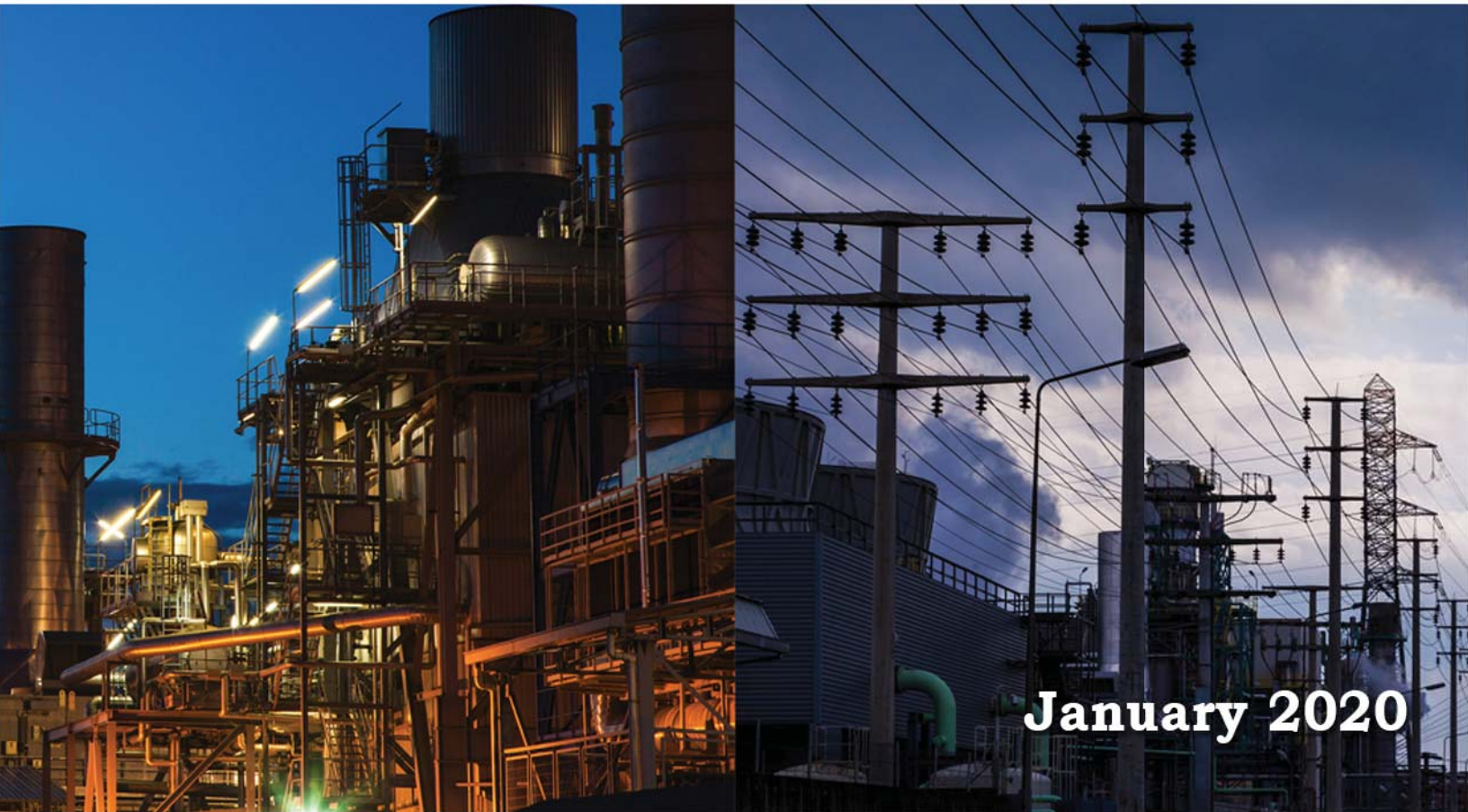
Report of the Tennessee Advisory Commission on Intergovernmental Relations

Tennessee Valley Authority's Payments in Lieu of Taxes

Annual Report to the Tennessee General Assembly



January 2020

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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

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January 17, 2020

The Honorable Bo Watson
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The Honorable Timothy Hill
Chair, House Commerce Committee
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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 report was approved January 17, 2020, and is hereby submitted for your consideration.

