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 of additional coal-fired units and unfinished nuclear facilities in other states. During the same period, investments in TVA's Tennessee facilities include natural gas-fired units completed at its John Sevier plant and its Allen plant, a second nuclear unit completed at its Watts Bar plant in Rhea County, and ongoing construction at Boone Dam on the border of Sullivan and Washington counties. TVA has paid off debt remaining for its unfinished Bellefonte nuclear plant in Alabama and accelerated depreciation of that facility. TVA also retired coal-fired units at its Colbert and Widows Creek plants in Alabama and its Shawnee and Paradise plants in Kentucky, though it built new natural-gas-fired units at Paradise.⁴⁰

But as discussed above, Tennessee's share of TVA power property decreased for federal fiscal year 2020-21 for only the second time since federal fiscal year 2008-09. The decrease is likely attributable to TVA's investments in Kentucky and Alabama combined with accelerated depreciation towards the 2023 retirement of TVA's Bull Run plant in Anderson County, which were partially offset by new investment at its

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.

³⁷ Tennessee Valley Authority 2015b.

³⁸ Email from Stephen Schoolfield, senior program manager-taxes, Tennessee Valley Authority, January 6, 2016.

³⁹ Email from Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, October 29, 2019.

⁴⁰ Tennessee Valley Authority 2016f, 2017b, and 2018a; Flessner 2017a; email from Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, December 13, 2018; Flessner 2018b; telephone interview with Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, October 25, 2019; Tennessee Valley Authority 2019b; and Flessner 2020a.

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

Johnsonville plant in Humphreys County.⁴¹ In 2021, TVA began evaluating whether to retire its Cumberland (Stewart County)⁴² and Kingston (Roane County)⁴³ fossil plants. If TVA were to retire these two facilities, it would reduce Tennessee's share of TVA power property and the PILOT in future years unless their retirements are offset by increases in the value of TVA power property elsewhere in the state or by net reductions in other states.

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. Construction began in July 2020 and is expected to continue through 2022, with the facility fully operational in 2024.⁴⁴ 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. The relocation will not affect TVA's direct payments to Hamilton County because TVA still owns the building in which the current power control center is located.⁴⁵

TVA's 2019 IRP also calls for energy efficiency savings of up to 1,800 megawatts by 2028 and up to 2,200 megawatts by 2038.⁴⁶ 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's response to increases in energy efficiency has included a change to the way it charges local utilities for wholesale electric service, which it approved in May 2018. TVA's previous wholesale rate structure included

- a demand charge, based on a utility's peak monthly demand;

⁴¹ Emails from Rebecca Jones, Tennessee Valley Authority, December 23, 2021, and Betsy Hopson taxes program manager, Tennessee Valley Authority, January 7, 2022. For Bull Run retirement see Tennessee Valley Authority 2021a.

⁴² Flessner 2021a.

⁴³ Flessner 2021b.

⁴⁴ Chattanooga 2020 and Tennessee Valley Authority "System Operations Center."

⁴⁵ Emails from Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, December 13, 2018 and December 2, 2019.

⁴⁶ Tennessee Valley Authority 2019c. 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>.

- an energy charge, based on the kilowatt-hours used; and
- a separate adjustment for fuel costs.⁴⁷

The new rate structure added a grid access charge, which TVA said would “better recover fixed costs” of providing electricity and “reduce the variability in revenues caused by weather.”⁴⁸ Some environmental and consumer groups 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.”⁴⁹ According to TVA, the change was intended to be revenue neutral, and the grid access charge will be “offset by a reduction to the energy charge.”⁵⁰

The new rate structure has not resulted in any noticeable changes to the PILOT since its adoption. TVA has made no indication it intends to change the rate structure again in the near future.

Incentives in New Long-Term Wholesale Power Contracts

Changes in TVA’s wholesale power contracts with its distributors can affect TVA’s gross power revenue and, therefore, the PILOT. In August 2019, TVA approved a new long-term contract option that “better aligns the length of [distributor] contracts with TVA’s long-term commitments.”⁵¹ The new contracts include rebates for distributors and flexibility for them to obtain renewable energy from sources other than TVA in exchange for a 20-year termination notice requirement.⁵²

The rebates in these new long-term contracts reduce revenue TVA otherwise would have received, and they reduce TVA’s total PILOT because they are credited prior to TVA calculating its gross revenue from power sales.⁵³ The full effect of the rebates, however, will depend on the number of distributors that opt into these contracts. As of November 12, 2021, 145 of TVA’s now-153 distributors had signed the new contracts.⁵⁴ The remaining eight combined to provide 16% of TVA’s revenue from sales of electricity to all distributors in federal fiscal year 2021.⁵⁵ Long-term partnership rebates reduced TVA’s gross revenue by \$189 million in federal fiscal year 2021.⁵⁶ According to TACIR staff calculations, reducing

Rebates in TVA’s long-term wholesale power contracts reduced revenue by \$189 million in federal fiscal year 2020-21, reducing TVA’s PILOT; 146 of the Authority’s 153 distributors have opted into the new contracts.

⁴⁷ Ibid.

⁴⁸ Ibid.

⁴⁹ Flessner 2018a and 2018c.

⁵⁰ Tennessee Valley Authority 2018a.

⁵¹ Tennessee Valley Authority 2019b.

⁵² Tennessee Valley Authority 2019b and Flessner 2019b.

⁵³ Telephone interview with Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, October 15, 2019.

⁵⁴ Tennessee Valley Authority 2021a. On November 18, the Jackson Energy Authority became the 146th to sign. See Flessner 2021c and Thomas 2021.

⁵⁵ Tennessee Valley Authority 2021a.

⁵⁶ Ibid.

Contract provisions that grant distributors flexibility to obtain renewable energy from sources other than TVA—either by generating it themselves or by purchasing it from other entities—could affect PILOT payments; 74 of the Authority's 153 distributors have signed flexibility agreements.

revenue by \$189 million reduced the total PILOT for 2021 by \$9.5 million and Tennessee's share by approximately \$6.4 million.

The provisions that grant distributors flexibility to obtain renewable energy from sources other than TVA either by generating it themselves or by purchasing it from other entities could also affect payments to Tennessee. As of November 12, 2021, 74 distributors had signed flexibility agreements as part of their long-term partnership contracts with TVA.⁵⁷ These agreements allow for "generation of up to five percent of their average total hourly energy sales over the last five TVA fiscal years (FY 2015 to 2019), converted to capacity basis with a minimum availability of one MW [megawatt] per Valley Partner."⁵⁸ TVA estimates that a total capacity of 800 MW could be developed if all its LPCs utilized their maximum allocation. (Applying a technology factor to solar installations to account for the difference between nameplate capacity and output could increase total installed capacity to 2,000 MW.)⁵⁹

To the extent that these provisions reduce the amount of power distributors would otherwise purchase from TVA, they too could reduce TVA power revenue and the PILOT, though TVA staff interviewed said it would be difficult to estimate their full effect.⁶⁰ Moreover, the effect on Tennessee revenue would depend in part on the cost of wholesale power that distributors purchased from entities other than TVA. While power purchased at wholesale from these entities would be subject to the equivalent payments required under Public Chapter 1035, Acts of 2010, power that a distributor generated itself for sale to its retail customers would not.⁶¹ Regardless of the structure of these agreements, a number are in the early stages of development. BrightRidge, which provides power to Johnson City, Tennessee, partnered with Silicon Ranch to build a 9-megawatt solar farm, becoming the first solar project to break ground under the flexibility program.⁶² BrightRidge says the Washington County facility will be operational in early 2022.⁶³ Bolivar Energy Authority has also signed a contract with Silicon Ranch for a 3.45-megawatt solar project in Hardeman County, to be completed in 2022.⁶⁴ Power purchased from solar projects owned and operated by firms like Silicon Ranch is subject to the terms of Public Chapter 1035.

⁵⁷ Ibid.

⁵⁸ Tennessee Valley Authority 2020g.

⁵⁹ Ibid.

⁶⁰ Telephone interview with Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, October 15, 2019.

⁶¹ Email from Christin Lotz, research director, Tennessee Department of Revenue, October 28, 2019.

⁶² BrightRidge 2021a.

⁶³ BrightRidge 2021b.

⁶⁴ Silicon Ranch 2020.

Potential for Changes in TVA's Customer Base

Federal law both prohibits TVA from expanding its service area and protects TVA from competitors. Although the prohibition on expansion—called the fence—makes it unlikely that TVA would be able to replace revenue lost if a distributor were to opt out of its contract and obtain power elsewhere, the protection from competition—called the anti-cherrypicking provision—creates potential hurdles for distributors leaving the TVA system. As described by TVA,

under the TVA Act, subject to certain minor exceptions, TVA may not, without the enactment of authorizing federal legislation, enter into contracts that would have the effect of making it, or the wholesale customers that distribute TVA power (“local power company customers” or “LPCs”), a source of power supply outside the area for which TVA or its LPCs were the primary source of power supply on July 1, 1957. This provision is referred to as the “fence” because it bounds TVA’s sales activities, essentially limiting TVA to power sales within a defined service area.

In addition, the Federal Power Act includes a provision that helps protect TVA’s ability to sell power within its service area. This provision, called the “anti-cherrypicking” provision, prevents the Federal Energy Regulatory Commission from ordering TVA to provide access to its transmission lines to others to deliver power to customers within TVA’s defined service area. As a result, the anti-cherrypicking provision reduces TVA’s exposure to loss of its customers. . . .

. . . However, other utilities may use their own transmission lines to serve customers within TVA’s service area, and third parties are able to avoid the restrictions on serving end-use customers by selling or leasing generating assets to a customer rather than selling electricity.⁶⁵

In January 2021, four distributors—including three from Tennessee—filed a complaint with the Federal Energy Regulatory Commission (FERC), challenging the anti-cherrypicking provision by requesting that FERC exercise its authority to “order TVA to provide unbundled transmission service.”⁶⁶ Their request was denied in October and a request for rehearing

⁶⁵ Tennessee Valley Authority 2019b. Also see 16 US Code 831n-4; 16 US Code 824j; and 16 US Code 824k(j).

⁶⁶ Athens Utilities Board et al. v. Tennessee Valley Authority. *Notice of Complaint*. 86 FR 7089 (2021). The four petitioners were: Athens Utilities Board (TN), Gibson Electric Membership Corporation (TN), Volunteer Energy Cooperative (TN), and Joe Wheeler Electric Membership Corporation (AL).

If Tennessee distributors leave the TVA system, the equivalent in lieu of tax payments required by Public Chapter 1035, Acts of 2010 for wholesale electric power purchased from entities other than TVA could at least partially offset decreases in TVA’s PILOT to Tennessee.

Memphis Light, Gas and Water is considering whether to end its contract with TVA and is evaluating proposals to connect to and purchase electricity from other providers.

was denied in December, but it remains possible for the petitioners to appeal to the U.S. Circuit Court.⁶⁷

Distributors can opt out of their contracts with TVA subject to termination notice requirements. Seven distributors have contracts with 5-year notice requirements and 146 have 20-year requirements.⁶⁸ A handful of distributors have left the TVA system in recent decades,⁶⁹ though at least one has since returned.⁷⁰

Currently, Memphis Light, Gas and Water (MLGW)—which serves the cities and unincorporated areas of Shelby County and has a 5-year termination notice—is studying whether to leave the TVA system.⁷¹ MLGW accounted for 9% of TVA revenue in federal fiscal year 2020-21,⁷² and its departure would reduce TVA's PILOT and the share allocated to Tennessee, though decreases in the state's share could be at least partially offset by equivalent payments required under Public Chapter 1035, Acts of 2010. In August 2020, MLGW published an Integrated Resource Plan (IRP) and announced their plan to issue requests for proposals (RFPs) to validate the cost estimates included in the IRP.⁷³ The IRP contained several possible "portfolios" for MLGW to obtain power supply for its customers. These alternatives were compared with MLGW's current contract with TVA and with a potential 20-year partnership agreement (e.g. including the 3.1% rebate) across several performance metrics: least cost, reliability, resiliency, sustainability, etc. Most of the portfolios presented in the IRP involve a combination of MLGW generating some of its own power—by way of third-party construction of solar farms and natural gas combustion turbines—and purchasing the rest from the neighboring Midcontinent Independent System Operator (MISO) market. If MLGW chooses to end its contract with TVA, this combination of own-generation, third-party partnerships, and power purchase would determine the effect on PILOT calculation and allocation.

In July 2021, MLGW issued an RFP for interested companies to bid on the construction of high-voltage transmission lines and substations necessary for MLGW to connect to MISO to import electricity. A second RFP was issued in August to get bids for the construction of thermal generation facilities, from which MLGW would purchase power, and a third, for renewable energy sources, was issued in September. Proposals for the latter two components were received in December 2021, and the deadline

⁶⁷ Athens Utilities Board et al. v. Tennessee Valley Authority. *Order on Petition*. 177 FERC ¶61,021 (2021) and *Notice of Denial of Rehearing by Operation of Law and Providing for Further Consideration*. 177 FERC ¶62,162 (2021). See 16 US Code 825(b) for judicial review process.

⁶⁸ Tennessee Valley Authority 2021a and Flessner 2021c.

⁶⁹ Kentucky Municipal Power Agency 2018.

⁷⁰ McGee 2008.

⁷¹ Tennessee Valley Authority 2021a and Memphis Light, Gas and Water 2022.

⁷² Tennessee Valley Authority 2021a.

⁷³ Memphis Light, Gas and Water 2020.

for transmission proposals is February 4, 2022. Once proposals for all three components have been received, MLGW intends to select the top three for each category in May 2022 and—if it chooses to proceed—recommend contracts be awarded to the winning bidders for approval in December 2022. Contracts approved by the MLGW board of commissioners would then require approval from the Memphis City Council before taking effect.⁷⁴ Only then would MLGW end its contract with TVA, starting the five-year termination period. At the earliest, TVA could lose all power revenue from MLGW in January 2028, reducing total revenue in federal fiscal year 2027-28 that would determine its PILOT for federal fiscal year 2028-29 and affecting payments to Tennessee in the state's 2028-29 fiscal year.

If MLGW or any other Tennessee distributor were to leave the TVA system, the overall effect on state and local revenue from TVA's PILOT and the equivalent payments required under the 2010 law would depend in part on the cost of wholesale power purchased from other entities. As discussed above, power purchased at wholesale from entities other than TVA would be subject to the equivalent payments, but power that a distributor generated itself for sale to its retail customers would not.⁷⁵ It's worth noting that the RFPs issued by MLGW require the bidders to own and operate the new generation units, selling electricity to MLGW through power purchase agreements.

For individual local governments in Tennessee, the effect on revenue from TVA's PILOT and the equivalent payments would vary. Equivalent payments made pursuant to the 2010 law would be added to TVA PILOT revenue and allocated to local governments through the state's TVA PILOT distribution formula. But local governments whose distributors leave TVA's service area after March 8, 1990, are excluded from the portion of revenue distributed through the formula based on population, county acreage, or TVA acreage.⁷⁶ As a result, revenue distributed to some local governments could increase even if overall revenue decreases because they would receive a larger individual percentage through the formula; however, local governments in the exiting distributor's service area would all see their shares decrease.

Any power distributor leaving TVA would reduce the overall PILOT available for all states. Local governments in Tennessee served by distributors that leave the TVA system would see their PILOT revenue decrease.

⁷⁴ Memphis Light, Gas and Water 2022. "Transmission RFP"; "Thermal Generation RFP"; and "Renewables and Other RFP."

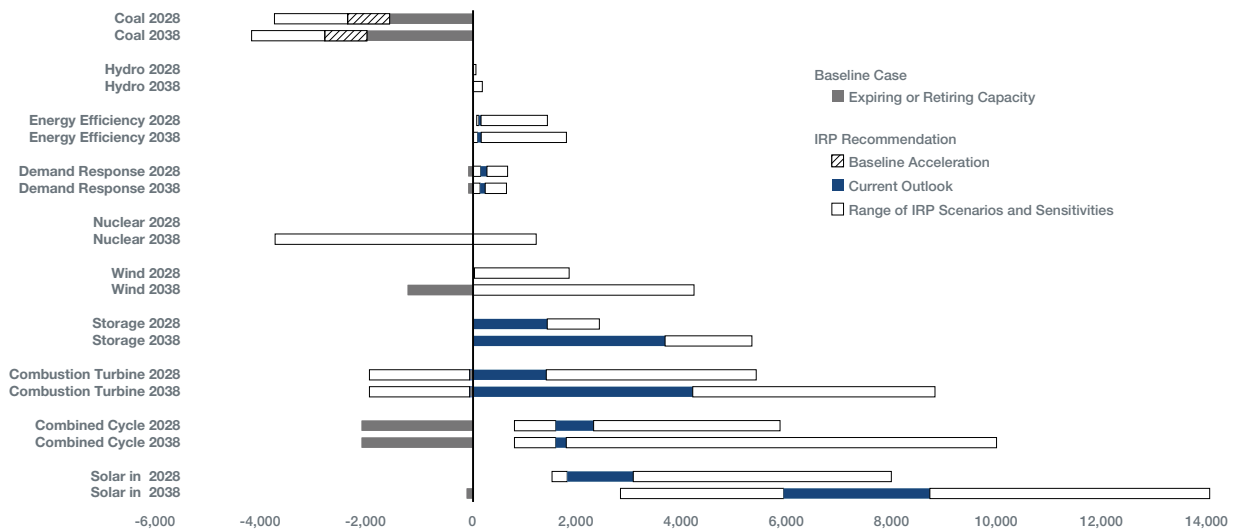
⁷⁵ Email from Christin Lotz, research director, Tennessee Department of Revenue, October 28, 2019.

⁷⁶ Tennessee Code Annotated, Section 67-4-3101(f); Tennessee Code Annotated, Section 67-9-102(a); and email from Christin Lotz, research director, Tennessee Department of Revenue, October 28, 2019.

The Shift Away from Coal: Environmental and Business Reasons

As recently as 2011, coal-fired plants were TVA's largest single source of power,⁷⁷ but because of their age and changing air-quality requirements, the Authority is shifting emphasis from coal to other power sources (see figure 3 and appendix G). As its coal-fired power plants age, 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.

Figure 3. TVA Recommended Range of Capacity Changes in Megawatts by 2028 and 2038



Source: Tennessee Valley Authority 2019c.

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 included 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.⁷⁸ See table 2.

⁷⁷ Tennessee Valley Authority 2013a shows coal fueled 52% of TVA power generation in federal fiscal year 2011, but 41% in 2012 as natural gas usage more than doubled.
⁷⁸ Tennessee Valley Authority 2014, 2017b, and 2018a.

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

Fossil Plant	Units Affected	Existing Scrubbers and SCRs* Prior to Agreements	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"> Retire two units no later than December 31, 2012 	<ul style="list-style-type: none"> Retired Units 1 and 2 on December 31, 2012
Johnsonville	10 of 10	None	<ul style="list-style-type: none"> Retire six units no later than December 31, 2015 Retire four units no later than December 31, 2017 	<ul style="list-style-type: none"> Retired Units 5-10 on December 31, 2015 Retired Units 1-4 on December 31, 2017
Widows Creek	6 of 8	None	<ul style="list-style-type: none"> Retire two of Units 1-6 no later than July 31, 2013 Retire two of Units 1-6 no later than July 31, 2014 Retire two of Units 1-6 no later than July 31, 2015 	<ul style="list-style-type: none"> Retired Units 3 and 5 on July 31, 2013 Retired Units 1, 2, 4, and 6 on July 31, 2014

* Selective catalytic reduction systems ("SCR")

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

Fossil Plant Retirements for Business Reasons

Because of the competitive advantage over coal of other methods of generating electricity, TVA has retired 16 additional coal-fired units since 2013 and plans to retire one more by the end of 2023. The units retired for business reasons included 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 2018 following the completion of new natural gas-fired units at each site. TVA retired the remaining coal-fired unit at Paradise in February 2020 and plans to retire the lone unit at its Bull Run plant in Anderson County by December 2023.⁷⁹ See table 3.

⁷⁹ Tennessee Valley Authority 2014, 2017b, 2018a, 2019b, and 2020b.

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

Fossil Plant	Units Affected	Existing Scrubbers and SCRs* Prior to Agreements	Requirements Under Environmental Agreements	Retirements Implemented or planned by TVA for Business Reasons
Allen	3 of 3	SCRs on all three units	<ul style="list-style-type: none"> • Install scrubbers or retire no later than December 31, 2018 	<ul style="list-style-type: none"> • New gas-fired plant built at site of Allen coal-fired plant began operation on April 30, 2018 • Retired Units 1-3 of coal-fired plant on March 31, 2018
Bull Run	1 of 1	Scrubber and SCRs on unit	<ul style="list-style-type: none"> • Continuously operate existing emission control equipment 	<ul style="list-style-type: none"> • Retire lone unit by December 2023
Colbert	5 of 5	SCR on Unit 5	<ul style="list-style-type: none"> • Remove from service, control, convert, or retire Units 1-4 no later than June 30, 2016 • Remove from service, control, or retire Unit 5 no later than December 31, 2015 • Control or retire removed from service units within three years 	<ul style="list-style-type: none"> • Retired Units 1-5 on April 16, 2016
John Sevier	2 of 4	None	<ul style="list-style-type: none"> • Remove from service two units no later than December 31, 2012 and control, convert, or retire those units no later than December 31, 2015 	<ul style="list-style-type: none"> • Retired Units 3 and 4 on June 25, 2014
Paradise	3 of 3	Scrubbers and SCRs on all three units	<ul style="list-style-type: none"> • Upgrade scrubbers on Units 1 and 2 no later than December 31, 2012 • Continuously operate emission control equipment on Units 1-3 	<ul style="list-style-type: none"> • New gas-fired plant built at site of Paradise coal-fired plant began operation on April 7, 2017 • Retired Units 1 and 2 of coal-fired plant on April 15, 2017 • Retired Unit 3 of coal-fired plant in February 2020
Shawnee	1 of 10	None	<ul style="list-style-type: none"> • Control, convert, or retire Units 1 and 4 no later than December 31, 2017 	<ul style="list-style-type: none"> • Retired Unit 10 on June 30, 2014
Widows Creek	2 of 8	Scrubbers and SCRs on Units 7 and 8	<ul style="list-style-type: none"> • Continuously operate existing emissions control equipment on Units 7 and 8 	<ul style="list-style-type: none"> • Retired Units 7 and 8 on September 30, 2015

* Selective catalytic reduction systems (“SCR”)

Source: Tennessee Valley Authority 2014a, 2017b, 2018a, 2019b, and 2020b; and Associated Press 2018.

TVA plans to continue operating 24 other coal-fired units, though in 2021 it sought public input on the potential environmental and socioeconomic effects of retiring all units at its Cumberland and Kingston plants.⁸⁰ TVA’s other remaining units that will continue to operate include four at its Gallatin plant in Sumner 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.⁸¹ See table 4.

⁸⁰ Tennessee Valley Authority 2021d and 2021e.

⁸¹ Tennessee Valley Authority 2017b and 2018a.

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* Prior to Agreements	Requirements Under Environmental Agreements	Other Actions Taken or Planned
Cumberland	2 of 2	Scrubbers and SCRs on both units	<ul style="list-style-type: none"> Continuously operate existing emission control equipment 	<ul style="list-style-type: none"> Continuously operate existing emission control equipment Evaluate one unit for potential retirement by 2030 and the second by 2033
Gallatin	4 of 4	None	<ul style="list-style-type: none"> Control, convert, or retire all four units no later than December 31, 2017 	<ul style="list-style-type: none"> Added scrubbers and SCRs on all four units in 2016
Kingston	9 of 9	Scrubbers and SCRs on all nine units	<ul style="list-style-type: none"> Continuously operate existing emission control equipment 	<ul style="list-style-type: none"> Continuously operate existing emission control equipment Evaluate three units for potential retirement by 2031 and the remaining six by 2033
Shawnee	9 of 10**	None	<ul style="list-style-type: none"> Control, convert, or retire Units 1 and 4 no later than December 31, 2017 	<ul style="list-style-type: none"> Added scrubbers and SCRs on Units 1 and 4 in 2017; remaining units have none

* Selective catalytic reduction systems (“SCR”)

** Unit 10 at Shawnee was idled in 2010 and retired. Tennessee Valley Authority “Shawnee Fossil Plant Emissions.”

Source: Tennessee Valley Authority 2014, 2017b, 2018a, 2020b, 2021d, and 2021e.