Respectfully yours,

Representative Mike Carter
Chairman

Cliff Lippard
Executive Director

The Tennessee Advisory Commission on Intergovernmental Relations

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MEMORANDUM

TO: Commission Members

FROM: Cliff Lippard
Executive Director

DATE: 17 January 2020

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

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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 2020 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. 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.

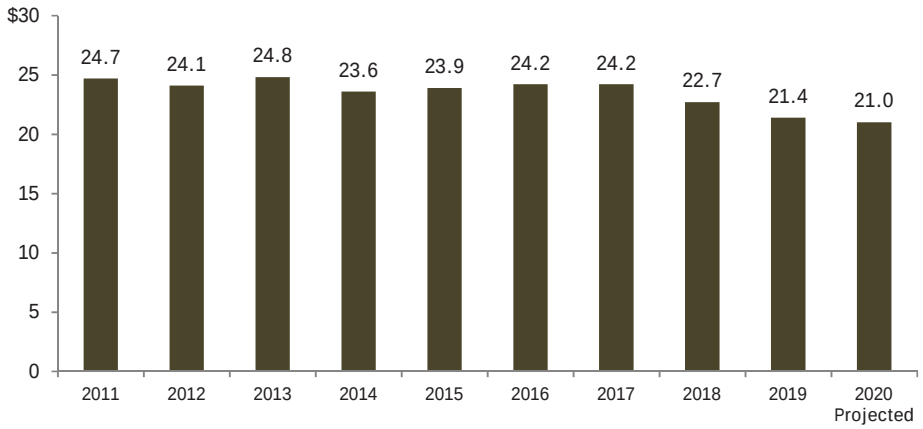
TVA's payments in lieu of taxes to Tennessee are estimated to increase by $6 million for federal fiscal year 2019-20, the third straight year payments have increased.

[1] Tennessee Advisory Commission on Intergovernmental Relations 2010.

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 buying power that $10 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 2011.

Figure 1. Tennessee Valley Authority Statutory Debt at Federal Fiscal Year End

(*in billions*)



Source: Tennessee Valley Authority 2016a; Tennessee Valley Authority 2019a; and email from Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, October 29, 2019.

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

[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.

located, the changes have affected the value of TVA power property, one of two factors determining each state's share of the PILOT. TVA's investments in 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. However, TVA's planned retirement of its Bull Run facility in Anderson County will reduce that plant's value and could reduce Tennessee's share of the PILOT in future years unless it too is offset by increases in the value of TVA power property elsewhere in the state or by net reductions in other states.

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).[5] 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 this year will reduce revenue TVA otherwise would have received, though the full effect of this rebate will depend on the number of distributors that opt into these contracts.

Neither these changes by TVA nor the possibility that one of Tennessee's distributors—Memphis Light, Gas and Water—might leave the TVA system appear to warrant legislative action at this time but should continue to be monitored.

Tennessee receives more than 67% of the payments in lieu of taxes TVA distributes to states in the region, a percentage that has increased almost every year since 2008-09.

TVA's Payments in Lieu of Taxes Increase for Third Straight Year

TVA's actual payments in lieu of taxes for federal fiscal year 2018-19 amounted to $548 million, of which $367 million was paid to Tennessee governments, including $3.4 million in direct payments to counties. This was an increase of $24 million over payments to all states in the previous fiscal year.[6] Payments for the current fiscal year, federal fiscal year 2019-20, are estimated to increase $4 million to a total of $552 million because

[5] Tennessee Valley Authority 2019c.
[6] Tennessee Valley Authority 2019h.

of an increase in wholesale rates, which was partially offset by decreased sales resulting from milder weather.[7]