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 2016.⁸² While TVA has as recently as November 2016 said it has no need for another large nuclear facility,⁸³ 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. That “Early Site Permit” was approved in 2019, though TVA says it has “no plans to build [small modular reactors] at this time.”⁸⁴ The permit is valid through 2039, which TVA says provides it with “a great deal of flexibility to make new nuclear decisions based on energy needs and economic factors.”⁸⁵ In 2021, TVA said it will evaluate “a variety

⁸² Tennessee Valley Authority 2016f.

⁸³ Tennessee Valley Authority 2016b.

⁸⁴ Tennessee Valley Authority 2016e and Flessner 2019a.

⁸⁵ Tennessee Valley Authority 2020b.

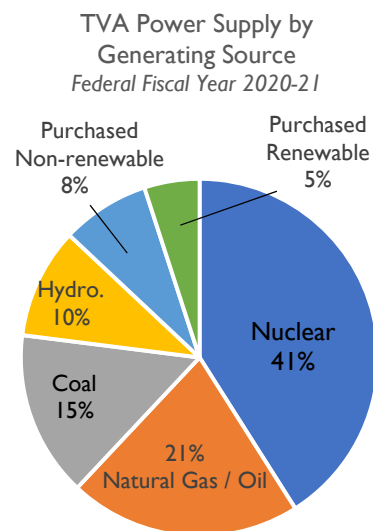
of alternatives for a proposed advanced nuclear technology park at the Clinch River nuclear site.”⁸⁶

TVA has contracts to purchase electricity from eight operating wind farms.⁸⁷ It owns 14 solar sites, including one at its Allen plant in Memphis that was completed in 2017.⁸⁸ It has 20 solar power purchase contracts with providers in Tennessee, Alabama, Kentucky, and Mississippi. In federal fiscal year 2020-21, two of these in Tennessee and two in Alabama were operational. Eleven solar contracts in Tennessee are expected to commence between federal fiscal years 2022 and 2025, with two in Kentucky and three in Mississippi set for federal fiscal year 2023.⁸⁹

Several of these solar agreements have been made using TVA’s latest utility-scale program for renewable energy development, called “Green Invest.” To qualify for federal tax incentives for solar generation, these projects are built by private solar companies that sell the power generated to TVA for distribution to participants in the Green Invest program and other customers.⁹⁰ The program has no effect on TVA’s PILOT because the power is sold through TVA and counts toward TVA’s wholesale power revenue and because the properties are not owned by TVA.

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 has in the past encouraged the private sector to develop small and medium renewable energy projects by buying electricity from participants in several programs. 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.⁹¹ Two other programs—Distributed Solar Solutions and the Renewable Standard Offer—purchase power from



Source: TVA 2021a.

⁸⁶ Tennessee Valley Authority 2021a.

⁸⁷ Tennessee Valley Authority “Wind Energy Contracts.”

⁸⁸ Tennessee Valley Authority 2017a and Tennessee Valley Authority “Our Power System.”

⁸⁹ Tennessee Valley Authority 2021a.

⁹⁰ Flessner 2020c.

⁹¹ Tennessee Valley Authority “Green Power Providers.” A 50-kilowatt solar installation can provide enough power for approximately five average-sized homes in Tennessee; email from Grace Robertson, marketing manager, Lightwave Solar, February 23, 2015.

medium-sized projects.⁹² Although TVA continues to purchase electricity from existing participants in these programs, it is no longer accepting new applicants for any of them.⁹³

TVA's purchases of wind and solar power and its renewable energy incentive programs have little to no effect on TVA's PILOT.

⁹² Tennessee Valley Authority 2017b; Tennessee Valley Authority "Guidelines for Renewable Standard Offer"; and Tennessee Valley Authority "Guidelines for Distributed Solar Solutions (2017)."

⁹³ Tennessee Valley Authority "Green Power Providers" and Tennessee Valley Authority 2017b.

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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.

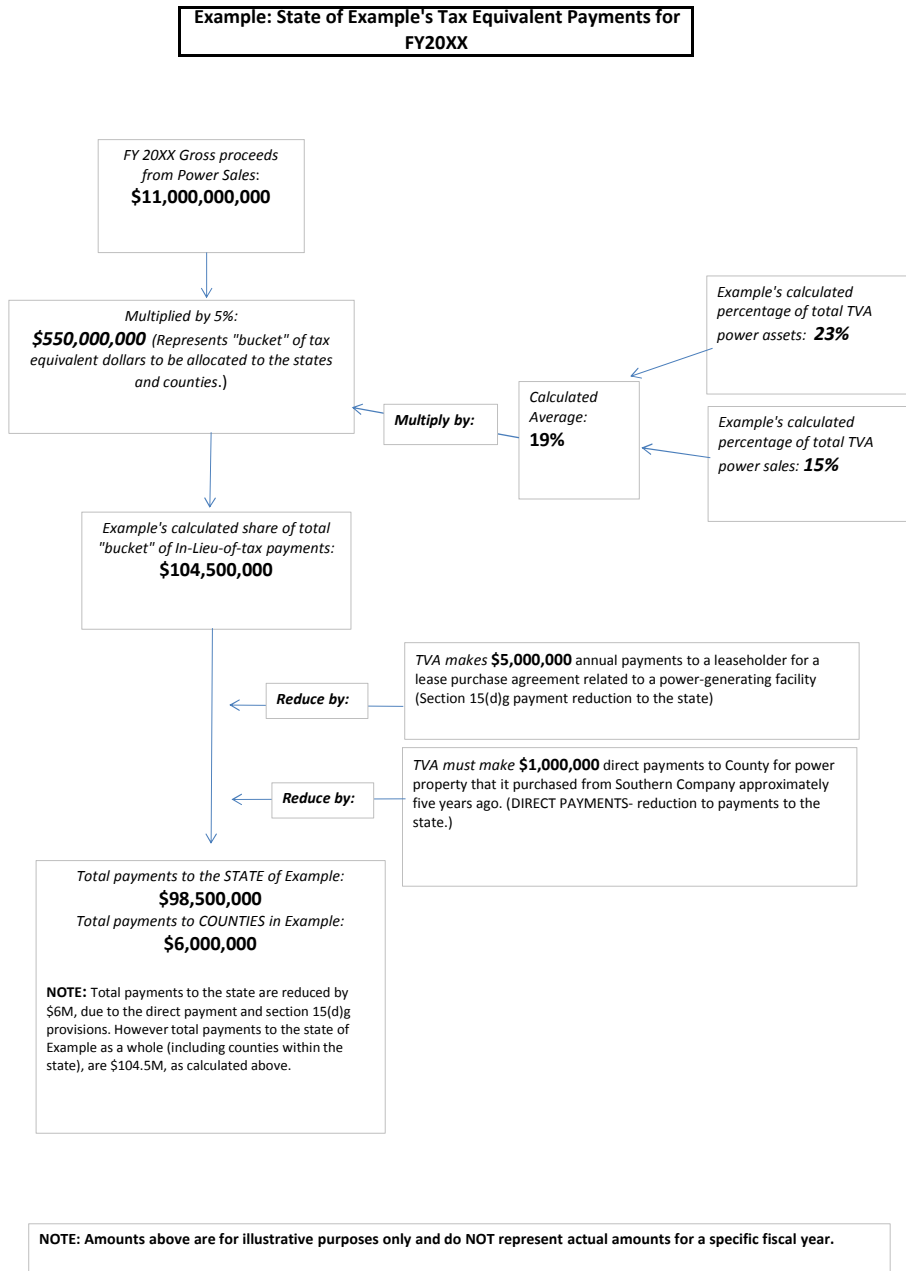
Section 15(d)g of the TVA Act:

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.

Appendix A: TVA's Allocation Formula (continued)



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 (remainder allocated to CTAS, TACIR and Tennessee Central Economic Authority)	3%	
Retained by the State	48.5%	
Paid to Local Governments	48.5%	
<i>Counties—70% of Local Share</i>		
•Based on Percent of State Population		30% (14.55% of total)
•Based on Percent of State Land		30% (14.55% of total)
•Based on County's Percent of TVA Acreage in Tennessee		10% (4.85% of total)
<i>Municipalities—30% of Local Share Based on Percent of State Population</i>		30% (14.55% of total)
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	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15
Anderson	\$ 1,116,491	\$ 1,161,579	\$ 1,240,594	\$ 1,209,200	\$ 1,148,257	\$ 1,140,471	\$ 1,173,627	\$ 1,157,568
Bedford	804,007	810,094	871,080	853,927	806,433	800,352	826,171	813,673
Benton	1,692,600	1,731,788	1,856,422	1,822,570	1,725,938	1,714,385	1,766,920	1,741,324
Bledsoe	504,778	507,635	545,815	525,639	496,430	492,676	508,555	500,872
Blount	1,468,371	1,483,920	1,593,273	1,538,002	1,454,729	1,443,998	1,489,557	1,467,505
Bradley	1,071,060	1,083,356	1,164,376	1,121,118	1,059,194	1,051,291	1,084,953	1,068,668
Campbell	1,279,413	1,330,786	1,428,757	1,392,427	1,316,850	1,307,542	1,348,530	1,328,569
Cannon	369,106	378,197	405,909	391,265	370,065	367,340	378,865	373,289
Carroll	775,217	804,059	865,172	832,797	786,049	780,040	805,454	793,157
Carter	812,270	863,123	927,466	879,608	831,239	825,098	851,393	838,655
Cheatham	560,192	578,715	614,263	591,333	558,137	553,870	571,916	563,184
Chester	395,306	409,882	441,037	424,574	400,739	397,676	410,633	404,364
Claiborne	922,133	955,457	1,025,956	1,005,159	950,425	943,604	973,360	958,919
Clay	274,076	284,598	306,230	294,798	278,249	276,122	285,118	280,766
Cocke	741,201	769,632	822,801	795,345	754,642	749,426	771,553	760,844
Coffee	977,851	991,625	1,066,873	1,027,328	969,841	962,603	993,854	978,703
Crockett	351,512	369,375	397,448	382,618	361,141	358,381	370,056	364,407
Cumberland	1,057,255	1,074,162	1,155,766	1,112,664	1,050,235	1,042,213	1,076,151	1,059,729
Davidson	4,857,256	4,733,171	5,088,979	4,900,954	4,628,778	4,593,798	4,741,771	4,670,173
Decatur	628,311	646,256	691,692	658,650	624,479	620,217	638,793	629,779
DeKalb	413,561	422,309	454,404	438,393	413,787	410,625	424,001	417,529
Dickson	822,427	834,653	897,964	864,514	816,079	809,854	836,184	823,445
Dyer	744,941	787,458	847,311	815,685	769,896	764,011	788,979	776,934
Fayette	962,483	977,492	1,051,342	1,011,838	955,036	947,735	978,614	963,673
Fentress	612,474	629,153	676,975	651,704	615,119	610,417	630,305	620,682
Franklin	1,247,840	1,279,143	1,371,158	1,183,321	1,120,924	1,113,088	1,147,012	1,130,560
Gibson	909,018	946,514	1,018,457	980,440	925,401	918,328	948,247	933,771
Giles	802,396	826,366	888,733	855,804	808,090	801,957	827,896	815,345
Grainger	979,171	1,001,043	1,071,128	1,036,650	983,113	976,602	1,005,707	991,550
Greene	1,086,979	1,134,096	1,219,325	1,172,530	1,107,440	1,099,096	1,134,480	1,117,355
Grundy	448,839	464,716	499,725	481,224	454,442	450,999	465,559	458,514
Hamblen	879,257	915,171	981,718	946,369	895,606	889,305	916,902	903,504
Hamilton	3,445,621	3,502,196	3,760,660	3,658,020	3,458,866	3,433,751	3,542,017	3,489,550
Hancock	264,624	273,673	294,472	283,481	267,569	265,524	274,174	269,989
Hardeman	828,317	867,772	933,732	899,025	848,556	842,070	869,506	856,231
Hardin	1,069,533	1,095,765	1,175,850	1,146,888	1,085,003	1,077,274	1,110,917	1,094,593
Hawkins	1,258,661	1,308,016	1,393,622	1,356,948	1,291,118	1,282,909	1,318,698	1,301,342
Haywood	656,774	683,490	735,421	707,991	668,267	663,010	684,599	674,151
Henderson	839,275	867,765	933,604	893,489	843,627	837,362	864,648	851,486
Henry	1,702,936	1,748,274	1,875,847	1,777,904	1,682,427	1,670,799	1,722,705	1,697,459
Hickman	781,709	806,363	866,351	834,577	788,690	782,792	807,737	795,667
Houston	411,582	423,568	454,519	440,770	417,012	414,070	426,986	420,714
Humphreys	1,545,581	1,576,576	1,687,868	1,648,788	1,562,903	1,552,477	1,599,168	1,576,452
Jackson	379,856	392,603	422,445	406,675	383,846	380,911	393,322	387,317
Jefferson	1,013,551	1,035,256	1,100,173	1,055,684	1,006,702	1,000,580	1,027,208	1,014,289
Johnson	487,742	507,043	543,332	521,881	494,271	490,759	505,769	498,499
Knox	3,597,658	3,605,000	3,870,233	3,735,811	3,532,625	3,506,590	3,617,045	3,564,161
Lake	212,363	225,180	242,296	233,251	220,157	218,474	225,592	222,148
Lauderdale	628,816	670,631	721,589	694,284	655,321	650,313	671,477	661,229
Lawrence	889,474	912,944	982,111	945,560	892,645	885,845	914,610	900,692