Payments to Tennessee are estimated to increase $6 million to a total of $373 million, of which $3.4 million will again be paid directly to counties, in federal fiscal year 2019-20. Moreover, Tennessee's percentage of the Authority's overall payments increased primarily because TVA accelerated depreciation of the last remaining coal-fired unit at its Paradise facility in Kentucky, which it plans to retire by the end of 2020. This decreased the value of TVA power property in that state relative to the other states in the region.[8]

Total payments are based on 5% of prior-year gross proceeds[9] from power sales, and funds are divided among the eight states in which TVA owns power property[10] 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 with the exception of fiscal year 2017-18 has been increasing since 2008-09. Past increases in this percentage helped offset what would have otherwise been larger decreases in TVA's payments to Tennessee in federal fiscal years 2015-16 and 2016-17. See table 1.

Table 1. Tennessee Valley Authority Revenue Sharing

Distribution to Tennessee by Federal Fiscal Year (in millions)

		2019-20*	2018-19	2017-18	2016-17	2015-16	2014-15
TVA's Overall PILOT		$ 551.7	$ 547.7	$ 523.7	$ 517.1	$ 534.8	$ 542.0
Tennessee's Percent	x	67.58%	67.06%	66.33%	66.54%	65.78%	65.31%
Tennessee's Amount		$ 372.8	$ 367.3	$ 347.4	$ 344.1	$ 351.8	$ 354.0
Direct Payment to Counties	-	3.4	3.4	3.4	3.4	3.4	3.4
Tennessee's Share		$ 369.4	$ 363.9	$ 344.0	$ 340.7	$ 348.5	$ 350.6

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

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

Source: Tennessee Valley Authority.

[7] Tennessee Valley Authority 2019d; and Flessner 2019c. See table 1 for federal fiscal year 2019-20 PILOT estimate provided by TVA.

[8] Telephone interview with Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, October 25, 2019. See table 1 for federal fiscal year 2019-20 PILOT estimate provided by TVA.

[9] 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.

[10] 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.

Tennessee's local governments continue to receive more than 40% of the amount TVA allocates to Tennessee for distribution through the state's own formula. Under Tennessee Code Annotated, Section 67-9-101 et seq., this formula distributes a portion of Tennessee's share to cities and counties with additional payments set aside for local governments in counties with TVA construction. The rest is reserved for the state. Distributions through the formula, which are calculated on a state fiscal year basis, are directly affected by the increasing total payments to Tennessee in federal fiscal year 2019-20 and by TVA construction projects. See appendix B for an explanation of Tennessee's allocation formula.

On a state fiscal year basis, the 2019-20 allocations—excluding impact payments that are set aside for local governments in counties with TVA construction—will increase by $3.9 million for counties, by $1.7 million for cities, and by $4.7 million for the state's own agencies. Impact payments related to TVA construction, however, will decrease by $681 thousand for counties and by $359 thousand for cities because of recent project completions. Combined these amounts result in an overall increase, and they total more than the estimated increase in payments to Tennessee for federal fiscal year 2019-20 because the state's fiscal year begins on July 1, three months earlier than the federal fiscal year. As a result, Tennessee's distribution to local governments and the state for state fiscal year 2019-20 includes TVA's payments for the last three months of federal fiscal year 2018-19, when the PILOT's increase was larger. See appendixes C and D for the distribution to local governments within the state by county and city since state fiscal year 2012-13, excluding impact payments set aside for local governments in counties with TVA construction, which can be found in appendixes E and F.

On a state fiscal year basis, the 2019-20 allocations—excluding impact payments that are set aside for local governments in counties with TVA construction—will increase by $3.9 million for counties, by $1.7 million for cities, and by $4.7 million for the state's own agencies. Impact payments related to TVA construction, however, will decrease by $681 thousand for counties and by $359 thousand for cities because of recent project completions.

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

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

Short-Term System-Management Strategies

TVA meets short-term-demand increases that result from extreme weather by operating additional facilities that are used only in times of high demand, purchasing power from other utilities, and cutting off power to customers with interruptible contracts. These strategies enabled TVA to meet record power demands on January 8, 2015, when demand hit the third highest

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

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

Long-Term System-Management Strategies

TVA's long-term management strategies are laid out in its updated Integrated Resource Plan, which was approved by the TVA Board in August 2019.[18] The update, a response to changes in the utility industry including lower-cost natural gas and renewables as well as decreased demand caused by energy efficiency efforts,[19] analyzed five strategies for meeting demand within six future scenarios (see figure 2).

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

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[11] Tennessee Valley Authority 2015a.
[12] Tennessee Valley Authority 2015c.
[13] Ibid.
[14] Tennessee Valley Authority 2014b.
[15] Flessner 2014.
[16] Tennessee Valley Authority 2011.
[17] Canning, Lampe, and Null 2014.
[18] Tennessee Valley Authority 2019c; and Tennessee Valley Authority "2019 Integrated Resource Plan."
[19] Tennessee Valley Authority 2019e.

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

	SCENARIOS
1	**CURRENT OUTLOOK** which represents TVA's current forecast for these key uncertainties and reflects modest economic growth offset by increasing efficiencies;
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;
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;
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;
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;
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.

	STRATEGIES
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;
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;
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;
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;
E	**PROMOTE RENEWABLES** which incents renewables at all scales (from utility size to residential) to meet growing or existing consumer demand for renewable energy.

Source: Tennessee Valley Authority 2019c.

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,[20] TVA began using new financing methods,[21] 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.[22]

[20] 16 United States Code 831 n-4(a).
[21] US General Accounting Office 2003.
[22] Email from Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, October 29, 2019. For details on existing lease arrangements, see Tennessee Valley Authority 2019b.

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.[23] 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.[24] 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.

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

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

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

This provision causes facilities operated by TVA under leases to be included in the calculation of the value of power property under Section 13, which means that the value of TVA property in a state does not change when TVA sells a facility and then leases it back as the Authority did with Southaven.[25]

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.*

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[23] Tennessee Valley Authority 2009.
[24] Tennessee Valley Authority 2013a.
[25] Moreover, this means that when TVA leases a facility that it did not previously own, such as the Caledonia plant in Mississippi, the value of TVA power property in the state where the facility is located actually increases.

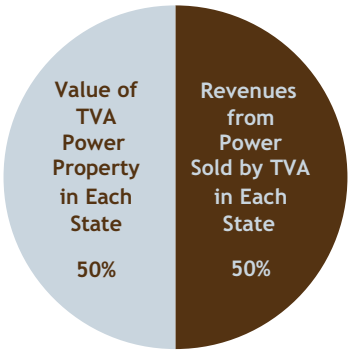
The initial sale-and-lease-back arrangement at the Southaven plant and the Authority's current lease arrangement at the privately owned Caledonia plant, also in Mississippi, illustrate the effect of this second provision. Privately owned plants are subject to state and local taxes. Consequently, the portion of the TVA PILOT paid directly to Mississippi, related to Caledonia, was reduced by approximately $1.2 million in 2018-19 and will again be reduced by an estimated $1.2 million in 2019-20.[26] This works much like the $3+ million in direct payments TVA makes to counties in Tennessee. Direct payments are taken off the top of TVA's PILOT to each state, reducing the amount allocated through the state's statutory formula.

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

TVA chose a somewhat different leasing strategy to raise funds for generating expansions in Tennessee without approaching its debt ceiling. Thus far, arrangements in Tennessee have been lease-and-lease-back agreements, which do not jeopardize the amount of the PILOT controlled by Tennessee's allocation formula. An example is the natural gas combined cycle plant built between 2010 and 2012 in Hawkins County next to the John Sevier fossil plant and leased to a private company in January 2012. The company paid TVA $1 billion for the lease and then leased the plant back to TVA for 30 years.[27] 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.[28]

Currently, TVA has no reported plans for any new lease arrangements in Tennessee, including sale-lease-back arrangements that would affect

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



[26] Email from Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, October 29, 2019; and Schoolfield 2017.
[27] Tennessee Valley Authority 2013a.
[28] Tennessee Valley Authority 2013b.