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

County	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15
Lewis	362,716	372,714	400,798	385,957	364,473	361,711	373,390	367,739
Lincoln	793,288	812,383	873,683	841,293	794,397	788,370	813,863	801,528
Loudon	1,143,625	1,145,913	1,212,826	1,189,182	1,137,478	1,131,078	1,159,187	1,145,537
Macon	460,842	462,467	497,620	479,044	452,186	448,729	463,349	456,275
Madison	1,161,940	1,231,304	1,324,771	1,275,651	1,204,133	1,194,946	1,233,824	1,214,961
Marion	1,190,531	1,219,655	1,302,034	1,242,589	1,180,630	1,172,933	1,206,616	1,190,264
Marshall	594,632	598,395	643,170	619,527	585,272	580,870	599,491	590,481
Maury	1,249,707	1,192,117	1,281,766	1,249,817	1,180,372	1,171,466	1,209,217	1,190,947
McMinn	878,514	914,021	977,685	944,436	895,732	889,511	915,988	903,169
McNairy	721,688	749,089	806,027	775,931	732,372	726,774	750,453	738,589
Meigs	780,553	792,830	849,100	833,143	789,534	779,845	803,409	791,935
Monroe	1,597,764	1,634,647	1,743,996	1,679,319	1,596,020	1,585,671	1,630,983	1,608,999
Montgomery	1,865,619	1,699,016	1,828,069	1,759,965	1,661,232	1,648,543	1,702,216	1,676,246
Moore	225,170	231,641	248,748	216,533	204,769	203,279	209,673	206,575
Morgan	656,830	685,407	737,230	709,774	670,131	664,854	686,398	675,974
Obion	739,005	774,607	833,471	802,361	757,329	751,541	776,021	764,176
Overton	571,326	590,181	635,041	611,335	577,016	572,606	591,262	582,235
Perry	667,854	679,910	729,051	703,299	665,771	661,077	681,478	671,581
Pickett	190,121	196,494	211,430	203,537	192,111	190,643	196,854	193,849
Polk	801,740	817,050	866,641	832,290	794,851	790,102	810,455	800,594
Putnam	882,155	890,097	957,698	921,975	870,259	863,646	891,761	878,158
Rhea	1,150,972	1,178,824	1,259,320	1,219,463	1,157,939	1,150,431	1,183,879	1,167,614
Roane	1,535,689	1,591,843	1,697,315	1,687,870	1,604,918	1,594,781	1,639,940	1,620,023
Robertson	917,629	929,055	999,490	962,217	908,258	901,323	930,656	916,354
Rutherford	2,686,117	2,391,830	2,571,699	2,476,705	2,338,930	2,321,247	2,396,046	2,359,854
Scott	662,889	688,257	740,572	712,926	672,904	667,760	689,517	678,990
Sequatchie	372,029	375,261	403,100	388,389	367,092	364,355	375,932	370,330
Sevier	1,260,902	1,278,590	1,374,699	1,323,002	1,249,557	1,240,164	1,280,090	1,260,762
Shelby	6,576,268	7,172,587	7,702,525	7,422,378	7,016,977	6,964,888	7,185,270	7,078,634
Smith	476,017	489,395	524,664	510,067	482,866	479,384	494,172	487,014
Stewart	2,813,009	2,861,905	3,066,904	2,946,487	2,791,312	2,772,961	2,857,324	2,816,181
Sullivan	1,688,392	1,792,441	1,924,751	1,891,853	1,788,290	1,775,264	1,831,340	1,804,161
Sumner	1,783,315	1,682,567	1,809,384	1,739,358	1,642,536	1,624,332	1,676,777	1,651,393
Tipton	824,179	871,659	937,835	902,844	852,219	845,712	873,233	859,917
Trousdale	231,096	215,953	230,477	223,026	211,912	210,501	216,542	213,616
Unicoi	295,172	312,350	336,068	323,508	305,365	303,033	312,896	308,124
Union	1,079,150	1,101,418	1,177,314	1,126,542	1,069,374	1,062,503	1,093,583	1,078,448
Van Buren	335,421	340,091	365,362	353,285	333,888	331,407	341,952	336,847
Warren	757,612	784,319	840,784	796,824	754,461	749,031	772,074	760,921
Washington	1,164,220	1,188,742	1,277,167	1,231,386	1,163,691	1,155,001	1,191,801	1,173,993
Wayne	847,584	875,682	942,190	906,454	855,624	849,097	876,736	863,361
Weakley	789,720	834,728	898,081	864,107	815,671	809,450	835,781	823,040
White	580,312	594,614	639,166	618,027	583,823	579,453	598,047	589,045
Williamson	2,099,523	1,839,894	1,978,126	1,902,192	1,796,604	1,783,034	1,840,433	1,812,660
Wilson	1,479,179	1,359,603	1,461,825	1,407,649	1,329,458	1,319,411	1,361,917	1,341,350
Total	\$ 100,523,880	\$ 102,129,184	\$ 109,601,944	\$ 105,652,995	\$ 99,936,128	\$ 99,201,346	\$ 102,309,124	\$ 100,805,418

Source: Tennessee Department of Revenue.

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

City	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15
Adams	\$ 6,479	\$ 7,236	\$ 7,786	\$ 7,496	\$ 7,178	\$ 7,142	\$ 7,428	\$ 7,337
Adamsville	23,630	25,340	27,258	26,248	25,139	25,015	26,012	25,693
Alamo	24,260	28,136	30,275	29,149	27,912	27,773	28,886	28,529
Alcoa	113,982	96,577	103,918	100,053	95,807	95,330	99,149	97,925
Alexandria	10,185	11,042	11,881	11,439	10,954	10,899	11,336	11,196
Algood	41,147	39,950	42,986	41,388	39,632	39,434	41,014	40,508
Allardt	5,762	7,247	7,798	7,508	7,189	7,153	7,440	7,348
Altamont	11,598	11,945	12,853	12,375	11,850	11,791	12,263	12,112
Ardmore	12,636	13,865	14,919	14,364	13,755	13,686	14,235	14,059
Arlington	151,058	151,078	162,561	156,516	137,094	136,411	141,876	140,125
Ashland City	53,917	59,736	64,277	61,886	51,493	51,236	53,289	52,631
Athens	146,375	153,977	165,670	159,514	152,751	151,990	158,074	156,125
Atoka	103,910	108,293	116,525	112,191	107,430	94,630	98,422	97,207
Atwood	9,760	10,722	11,537	11,108	10,636	10,583	11,007	10,872
Auburntown	2,824	3,075	3,309	3,186	3,050	3,035	3,157	3,118
Baileyton	4,527	4,927	5,301	5,104	4,887	4,863	5,058	4,995
Baneberry	5,430	5,510	5,928	5,708	5,466	5,438	5,656	5,586
Bartlett	599,976	645,691	694,770	668,931	640,545	637,351	662,887	654,705
Baxter	16,384	15,603	16,789	16,164	15,478	15,401	16,018	15,821
Bean Station	30,806	34,909	37,562	36,165	34,631	34,458	35,839	35,257
Beersheba Spring	4,506	5,452	5,867	5,649	5,409	5,382	5,598	5,529
Bell Buckle	4,257	5,715	6,150	5,921	5,670	5,641	5,868	5,795
Belle Meade	30,120	33,286	35,816	34,484	33,021	32,856	34,172	33,751
Bells	25,573	27,856	29,974	28,859	27,634	27,497	28,598	28,245
Benton	15,813	15,831	17,035	16,401	15,705	15,627	16,253	16,052
Berry Hill	21,928	11,008	11,844	11,404	10,920	10,865	6,302	6,224
Bethel Springs	7,704	8,207	8,831	8,503	8,142	8,101	8,426	8,322
Big Sandy	5,726	7,046	7,530	7,276	6,996	6,964	7,216	7,135
Blaine	21,638	21,215	22,828	21,979	21,046	20,941	21,780	21,511
Bluff City	19,367	20,259	21,765	20,972	20,101	20,003	20,787	20,536
Bolivar	54,042	61,919	66,626	64,148	61,426	61,120	63,569	62,784
Braden	2,648	3,223	3,468	3,339	3,198	3,182	3,309	3,268
Bradford	10,417	12,003	12,913	12,434	11,907	11,848	12,322	12,170
Brentwood	471,095	501,677	539,809	519,734	458,127	455,842	474,106	429,531
Brighton	29,985	31,263	33,639	32,388	31,013	30,859	32,095	31,699
Bristol	285,422	308,781	331,981	319,767	306,349	304,839	316,910	313,042
Brownsville	101,791	117,808	126,750	122,043	116,871	116,289	120,942	119,451
Bruceston	15,647	16,894	18,179	17,502	16,760	16,676	17,344	17,130
Bulls Gap	7,849	8,436	9,077	8,739	8,369	8,327	8,660	8,554
Burlison	3,810	4,858	5,227	5,033	4,819	4,795	4,987	4,926
Burns	16,332	16,780	18,056	17,384	16,646	16,563	17,227	17,014
Byrdstown	8,285	9,179	9,876	9,509	9,106	9,060	9,423	9,307
Calhoun	5,565	5,601	6,027	5,803	5,556	5,529	5,750	5,679
Camden	38,146	40,944	44,057	42,418	40,618	40,416	42,035	41,516
Carthage	23,787	26,359	28,362	27,308	26,149	26,018	27,061	26,727
Caryville	22,967	26,256	28,252	27,201	26,047	25,917	26,955	26,623
Cedar Hill	3,125	3,589	3,862	3,718	3,561	3,543	3,685	3,639
Celina	14,764	17,089	18,388	17,704	16,953	16,868	17,544	17,327
Centertown	3,084	2,778	2,989	2,878	2,755	2,742	2,852	2,816
Centerville	36,830	41,811	44,977	43,310	41,479	41,273	42,921	42,393
Chapel Hill	17,827	16,517	17,773	17,112	16,386	16,304	16,957	16,748
Charleston	6,894	7,441	8,007	7,709	7,382	7,345	7,639	7,545
Charlotte	17,194	14,117	15,190	14,625	14,004	13,934	14,493	14,314

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

City	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15
Chattanooga	1,923,319	1,959,629	2,105,311	2,028,614	1,944,355	1,934,875	2,010,675	1,986,387
Church Hill	72,658	77,008	82,861	79,780	76,394	76,013	79,059	78,083
Clarksburg	3,935	4,492	4,834	4,654	4,456	4,434	4,612	4,555
Clarksville	1,731,075	1,519,503	1,634,997	1,574,193	1,507,393	1,499,878	1,559,970	1,540,715
Cleveland	492,447	472,674	508,544	489,660	468,913	466,579	485,242	479,262
Clifton	27,525	30,794	33,135	31,902	30,549	30,396	31,614	31,224
Clinton	106,539	114,618	123,169	118,667	113,722	113,165	117,614	116,189
Coalmont	8,140	9,613	10,344	9,959	9,537	9,489	9,869	9,747
Collegedale	115,342	94,668	101,864	98,075	93,914	93,445	97,189	95,990
Collierville	532,883	520,663	560,239	539,403	516,514	513,938	534,530	527,932
Collinwood	9,324	11,225	12,078	11,629	11,135	11,080	11,524	11,382
Columbia	438,760	402,328	432,461	416,597	399,169	397,208	412,886	407,863
Cookeville	361,755	356,108	383,176	368,926	353,270	351,509	365,593	361,080
Coopertown	46,515	48,900	52,617	50,660	48,510	48,268	50,202	49,583
Copperhill	4,600	4,046	4,354	4,192	4,014	3,994	4,154	4,103
Cornersville	12,750	13,648	14,686	14,139	13,539	13,472	14,012	13,839
Cottage Grove	685	1,006	1,082	1,042	998	993	1,033	1,020
Covington	89,946	103,310	111,162	107,028	102,486	101,975	106,061	104,752
Cowan	18,513	20,105	21,614	20,819	19,946	19,848	20,633	20,382
Crab Orchard	7,476	8,596	9,249	8,905	8,527	8,485	8,825	8,716
Cross Plains	18,575	19,592	21,081	20,297	19,436	19,339	20,114	19,866
Crossville	125,330	132,183	142,231	136,941	124,984	124,361	129,343	127,747
Crump	16,550	16,323	17,564	16,910	16,193	16,112	16,758	16,551
Cumberland City	16,333	16,721	16,992	16,849	16,693	16,676	16,816	16,771
Cumberland Gap	3,250	5,647	6,076	5,850	5,602	5,574	5,797	5,726
Dandridge	35,530	32,953	35,396	34,110	32,697	32,538	33,809	33,402
Dayton	75,906	84,749	90,997	87,708	84,094	83,688	86,938	85,897
Decatur	16,228	18,266	19,654	18,924	18,121	18,030	18,753	18,521
Decaturville	8,455	9,986	10,739	10,343	9,907	9,858	10,250	10,124
Decherd	24,722	27,009	29,060	27,980	26,794	26,660	27,727	27,385
Dickson	166,726	166,178	178,809	172,159	164,853	164,032	170,604	168,498
Dover	18,959	16,197	17,428	16,780	16,068	15,988	16,629	16,423
Dowelltown	3,551	4,058	4,366	4,204	4,026	4,005	4,166	4,115
Doyle	5,119	6,138	6,605	6,359	6,089	6,059	6,302	6,224
Dresden	31,345	34,349	36,960	35,585	34,075	33,905	35,264	34,828
Ducktown	4,786	5,430	5,842	5,625	5,386	5,359	5,574	5,505
Dunlap	55,643	55,061	59,245	57,042	54,622	54,350	56,527	55,829
Dyer	23,963	26,759	28,793	27,722	26,546	26,413	27,472	27,133
Dyersburg	167,826	195,977	210,874	203,031	194,415	193,446	201,197	198,713
Eagleville	8,441	6,904	7,429	7,153	6,849	6,815	7,088	7,000
East Ridge	230,154	239,802	258,030	248,433	237,891	236,705	246,189	243,150
Eastview	7,922	8,059	8,671	8,349	7,994	7,954	8,273	8,171
Elizabethton	152,316	163,329	175,645	169,161	162,037	161,236	167,644	165,591
Elkton	5,659	6,607	7,109	6,845	6,554	6,522	6,783	6,699
Englewood	16,588	18,702	20,034	19,333	18,563	18,476	19,169	18,947
Enville	1,952	2,160	2,325	2,238	2,143	2,132	2,218	2,191
Erin	12,708	15,134	16,284	15,679	15,013	14,939	15,537	15,345
Erwin	63,182	69,717	75,014	72,225	69,161	68,816	71,573	70,690
Estill Springs	25,935	25,888	27,673	26,733	25,700	25,584	26,513	26,215
Ethridge	5,576	5,315	5,719	5,507	5,273	5,247	5,457	5,389
Etowah	37,409	39,893	42,925	41,329	39,575	39,377	40,955	40,450
Fairview	97,151	91,468	98,420	94,760	90,739	90,286	90,594	89,476
Farragut	244,056	259,200	278,902	268,529	257,134	255,852	242,633	239,638

**Appendix D: Distribution of Cities' Share of TVA Payments in Lieu of Taxes to Tennessee
by Tennessee Fiscal Year (continued)**

City	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15
Fayetteville	73,437	78,089	84,020	80,898	77,467	77,081	80,167	79,178
Finger	2,866	3,406	3,665	3,529	3,379	3,362	3,497	3,454
Forest Hills	52,308	57,610	61,989	59,684	57,151	56,866	59,144	58,414
Franklin	866,622	810,662	872,269	839,835	804,202	748,991	778,995	769,381
Friendship	6,369	7,641	8,221	7,915	7,580	7,542	7,844	7,747
Friendsville	9,303	10,436	11,229	10,812	10,353	10,301	10,714	10,582
Gadsden	4,870	5,372	5,781	5,566	5,330	5,303	5,515	5,447
Gainesboro	9,552	10,996	11,832	11,392	10,909	10,854	11,289	11,150
Gallatin	461,315	394,046	423,998	408,229	390,906	388,957	355,313	350,927
Gallaway	5,482	7,773	8,364	8,053	7,711	7,672	7,980	7,881
Garland	3,001	3,543	3,813	3,671	3,515	3,498	3,638	3,593
Gates	6,894	7,396	7,958	7,662	7,337	7,300	7,593	7,499
Gatlinburg	37,139	45,082	48,509	46,705	44,723	44,500	46,283	45,712
Germantown	429,149	458,629	493,490	475,137	454,974	452,706	470,844	465,032
Gibson	3,800	4,527	4,871	4,689	4,490	4,468	4,647	4,590
Gilt Edge	4,942	5,452	5,867	5,649	5,409	5,382	5,598	5,529
Gleason	14,214	16,517	17,773	17,112	16,386	16,304	16,957	16,748
Goodlettsville	184,698	181,986	195,819	188,537	180,536	179,636	186,833	184,527
Gordonsville	14,152	13,865	14,919	14,364	13,755	13,686	14,235	14,059
Grand Junction	3,509	3,715	3,997	3,849	3,685	3,667	3,814	3,767
Graysville	15,273	17,169	18,474	17,787	17,032	16,947	17,626	17,408
Greenback	11,442	12,162	13,087	12,600	12,065	12,005	12,486	12,332
Greenbrier	71,620	73,533	79,122	76,180	72,947	72,583	75,491	74,560
Greeneville	160,931	172,384	185,471	178,581	171,012	170,160	176,969	174,788
Greenfield	21,087	24,942	26,837	25,839	24,743	24,619	25,606	25,290
Gruetli-Laager	18,087	20,724	22,299	21,470	20,558	20,456	21,276	21,013
Guys	4,298	5,327	5,732	5,518	5,284	5,258	5,469	5,401
Halls	21,710	25,776	27,735	26,704	25,571	25,443	26,462	26,136
Harriman	64,173	75,582	81,100	78,195	75,004	74,645	77,516	76,596
Harrogate	45,684	50,169	53,982	51,975	49,769	49,521	51,505	50,869
Hartsville	28,283	27,079	29,137	28,054	26,863	26,729	27,800	27,457
Henderson	65,494	72,116	77,597	74,711	71,541	71,184	74,036	73,122
Hendersonville	641,164	587,212	631,846	608,348	582,532	579,628	602,851	595,410
Henning	9,043	10,802	11,623	11,191	10,716	10,662	11,090	10,953
Henry	4,631	5,304	5,707	5,495	5,262	5,235	5,445	5,378
Hickory Valley	810	1,132	1,218	1,172	1,123	1,117	1,162	1,147
Hohenwald	38,337	43,198	46,463	44,744	42,856	42,644	44,342	43,798
Hollow Rock	7,091	8,207	8,831	8,503	8,142	8,101	8,426	8,322
Hornbeak	5,306	6,093	6,556	6,312	6,044	6,014	6,255	6,178
Hornsby	2,741	3,463	3,727	3,588	3,436	3,419	3,556	3,512
Humboldt	81,757	96,615	103,958	100,092	95,845	95,367	99,188	97,964
Huntingdon	46,089	45,551	49,013	47,190	45,188	44,963	46,764	46,187
Huntland	9,199	9,967	10,725	10,326	9,888	9,839	10,233	10,107
Huntsville	13,186	18,095	19,470	18,746	17,950	17,861	18,577	18,023
Jacksboro	23,943	23,090	24,845	23,921	22,906	22,792	23,705	23,412
Jackson	709,714	746,960	803,618	773,789	741,019	737,332	766,812	757,366
Jamestown	20,091	22,393	24,095	23,198	22,214	22,103	22,989	22,705
Jasper	37,502	37,984	40,871	39,351	37,681	37,493	38,995	38,514
Jefferson City	87,845	97,478	104,855	100,971	96,705	96,225	100,063	98,833
Jellico	22,364	26,919	28,965	27,888	26,704	26,571	27,636	27,295
Johnson City	740,663	724,876	779,745	750,858	719,123	715,553	744,102	734,954
Jonesborough	60,843	57,736	62,124	59,814	57,276	56,990	59,274	58,542
Kenton	12,511	14,643	15,756	15,170	14,526	14,453	15,033	14,847

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

City	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15
Kimball	16,041	15,946	17,158	16,520	15,819	15,740	16,370	16,168
Kingsport	575,639	586,092	630,641	607,187	581,421	578,522	601,701	594,274
Kingston	64,628	70,648	75,804	73,090	70,108	69,772	72,455	71,595
Kingston Springs	29,321	31,503	33,897	32,637	31,252	31,096	32,342	31,942
Knoxville	2,017,916	2,082,150	2,237,563	2,155,743	2,065,855	2,055,742	2,136,605	2,110,695
Lafayette	57,977	51,140	55,028	52,981	50,733	50,480	52,502	51,854
Lafollette	77,307	85,390	91,868	88,458	84,711	84,289	87,660	86,580
Lagrange	1,277	1,520	1,636	1,575	1,508	1,501	1,561	1,541
Lakeland	144,361	142,082	152,882	147,196	140,950	140,247	145,866	144,066
Lakesite	19,270	20,872	22,459	21,624	20,706	20,603	21,428	21,164
La Vergne	402,009	393,372	423,272	407,531	369,531	367,689	382,421	377,700
Lawrenceburg	120,782	119,198	128,258	123,488	118,248	117,659	122,373	120,862
Lebanon	399,804	374,931	403,370	388,398	371,949	370,099	308,125	304,331
Lenoir City	106,566	100,307	107,816	103,863	99,520	99,032	102,938	101,687
Lewisburg	128,256	127,552	137,196	132,119	126,541	125,914	130,931	129,324
Lexington	82,804	87,666	94,314	90,814	86,969	86,536	89,995	88,887
Liberty	3,468	3,543	3,813	3,671	3,515	3,498	3,638	3,593
Linden	10,358	10,386	11,175	10,759	10,303	10,252	10,662	10,531
Livingston	40,545	46,385	49,911	48,055	46,016	45,786	47,621	47,033
Lobelville	9,542	10,253	11,033	10,622	10,172	10,121	10,526	10,396
Lookout Mountain	21,368	20,941	22,533	21,695	20,774	20,670	21,499	21,233
Loretto	18,056	19,592	21,081	20,297	19,436	19,339	20,114	19,866
Loudon	65,475	64,781	69,456	66,994	64,290	63,986	66,419	65,639
Louisville	45,518	45,951	49,444	47,605	45,585	45,357	47,175	28,268
Luttrell	10,559	12,276	13,210	12,718	12,179	12,118	12,603	12,448
Lynchburg	4,839	6,612	7,109	6,847	6,560	6,527	6,786	6,703
Lynnville	3,087	3,336	3,586	3,454	3,310	3,294	3,424	3,382
Madisonville	53,284	52,318	56,294	54,201	51,901	51,642	53,711	53,048
Manchester	126,794	115,472	124,249	119,628	114,551	113,980	118,547	117,084
Martin	112,806	131,556	141,524	136,276	130,511	129,862	135,049	133,387
Maryville	331,282	314,753	338,677	326,081	312,244	310,687	323,135	319,147
Mason	13,882	18,392	19,790	19,054	18,245	18,154	18,882	18,649
Maury City	6,053	7,704	8,290	7,982	7,643	7,605	7,909	7,812
Maynardville	25,500	27,582	29,679	28,575	27,362	27,226	28,317	27,967
McEwen	17,212	20,157	21,677	20,877	19,997	19,898	20,690	20,436
McKenzie	57,406	60,696	65,310	62,881	60,213	59,912	62,313	61,544
McLemoresville	2,990	4,024	4,329	4,168	3,992	3,972	4,131	4,080
McMinnville	143,416	155,772	167,592	161,369	154,532	153,763	159,913	157,943
Medina	53,222	55,118	59,308	57,102	54,679	49,487	51,470	50,834
Medon	1,962	2,583	2,780	2,676	2,563	2,550	2,652	2,619
Memphis	6,770,368	7,591,343	8,153,386	7,857,488	7,532,413	7,495,841	7,788,276	7,694,573
Michie	7,050	6,755	7,269	6,999	6,702	6,668	6,935	6,850
Middleton	6,832	8,070	8,683	8,360	8,006	7,966	8,285	8,183
Milan	84,837	89,742	96,563	92,972	89,026	88,582	92,132	90,994
Milledgeville	2,814	3,029	3,259	3,138	3,005	2,990	3,110	3,071
Millersville	65,401	73,613	79,208	76,263	73,026	72,662	75,573	74,641
Millington	109,870	127,245	136,917	131,825	126,231	125,602	130,634	129,022
Minor Hill	5,233	6,138	6,605	6,359	6,089	6,059	6,302	6,224
Mitchellville	1,692	2,160	2,325	2,238	2,143	2,132	2,218	2,191
Monteagle	14,463	13,625	14,661	14,116	13,517	13,449	13,988	13,815
Monterey	28,579	32,645	35,121	33,818	32,386	32,224	33,513	33,100
Morrison	7,611	7,933	8,536	8,218	7,870	7,830	8,144	8,044
Morristown	315,957	333,053	358,368	345,041	330,399	328,751	341,923	337,703