the state's share of the Authority's PILOT, in the short-term.[29] 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.[30]

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.[31]

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

In April 2015, TVA purchased Quantum Utility Generation's Choctaw combined-cycle natural gas plant near Ackerman, Mississippi. Although the purchase used traditional forms of financing, the acquisition allows for future ownership by Seven States Power Corporation, which could affect the PILOT depending on the type of sale or lease arrangement adopted.[32]

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.[33]

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.[34] 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

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[29] Email from Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, October 29, 2019.
[30] Tennessee Valley Authority 2019b.
[31] Tennessee Valley Authority 2013a.
[32] Tennessee Valley Authority 2015b.
[33] Email from Stephen Schoolfield, senior program manager-taxes, Tennessee Valley Authority, January 6, 2016.
[34] Email from Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, October 29, 2019.

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. And as discussed above, TVA has already accelerated depreciation on the lone remaining coal-fired unit at its Paradise plant, which it plans to retire by December 2020, decreasing the value of TVA power property in that state relative to others in the region, including Tennessee.[35]

Future changes, however, could reduce Tennessee's share of TVA power property and the PILOT—which last occurred in 2017-18 when TVA's investments in new natural gas-fired units at Paradise shifted payments toward Kentucky[36]—unless they are offset by increases in the value of TVA power property from investments in Tennessee or by net reductions in other states. In particular, TVA has announced it will retire the lone coal-fired unit at its Bull Run plant in Anderson County by December 2023.[37]

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.

Shifts involving other types of power property similarly could affect the share of TVA's PILOT that each state and county receives. For example, TVA has announced plans to relocate its power control center from an existing facility in Hamilton County to a new facility to be built in Meigs County. To the extent that investment in the new facility increases the value of TVA power property in Tennessee relative to other states, it would shift the balance of the PILOT toward Tennessee. Moreover, because a county's direct payments from TVA are based on the power property TVA owns in it, the planned relocation has already resulted in an increase in direct payments to Meigs County for the land TVA has purchased there for the new facility. 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.[38]

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[35] Tennessee Valley Authority 2017b; Tennessee Valley Authority 2018a; Tennessee Valley Authority 2016f; Flessner 2017; 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; and Tennessee Valley Authority 2019b.

[36] Email from Stephen Schoolfield, senior program manager-taxes, Tennessee Valley Authority, January 11, 2018.

[37] Tennessee Valley Authority 2019b.

[38] Email from Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, December 13, 2018; and email from Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, December 2, 2019.

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.[39] 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.

Improvements in energy efficiency could reduce TVA revenue and the PILOT for all states if the amount of electricity consumed doesn't continue to grow with the population and the economy.

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

> consistent with national trends, energy demand in the areas served by TVA . . . has been essentially flat over the past five years. TVA anticipates this trend to continue as technological advances, consumer demand for generation, energy management technologies, and distributed energy increase. To accommodate this trend, TVA began working . . . on its long-term pricing and product development strategies in the fall of 2013. . . . At its May 10, 2018 meeting, the TVA Board approved a change to the structure of its wholesale electric power rates.[40]

TVA's previous wholesale rate structure included a

- demand charge, based on a utility's peak monthly demand;
- energy charge, based on the kilowatt-hours used; and a
- separate adjustment for fuel costs.[41]

The new rate structure adds a grid access charge, which TVA says will "better recover fixed costs" of providing electricity and "reduce the variability in revenues caused by weather."[42] Some environmental and consumer groups have criticized the new structure, saying that it reduces the potential savings to consumers from energy conservation and renewable energy and that it is "disproportionately burdensome to low-energy users and low-income ratepayers."[43] According to TVA, the change

[39] 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.
[40] Tennessee Valley Authority 2018a.
[41] Ibid.
[42] Ibid.
[43] Flessner 2018c; and Flessner 2018a.

is intended to be revenue neutral, and the grid access charge will be "offset by a reduction to the energy charge."[44]