**Appendix D: Distribution of Cities' Share of TVA Payments in Lieu of Taxes to Tennessee
by Tennessee Fiscal Year (continued)**

City	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15
Moscow	5,939	6,355	6,838	6,584	6,305	6,273	6,525	6,444
Mosheim	25,739	26,999	29,051	27,971	26,784	26,650	27,718	27,376
Mount Carmel	56,825	62,057	66,774	64,290	61,562	61,255	63,709	62,923
Mount Juliet	407,927	358,646	385,907	371,555	319,309	317,717	330,446	284,515
Mount Pleasant	50,038	58,583	63,008	60,678	52,086	51,828	53,890	53,230
Mountain City	25,074	28,931	31,130	29,972	28,700	28,557	29,701	29,335
Murford	65,432	69,841	75,149	72,355	69,284	66,874	69,553	68,695
Murfreesboro	1,587,090	1,405,796	1,512,580	1,456,362	1,237,287	1,231,123	1,280,412	1,264,619
Nashville	5,318,165	5,148,424	5,539,230	5,333,483	4,876,338	4,852,060	5,046,186	4,983,984
New Hope	10,248	12,368	13,308	12,813	12,269	12,208	12,697	12,541
New Johnsonville	19,217	22,787	24,482	23,590	22,610	22,499	23,381	23,099
New Market	14,006	15,248	16,407	15,797	15,127	15,051	15,655	15,461
New Tazewell	28,750	34,715	37,353	35,964	34,438	34,266	35,639	35,199
Newbern	34,772	37,870	40,748	39,233	37,568	37,380	38,878	38,398
Newport	71,454	79,531	85,565	82,388	78,898	78,505	81,645	80,639
Niota	9,459	9,662	10,287	9,958	9,597	9,556	9,881	9,777
Nolensville	143,583	126,845	136,487	131,411	89,990	89,541	93,129	67,930
Normandy	1,121	1,612	1,734	1,670	1,599	1,591	1,655	1,634
Norris	16,602	18,620	20,036	19,291	18,472	18,380	19,116	18,880
Oak Hill	50,782	53,598	57,672	55,527	53,171	52,906	55,025	54,346
Oak Ridge	329,321	338,542	364,025	350,609	335,870	334,212	347,471	343,222
Oakdale	1,983	2,423	2,607	2,511	2,404	2,392	2,488	2,457
Oakland	92,780	75,705	81,459	78,430	75,101	74,727	77,721	76,762
Obion	10,289	12,791	13,763	13,251	12,689	12,626	13,131	12,969
Oliver Springs	34,232	36,932	39,739	38,262	36,638	36,455	37,916	37,448
Oneida	39,319	42,888	46,147	44,431	42,546	42,334	44,030	43,486
Orlinda	9,832	9,819	10,565	10,172	9,741	9,692	10,080	9,956
Orme	903	1,440	1,550	1,492	1,429	1,422	1,479	1,460
Palmer	5,721	7,681	8,265	7,958	7,620	7,582	7,886	7,789
Paris	107,108	116,089	124,913	120,267	115,164	114,590	119,181	117,710
Parkers Crossroads	2,949	3,772	4,059	3,908	3,742	3,723	3,873	3,825
Parrottsville	2,253	3,006	3,235	3,114	2,982	2,967	3,086	3,048
Parsons	22,298	27,619	29,680	28,595	27,403	27,268	28,341	27,997
Pegram	21,513	23,924	25,743	24,785	23,734	23,615	24,561	24,258
Petersburg	5,863	6,599	7,071	6,823	6,549	6,518	6,764	6,686
Philadelphia	6,302	7,498	8,068	7,768	7,439	7,402	7,698	7,603
Pigeon Forge	65,858	67,155	72,259	69,572	66,619	66,287	68,943	68,092
Pikeville	18,938	18,380	19,777	19,042	18,234	18,143	18,870	18,637
Piperton	23,496	22,975	24,722	19,326	18,506	18,414	16,957	16,748
Pittman Center	4,714	5,738	6,174	5,945	5,692	5,664	5,891	5,818
Plainview	21,388	24,290	26,136	25,164	24,096	23,976	24,937	24,629
Pleasant Hill	5,607	6,435	6,925	6,667	6,384	6,352	6,607	6,525
Pleasant View	49,910	48,260	51,928	49,997	47,875	46,813	48,689	48,088
Portland	136,595	131,223	141,197	135,946	130,177	129,528	134,718	133,055
Powells Crossroads	13,456	15,111	16,260	15,655	14,991	14,916	15,514	15,322
Pulaski	87,184	89,959	96,796	93,197	89,242	88,797	92,355	91,215
Puryear	7,330	7,670	8,253	7,946	7,609	7,571	7,874	7,777
Ramer	3,374	3,646	3,924	3,778	3,617	3,599	3,743	3,697
Red Bank	123,544	133,178	143,301	137,971	132,116	131,458	136,725	135,037
Red Boiling Springs	12,511	12,711	13,677	13,168	12,610	12,547	13,049	12,888
Ridgely	17,547	20,518	22,077	21,256	20,354	20,253	21,064	20,804
Ridgeside	4,631	4,458	4,797	4,618	4,422	4,400	4,577	4,520
Ridgetop	22,375	23,478	25,263	24,323	23,291	23,175	21,991	21,720

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

City	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15
Ripley	80,985	96,531	103,869	100,006	95,762	95,285	99,102	97,879
Rives	2,554	3,726	4,010	3,860	3,697	3,678	3,826	3,778
Rockford	8,535	9,785	10,528	10,137	9,707	9,658	10,045	9,921
Rockwood	56,524	63,577	68,409	65,865	63,070	62,756	65,270	64,464
Rocky Top	17,403	20,858	22,405	21,590	20,696	20,595	21,400	21,142
Rogersville	48,498	50,523	54,363	52,342	50,121	49,871	51,869	51,229
Rossville	10,808	12,094	13,013	10,670	10,217	10,166	7,792	7,696
Rutherford	12,075	13,157	14,157	13,630	13,052	12,987	13,507	13,340
Rutledge	13,716	14,848	15,977	15,383	14,730	14,657	15,244	15,056
Saltillo	4,361	6,710	7,220	6,951	6,656	6,623	6,888	6,803
Samburg	2,180	2,480	2,669	2,570	2,461	2,448	2,547	2,515
Sardis	4,298	4,355	4,686	4,512	4,320	4,299	4,471	4,416
Saulsberry	1,163	1,280	1,378	1,326	1,270	1,264	1,314	1,298
Savannah	75,094	80,012	86,078	82,884	79,376	78,981	82,137	81,126
Scotts Hill	9,106	11,248	12,103	11,653	11,158	11,102	11,547	11,405
Selmer	46,167	50,254	54,074	52,063	49,854	49,605	51,593	50,956
Sevierville	185,737	169,253	182,118	175,345	167,904	167,067	173,760	171,616
Sharon	9,747	10,830	11,650	11,218	10,744	10,690	11,117	10,980
Shelbyville	248,541	236,396	254,064	244,762	234,544	233,394	242,587	239,641
Signal Mountain	91,908	95,594	102,860	99,035	94,832	94,359	98,140	96,929
Silerton	1,007	1,269	1,365	1,314	1,259	1,252	1,303	1,287
Slayden	1,765	2,035	2,189	2,108	2,018	2,008	2,089	2,063
Smithville	51,955	51,781	55,716	53,644	51,368	51,112	53,160	52,503
Smyrna	551,011	543,193	584,481	562,744	538,864	536,177	469,095	463,305
Sneedville	13,311	15,854	17,059	16,425	15,728	15,649	16,276	16,076
Soddy Daisy	135,702	145,328	156,375	150,559	144,170	143,451	149,199	147,357
Somerville	35,457	35,366	38,054	36,639	35,084	34,909	36,308	35,860
South Carthage	15,470	15,111	16,260	15,655	14,991	14,916	15,514	15,322
South Fulton	23,309	26,908	28,953	27,876	26,693	26,560	27,624	27,283
South Pittsburg	32,568	34,520	37,119	35,751	34,247	34,078	35,430	34,997
Sparta	52,272	58,344	62,750	60,430	57,882	57,595	59,888	59,153
Spencer	15,180	18,300	19,691	18,959	18,155	18,064	18,788	18,556
Spring City	21,607	24,015	25,736	24,830	23,834	23,722	24,618	24,331
Spring Hill	519,188	462,207	497,339	478,843	414,231	412,166	376,142	371,499
Springfield	195,008	187,919	202,203	194,683	186,421	185,492	192,924	190,542
St. Joseph	8,202	8,939	9,618	9,260	8,867	8,823	9,177	9,064
Stanton	4,330	5,167	5,559	5,353	5,125	5,100	5,304	5,239
Stantonville	3,478	3,235	3,481	3,351	3,209	3,193	3,321	3,280
Sunbright	5,389	6,310	6,789	6,537	6,259	6,228	6,478	6,398
Surgoinsville	19,540	20,586	22,151	21,327	20,422	20,321	21,135	20,874
Sweetwater	66,014	69,176	74,397	71,648	68,628	68,288	71,005	70,135
Tazewell	24,379	25,387	27,317	26,301	25,185	25,059	26,063	25,742
Tellico Plains	7,950	10,097	10,862	10,459	10,017	9,967	10,365	10,238
Tennessee Ridge	13,830	15,637	16,826	16,200	15,512	15,435	16,054	15,855
Thompson's Station	77,715	54,021	58,127	55,965	53,590	30,250	31,462	31,073
Three Way	19,488	19,535	21,020	20,238	19,379	19,283	20,055	19,808
Tiptonville	41,282	51,026	54,905	52,863	50,619	50,367	52,385	51,738
Toone	2,803	4,161	4,477	4,310	4,128	4,107	4,272	4,219
Townsend	5,711	5,121	5,510	5,305	5,080	5,055	5,257	5,192
Tracy City	14,598	16,929	18,215	17,538	16,794	16,710	17,380	17,165
Trenton	44,023	48,740	52,445	50,494	48,352	48,110	50,038	49,420
Trezevant	8,296	9,819	10,565	10,172	9,741	9,692	10,080	9,956
Trimble	5,679	7,281	7,835	7,543	7,223	7,187	7,475	7,383

**Appendix D: Distribution of Cities' Share of TVA Payments in Lieu of Taxes to Tennessee
by Tennessee Fiscal Year (continued)**

City	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15
Troy	14,775	15,671	16,863	16,235	15,546	15,469	16,089	15,890
Tullahoma	211,848	213,912	230,120	221,587	212,212	211,158	219,591	216,889
Tusculum	34,242	30,440	32,753	31,535	30,197	30,046	31,250	30,865
Unicoi	39,797	41,516	44,672	43,010	41,185	40,980	42,622	42,095
Union City	115,975	124,536	134,002	129,019	123,544	122,928	127,853	126,275
Vanleer	3,883	4,515	4,858	4,678	4,479	4,457	4,635	4,578
Viola	966	1,497	1,611	1,551	1,485	1,478	1,537	1,518
Vonore	16,342	16,849	18,129	17,455	16,714	16,631	17,297	17,084
Walden	20,568	21,695	23,344	22,476	21,522	21,415	22,273	21,998
Wartburg	8,805	10,493	11,291	10,871	10,410	10,358	10,773	10,640
Wartrace	6,780	7,441	8,007	7,709	7,382	7,345	7,639	7,545
Watauga	3,665	5,235	5,633	5,424	5,193	5,168	5,375	5,308
Watertown	16,124	16,883	18,166	17,491	16,748	16,665	17,333	17,119
Waverly	44,615	46,923	50,489	48,611	46,549	46,317	48,172	47,578
Waynesboro	24,057	27,994	30,121	29,001	27,770	27,632	28,739	28,384
Westmoreland	28,220	25,216	27,133	26,123	25,015	24,890	25,887	25,568
White Bluff	40,098	36,646	39,432	37,965	36,354	36,173	37,622	37,158
White House	134,789	132,595	142,673	137,367	131,538	115,707	120,343	118,857
White Pine	25,656	25,102	27,010	26,005	24,902	24,777	25,770	25,452
Whiteville	27,057	53,015	57,045	54,923	52,593	52,330	54,427	53,755
Whitwell	17,038	19,421	20,897	20,120	19,266	19,170	19,938	19,692
Williston	3,624	4,515	4,858	4,678	4,479	4,457	4,635	4,578
Winchester	100,372	100,537	107,948	104,046	99,760	99,278	103,134	101,898
Winfield	9,832	11,945	12,853	12,375	11,850	11,791	12,263	12,112
Woodbury	28,065	30,634	32,962	31,737	30,390	30,238	31,450	31,062
Woodland Mills	3,592	4,321	4,649	4,476	4,286	4,265	4,436	4,381
Yorkville	2,450	3,269	3,518	3,387	3,243	3,227	3,356	3,315
Total	\$ 41,804,128	\$ 42,492,115	\$ 45,694,727	\$ 44,002,320	\$ 41,552,235	\$ 41,237,328	\$ 42,569,233	\$ 41,924,787

Source: Tennessee Department of Revenue.

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

County	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15
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
Haywood	-	-	-	-	-	-	-	138,513
Henderson	-	-	-	-	-	-	-	-
Henry	-	-	-	-	-	-	-	-
Hickman	-	-	-	-	-	-	-	-
Houston	-	-	-	-	-	-	-	-
Humphreys	-	-	-	-	-	-	-	-
Jackson	-	-	-	-	-	-	-	-
Jefferson	-	-	-	-	-	-	-	-
Johnson	-	-	-	-	-	-	-	-
Knox	-	-	-	-	-	-	-	-
Lake	-	-	-	-	-	-	-	-
Lauderdale	-	-	-	-	-	-	-	-

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

County	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15
Lawrence	-	-	-	-	-	-	-	-
Lewis	-	-	-	-	-	-	-	-
Lincoln	-	-	-	-	-	-	-	-
Loudon	-	-	-	-	-	-	-	-
Macon	-	-	-	-	-	-	-	-
Madison	-	-	-	-	-	-	-	-
Marion	-	-	-	-	-	-	-	-
Marshall	-	-	-	-	-	-	-	-
Maury	-	-	-	-	-	-	-	-
McMinn	-	-	-	26	9,785	39,170	160,097	158,150
McNairy	-	-	-	-	-	-	-	-
Meigs	-	-	-	200,358	380,086	569,656	776,106	766,666
Monroe	-	-	-	22	8,363	33,425	136,614	134,953
Montgomery	-	-	-	-	-	-	-	-
Moore	-	-	-	-	-	-	-	-
Morgan	-	-	-	-	-	-	-	-
Obion	-	-	-	-	-	-	-	-
Overton	-	-	-	-	-	-	-	-
Perry	-	-	-	-	-	-	-	-
Pickett	-	-	-	-	-	-	-	-
Polk	-	-	-	-	-	-	-	-
Putnam	-	-	-	-	-	-	-	-
Rhea	-	-	-	170,414	323,282	484,521	660,117	652,088
Roane	-	-	-	117,906	223,672	335,230	456,721	451,166
Robertson	-	-	-	-	-	-	-	-
Rutherford	-	-	-	-	-	-	-	-
Scott	-	-	-	-	-	-	-	-
Sequatchie	-	-	-	-	-	-	-	-
Sevier	-	-	-	-	-	-	-	-
Shelby	113,440	229,972	372,309	481,630	457,129	456,750	-	-
Smith	-	-	-	-	-	-	-	-
Stewart	-	-	-	-	-	-	-	-
Sullivan	562,001	582,549	628,740	610,017	578,612	578,132	-	-
Sumner	124,693	252,373	408,575	528,545	501,334	501,840	501,559	495,459
Tipton	-	-	-	-	-	-	-	-
Trousdale	-	-	-	-	-	-	-	-
Unicoi	-	-	-	-	-	-	-	-
Union	-	-	-	-	-	-	-	-
Van Buren	-	-	-	-	-	-	-	-
Warren	-	-	-	-	-	-	-	-
Washington	547,504	563,768	608,469	590,350	559,958	559,493	-	-
Wayne	-	-	-	-	-	-	-	-
Weakley	-	-	-	-	-	-	-	-
White	-	-	-	-	-	-	-	-
Williamson	-	-	-	-	-	-	-	-
Wilson	-	-	-	-	-	-	-	-
Total	\$ 1,347,638	\$ 1,628,661	\$ 2,018,093	\$ 2,699,268	\$ 3,042,223	\$ 3,652,310	\$ 2,883,505	\$ 3,088,761

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

City	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15
Adams	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Adamsville	-	-	-	-	-	-	-	-
Alamo	-	-	-	-	-	-	-	-
Alcoa	-	-	-	-	-	-	-	-
Alexandria	-	-	-	-	-	-	-	-
Algood	-	-	-	-	-	-	-	-
Allardt	-	-	-	-	-	-	-	-
Altamont	-	-	-	-	-	-	-	-
Ardmore	-	-	-	-	-	-	-	-
Arlington	1,775	3,277	5,305	6,862	5,958	5,953	-	-
Ashland City	-	-	-	-	-	-	-	-
Athens	-	-	-	7	2,520	10,086	41,224	40,722
Atoka	-	-	-	-	-	-	-	-
Atwood	-	-	-	-	-	-	-	-
Auburntown	-	-	-	-	-	-	-	-
Baileyton	-	-	-	-	-	-	-	-
Baneberry	-	-	-	-	-	-	-	-
Bartlett	7,051	14,004	22,671	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	6,474	6,438	6,948	6,741	6,394	6,389	-	-
Bolivar	-	-	-	-	-	-	-	-
Braden	-	-	-	-	-	-	-	-
Bradford	-	-	-	-	-	-	-	-
Brentwood	-	-	-	-	-	-	-	-
Brighton	-	-	-	-	-	-	-	-
Bristol	96,462	99,190	107,054	103,867	98,519	98,438	-	-
Brownsville	-	-	-	-	-	-	-	75,881
Bruceston	-	-	-	-	-	-	-	-
Bulls Gap	-	-	-	-	-	1,222	2,497	3,789
Burlison	-	-	-	-	-	-	-	-
Burns	-	-	-	-	-	-	-	-
Byrdstown	-	-	-	-	-	-	-	-
Calhoun	-	-	-	0.24	92	367	1,501	1,483
Camden	-	-	-	-	-	-	-	-
Carthage	-	-	-	-	-	-	-	-
Caryville	-	-	-	-	-	-	-	-
Cedar Hill	-	-	-	-	-	-	-	-
Celina	-	-	-	-	-	-	-	-
Centertown	-	-	-	-	-	-	-	-

**Appendix F: Impact Payments Distributed to Cities in Areas Affected by TVA Construction
 by Tennessee Fiscal Year (continued)**

City	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15
Centerville	-	-	-	-	-	-	-	-
Chapel Hill	-	-	-	-	-	-	-	-
Charleston	-	-	-	-	-	-	-	-
Charlotte	-	-	-	-	-	-	-	-
Chattanooga	-	-	-	-	-	-	-	-
Church Hill	-	-	-	-	-	11,154	22,794	34,586
Clarksburg	-	-	-	-	-	-	-	-
Clarksville	-	-	-	-	-	-	-	-
Cleveland	-	-	-	-	-	-	-	-
Clifton	-	-	-	-	-	-	-	-
Clinton	-	-	-	-	-	-	-	-
Coalmont	-	-	-	-	-	-	-	-
Collegedale	-	-	-	-	-	-	-	-
Collierville	6,262	11,292	18,281	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
Decatur	-	-	-	27,242	51,679	77,453	105,523	104,240
Decaturville	-	-	-	-	-	-	-	-
Decherd	-	-	-	-	-	-	-	-
Dickson	-	-	-	-	-	-	-	-
Dover	-	-	-	-	-	-	-	-
Dowelltown	-	-	-	-	-	-	-	-
Doyle	-	-	-	-	-	-	-	-
Dresden	-	-	-	-	-	-	-	-
Ducktown	-	-	-	-	-	-	-	-
Dunlap	-	-	-	-	-	-	-	-
Dyer	-	-	-	-	-	-	-	-
Dyersburg	-	-	-	-	-	-	-	-
Eagleville	-	-	-	-	-	-	-	-
East Ridge	-	-	-	-	-	-	-	-
Eastview	-	-	-	-	-	-	-	-
Elizabethton	-	-	-	-	-	-	-	-
Elkton	-	-	-	-	-	-	-	-
Englewood	-	-	-	0.76	287	1,148	4,693	4,636

**Appendix F: Impact Payments Distributed to Cities in Areas Affected by TVA Construction
by Tennessee Fiscal Year (continued)**

City	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15
Enville	-	-	-	-	-	-	-	-
Erin	-	-	-	-	-	-	-	-
Erwin	-	-	-	-	-	-	-	-
Estill Springs	-	-	-	-	-	-	-	-
Ethridge	-	-	-	-	-	-	-	-
Etowah	-	-	-	2	653	2,616	10,690	10,560
Fairview	-	-	-	-	-	-	-	-
Farragut	-	-	-	-	-	-	-	-
Fayetteville	-	-	-	-	-	-	-	-
Finger	-	-	-	-	-	-	-	-
Forest Hills	-	-	-	-	-	-	-	-
Franklin	-	-	-	-	-	-	-	-
Friendship	-	-	-	-	-	-	-	-
Friendsville	-	-	-	-	-	-	-	-
Gadsden	-	-	-	-	-	-	-	-
Gainesboro	-	-	-	-	-	-	-	-
Gallatin	28,226	54,157	87,677	113,421	107,582	107,690	94,533	93,383
Galloway	-	-	-	-	-	-	-	-
Garland	-	-	-	-	-	-	-	-
Gates	-	-	-	-	-	-	-	-
Gatlinburg	-	-	-	-	-	-	-	-
Germantown	5,043	9,947	16,103	20,832	19,772	19,756	-	-
Gibson	-	-	-	-	-	-	-	-
Gilt Edge	-	-	-	-	-	-	-	-
Gleason	-	-	-	-	-	-	-	-
Goodlettsville	4,037	8,801	14,248	18,431	17,482	17,500	49,708	49,103
Gordonsville	-	-	-	-	-	-	-	-
Grand Junction	-	-	-	-	-	-	-	-
Graysville	-	-	-	8,047	15,265	22,879	31,170	30,791
Greenback	-	-	-	-	-	-	-	-
Greenbrier	-	-	-	-	-	-	-	-
Greeneville	-	-	-	-	-	-	-	-
Greenfield	-	-	-	-	-	-	-	-
Gruetli-Laager	-	-	-	-	-	-	-	-
Guys	-	-	-	-	-	-	-	-
Halls	-	-	-	-	-	-	-	-
Harriman	-	-	-	13,819	26,214	39,289	53,528	52,877
Harrogate	-	-	-	-	-	-	-	-
Hartsville	-	-	-	-	-	-	-	-
Henderson	-	-	-	-	-	-	-	-
Hendersonville	39,230	80,705	130,657	169,021	160,320	160,481	160,392	158,441
Henning	-	-	-	-	-	-	-	-
Henry	-	-	-	-	-	-	-	-
Hickory Valley	-	-	-	-	-	-	-	-
Hohenwald	-	-	-	-	-	-	-	-
Hollow Rock	-	-	-	-	-	-	-	-
Hornbeak	-	-	-	-	-	-	-	-
Hornsby	-	-	-	-	-	-	-	-
Humboldt	-	-	-	-	-	-	-	-