The new rate structure did not result in major changes to the PILOT for federal fiscal year 2019-20. Of the 154 municipal utilities and electric cooperatives in the region that purchase power from TVA, 79 switched to the new rate structure in October 2018, while the remainder switched in October 2019. TVA's PILOT is based on power revenue from the previous federal fiscal year, so any effects from the switch by the remaining distributors would not be seen until federal fiscal year 2020-21. Because the new rate structure is intended to be revenue neutral, TVA does not anticipate that it will result in substantive changes to either the overall amount of the PILOT or each state's share.[45]

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."[46] 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.[47]

Rebates in TVA's new long-term wholesale power contract for its distributors will reduce TVA's PILOT; 131 of 154 distributors have opted into the new contracts.

The rebates in these new long-term contracts will reduce revenue TVA otherwise would have received, and they will reduce TVA's PILOT because they will be credited prior to TVA calculating its gross revenue from power sales.[48] The full effect of the rebates, however, will depend on the number of distributors that opt into these contracts. At the end of the most recent federal fiscal year, 131 of TVA's 154 distributors had signed the new contracts.[49] If all distributors were to opt in, TVA's gross revenue reportedly would decrease by up to $225 million,[50] and based on Commission staff calculations, the overall PILOT would decrease by up to $11.3 million for the federal fiscal year, while Tennessee's share would decrease by up to $7.6 million. Distributions through the state's formula would decrease by up to $3.8 million for the state, $2.6 million for counties, and $1.1 million for cities, based on Commission staff calculations and distributions in state fiscal year 2019-20.

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[44] Tennessee Valley Authority 2018a.
[45] Telephone interview with Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, October 25, 2019; Tennessee Valley Authority 2018a; and email from Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, October 29, 2019.
[46] Tennessee Valley Authority 2019b.
[47] Tennessee Valley Authority 2019b; and Flessner 2019b.
[48] Telephone interview with Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, October 15, 2019.
[49] Tennessee Valley Authority 2019b.
[50] Flessner 2019b.

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. 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.[51] 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.[52]

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.

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-

[51] Telephone interview with Bryan Johnson, senior program manager-taxes, Tennessee Valley Authority, October 15, 2019.
[52] Email from Christin Lotz, research director, Tennessee Department of Revenue, October 28, 2019.

> 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.[53]

Distributors can opt out of their contracts with TVA subject to termination notice requirements of five, 10, or 20 years. Eighteen distributors have contracts with 5-year notice requirements, five have 10-year requirements, and 131 have 20-year requirements.[54] A handful of distributors have left the TVA system in recent decades,[55] though at least one has since returned.[56]

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.[57] It plans to release recommendations from the study in March 2020.[58] MLGW accounted for 9% of TVA revenue in federal fiscal year 2018-19,[59] 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.

Local governments served by distributors that leave the TVA system after March 8, 1990, would see their PILOT revenue decrease.

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.[60]