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

City	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15
Huntingdon	-	-	-	-	-	-	-	-
Huntland	-	-	-	-	-	-	-	-
Huntsville	-	-	-	-	-	-	-	-
Jacksboro	-	-	-	-	-	-	-	-
Jackson	-	-	-	-	-	-	-	-
Jamestown	-	-	-	-	-	-	-	-
Jasper	-	-	-	-	-	-	-	-
Jefferson City	-	-	-	-	-	-	-	-
Jellico	-	-	-	-	-	-	-	-
Johnson City	286,531	283,447	305,921	296,811	281,531	281,297	-	-
Jonesborough	24,123	23,155	24,991	24,247	22,999	22,980	-	-
Kenton	-	-	-	-	-	-	-	-
Kimball	-	-	-	-	-	-	-	-
Kingsport	187,344	179,865	194,127	188,346	178,650	263,392	173,482	263,229
Kingston	-	-	-	12,913	24,497	36,715	50,021	49,413
Kingston Springs	-	-	-	-	-	-	-	-
Knoxville	-	-	-	-	-	-	-	-
Lafayette	-	-	-	-	-	-	-	-
Lafollette	-	-	-	-	-	-	-	-
Lagrange	-	-	-	-	-	-	-	-
Lakeland	1,696	3,082	4,989	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
Manchester	-	-	-	-	-	-	-	-
Martin	-	-	-	-	-	-	-	-
Maryville	-	-	-	-	-	-	-	-
Mason	-	-	-	-	-	-	-	-
Maury City	-	-	-	-	-	-	-	-
Maynardville	-	-	-	-	-	-	-	-
McEwen	-	-	-	-	-	-	-	-
McKenzie	-	-	-	-	-	-	-	-
McLemoresville	-	-	-	-	-	-	-	-

**Appendix F: Impact Payments Distributed to Cities in Areas Affected by TVA Construction
by Tennessee Fiscal Year (continued)**

City	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15
McMinnville	-	-	-	-	-	-	-	-
Medina	-	-	-	-	-	-	-	-
Medon	-	-	-	-	-	-	-	-
Memphis	77,246	160,370	259,628	335,863	318,777	318,513	-	-
Michie	-	-	-	-	-	-	-	-
Middleton	-	-	-	-	-	-	-	-
Milan	-	-	-	-	-	-	-	-
Milledgeville	-	-	-	-	-	-	-	-
Millersville	3,145	7,819	12,658	16,375	15,532	15,548	15,539	15,350
Millington	1,291	2,760	4,468	5,780	5,486	5,481	-	-
Minor Hill	-	-	-	-	-	-	-	-
Mitchellville	104	297	481	622	590	590	590	583
Monteagle	-	-	-	-	-	-	-	-
Monterey	-	-	-	-	-	-	-	-
Morrison	-	-	-	-	-	-	-	-
Morristown	-	-	-	-	-	-	-	-
Moscow	-	-	-	-	-	-	-	-
Mosheim	-	-	-	-	-	-	-	-
Mount Carmel	-	-	-	-	-	8,988	18,369	27,871
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
Nolensville	-	-	-	-	-	-	-	-
Normandy	-	-	-	-	-	-	-	-
Norris	-	-	-	-	-	-	-	-
Oak Hill	-	-	-	-	-	-	-	-
Oak Ridge	-	-	-	63,827	121,081	181,471	247,239	244,231
Oakdale	-	-	-	-	-	-	-	-
Oakland	-	-	-	-	-	-	-	-
Obion	-	-	-	-	-	-	-	-
Oliver Springs	-	-	-	7,031	13,338	19,991	27,236	26,905
Oneida	-	-	-	-	-	-	-	-
Orlinda	-	-	-	-	-	-	-	-
Orme	-	-	-	-	-	-	-	-
Palmer	-	-	-	-	-	-	-	-
Paris	-	-	-	-	-	-	-	-
Parkers Crossroads	-	-	-	-	-	-	-	-
Parrottsville	-	-	-	-	-	-	-	-
Parsons	-	-	-	-	-	-	-	-

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

City	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15
Pegram	-	-	-	-	-	-	-	-
Petersburg	-	-	-	-	-	-	-	-
Philadelphia	-	-	-	-	-	-	-	-
Pigeon Forge	-	-	-	-	-	-	-	-
Pikeville	-	-	-	-	-	-	-	-
Piperton	-	-	-	-	-	-	-	-
Pittman Center	-	-	-	-	-	-	-	-
Plainview	-	-	-	-	-	-	-	-
Pleasant Hill	-	-	-	-	-	-	-	-
Pleasant View	-	-	-	-	-	-	-	-
Portland	8,330	17,945	29,053	37,583	35,648	35,684	35,842	35,406
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
Rocky Top	-	-	-	-	-	-	-	-
Rogersville	-	-	-	-	-	7,318	14,955	22,691
Rossville	-	-	-	-	-	-	-	-
Rutherford	-	-	-	-	-	-	-	-
Rutledge	-	-	-	-	-	-	-	-
Saltillo	-	-	-	-	-	-	-	-
Samburg	-	-	-	-	-	-	-	-
Sardis	-	-	-	-	-	-	-	-
Saulsbery	-	-	-	-	-	-	-	-
Savannah	-	-	-	-	-	-	-	-
Scotts Hill	-	-	-	-	-	-	-	-
Selmer	-	-	-	-	-	-	-	-
Sevierville	-	-	-	-	-	-	-	-
Sharon	-	-	-	-	-	-	-	-
Shelbyville	-	-	-	-	-	-	-	-
Signal Mountain	-	-	-	-	-	-	-	-
Silerton	-	-	-	-	-	-	-	-
Slayden	-	-	-	-	-	-	-	-
Smithville	-	-	-	-	-	-	-	-
Smyrna	-	-	-	-	-	-	-	-
Sneedville	-	-	-	-	-	-	-	-
Soddy Daisy	-	-	-	-	-	-	-	-
Somerville	-	-	-	-	-	-	-	-
South Carthage	-	-	-	-	-	-	-	-
South Fulton	-	-	-	-	-	-	-	-

**Appendix F: Impact Payments Distributed to Cities in Areas Affected by TVA Construction
by Tennessee Fiscal Year (continued)**

City	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15
South Pittsburg	-	-	-	-	-	-	-	-
Sparta	-	-	-	-	-	-	-	-
Spencer	-	-	-	-	-	-	-	-
Spring City	-	-	-	10,613	20,133	30,175	41,111	40,611
Spring Hill	-	-	-	-	-	-	-	-
Springfield	-	-	-	-	-	-	-	-
St. Joseph	-	-	-	-	-	-	-	-
Stanton	-	-	-	-	-	-	-	3,333
Stantonville	-	-	-	-	-	-	-	-
Sunbright	-	-	-	-	-	-	-	-
Surgoinsville	-	-	-	-	-	2,982	6,094	9,246
Sweetwater	-	-	-	3	1,129	4,512	18,443	18,218
Tazewell	-	-	-	-	-	-	-	-
Tellico Plains	-	-	-	0.44	165	661	2,700	2,668
Tennessee Ridge	-	-	-	-	-	-	-	-
Thompson's Station	-	-	-	-	-	-	-	-
Three Way	-	-	-	-	-	-	-	-
Tiptonville	-	-	-	-	-	-	-	-
Toone	-	-	-	-	-	-	-	-
Townsend	-	-	-	-	-	-	-	-
Tracy City	-	-	-	-	-	-	-	-
Trenton	-	-	-	-	-	-	-	-
Trezevant	-	-	-	-	-	-	-	-
Trimble	-	-	-	-	-	-	-	-
Troy	-	-	-	-	-	-	-	-
Tullahoma	-	-	-	-	-	-	-	-
Tusculum	-	-	-	-	-	-	-	-
Unicoi	-	-	-	-	-	-	-	-
Union City	-	-	-	-	-	-	-	-
Vanleer	-	-	-	-	-	-	-	-
Viola	-	-	-	-	-	-	-	-
Vonore	-	-	-	0.73	277	1,107	4,523	4,468
Walden	-	-	-	-	-	-	-	-
Wartburg	-	-	-	-	-	-	-	-
Wartrace	-	-	-	-	-	-	-	-
Watauga	-	399	430	418	396	396	-	-
Watertown	-	-	-	-	-	-	-	-
Waverly	-	-	-	-	-	-	-	-
Waynesboro	-	-	-	-	-	-	-	-
Westmoreland	1,727	3,466	5,611	7,258	6,884	6,891	6,887	6,804
White Bluff	-	-	-	-	-	-	-	-
White House	4,314	9,140	14,797	19,142	18,157	16,588	16,579	16,377
White Pine	-	-	-	-	-	-	-	-
Whiteville	-	-	-	-	-	-	-	-
Whitwell	-	-	-	-	-	-	-	-
Williston	-	-	-	-	-	-	-	-
Winchester	-	-	-	-	-	-	-	-
Winfield	-	-	-	-	-	-	-	-
Woodbury	-	-	-	-	-	-	-	-

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

City	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15
Woodland Mills	-	-	-	-	-	-	-	-
Yorkville	-	-	-	-	-	-	-	-
Total	\$ 790,411	\$ 979,554	\$ 1,266,098	\$ 1,625,188	\$ 1,731,456	\$ 2,053,041	\$ 1,480,559	\$ 1,657,675

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 Commission staff and are reported in appendix as a single total.

Source: Tennessee Department of Revenue.

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 Commission staff and are reported in appendix as a single total.

Appendix G: TVA 2019 Integrated Resource Plan Recommendations by Resource Type

Coal: Continue with announced plans to retire Paradise in 2020 and Bull Run in 2023. Evaluate retirements of up to 2,200 MW of additional coal capacity if cost-effective.

Hydro: All portfolios reflect continued investment in the hydro fleet to maintain capacity. Consider additional hydro capacity where feasible.

Energy Efficiency: Achieve savings of up to 1,800 MW by 2028 and up to 2,200 MW by 2038. Work with our local power company partners to expand programs for low-income residents and refine program designs and delivery mechanisms with the goal of lowering total cost.

Demand Response: Add up to 500 MW of demand response by 2038 depending on availability and cost of the resource.

Nuclear: Pursue option for second license renewal of Browns Ferry for an additional 20 years. Continue to evaluate emerging nuclear technologies including Small Modular Reactors as part of technology innovation efforts.

Wind: Existing wind contracts expire in the early 2030s. Consider the addition of up to 1,800 MW of wind by 2028 and up to 4,200 MW by 2038 if cost effective.

Storage: Add up to 2,400 MW of storage by 2028 and up to 5,300 MW by 2038. Additions may be a combination of utility and distributed scale. The trajectory and timing of additions will be highly dependent on the evolution of storage technologies.

Gas Combustion Turbine: Evaluate retirements of up to 2,000 MW of existing combustion turbines if cost effective. Add up to 5,200 MW of combustion turbines by 2028 and up to 8,600 MW by 2038 if a high level of load growth materializes. Future CT needs are driven by demand for electricity, solar penetration, and evolution of other peaking technologies.

Gas Combined Cycle: Add between 800 and 5,700 MW of combined cycle by 2028 and up to 9,800 MW by 2038 if a high level of load growth materializes. Future CC needs are driven by demand for electricity and gas prices, as well as by solar penetration that tends to drive CT instead of CC additions.

Solar: Add between 1,500 and 8,000 MW of solar by 2028 and up to 14,000 MW by 2038. Additions may be a combination of utility and distributed scale. Future solar needs are driven by pricing, customer demand, and demand for electricity.

Source: Tennessee Valley Authority 2019c, sections 9-3 and 9-4.