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

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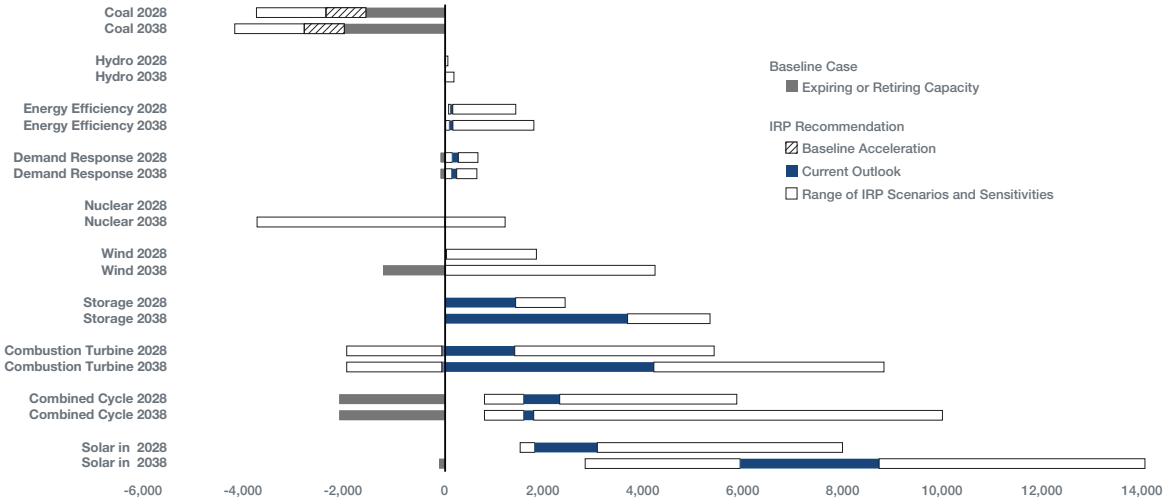
[53] Tennessee Valley Authority 2019b. Also see 16 US Code 831n-4; 16 US Code 824j; and 16 US Code 824k(j).
[54] Tennessee Valley Authority 2019b; the contracts include similar notice requirements for TVA.
[55] Kentucky Municipal Power Agency 2018.
[56] McGee 2008.
[57] Tennessee Valley Authority 2019b; and Memphis Light, Gas and Water 2019.
[58] Siemens 2019.
[59] Tennessee Valley Authority 2019b.
[60] Email from Christin Lotz, research director, Tennessee Department of Revenue, October 28, 2019.

of revenue distributed through the formula based on population, county acreage, or TVA acreage.[61] 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.

The Shift Away from Coal: Environmental and Business Reasons

Since the 1950s, coal-fired plants have been TVA's largest single source of power, but because of their age and changing air-quality requirements, the Authority is shifting emphasis from coal to other power sources (see figure 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

[61] 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.

entered into two settlements in April 2011 in which it agreed to retire 18 of its 59 coal-fired units before 2018. All of the affected units were retired prior to January 2018. They include two of four coal-fired units at TVA's John Sevier plant in Hawkins County, which as noted above were replaced by a combined-cycle gas plant on an adjacent site, all 10 coal-fired units at its Johnsonville plant in Humphreys County, and six of eight coal-fired units at its Widows Creek plant in Alabama.[62] See table 2.

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

Fossil Plant	Units Affected	Existing Scrubbers and SCRs*	Requirements Under Environmental Agreements	Retirements Implemented by TVA as a Result of Environmental Agreements
John Sevier	2 of 4	None	• Retire two units no later than December 31, 2012	• Retired Units 1 and 2 on December 31, 2012
Johnsonville	10 of 10	None	• Retire six units no later than December 31, 2015 • Retire four units no later than December 31, 2017	• Retired Units 5-10 on December 31, 2015 • Retired Units 1-4 on December 31, 2017
Widows Creek	6 of 8	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	• 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 2014a; Tennessee Valley Authority 2017b; and Tennessee Valley Authority 2018a.

Fossil Plant Retirements for Business Reasons

Because of the competitive advantage over coal of other methods of generating electricity, TVA has retired 15 additional coal-fired units since 2013 and plans to retire two more by the end of 2023. The units retired for business reasons include the two remaining coal-fired units at TVA's John Sevier plant in Hawkins County and one of the 10 units at its Shawnee plant in Kentucky in 2014, the last two units at its Widows Creek plant in Alabama in 2015, and all five coal-fired units at its Colbert plant in Alabama in 2016. TVA retired two of the three coal-fired units at its Paradise plant in Kentucky in 2017 and all three coal-fired units at the Allen plant in Memphis in 2018 following the completion of new natural gas-fired units at each site. TVA plans to retire the remaining coal-fired unit at Paradise by December 2020 and the lone unit at its Bull Run plant in Anderson County by December 2023.[63] See table 3.

[62] Tennessee Valley Authority 2014a; Tennessee Valley Authority 2017b; and Tennessee Valley Authority 2018a.

[63] Tennessee Valley Authority 2014a; Tennessee Valley Authority 2017b; Tennessee Valley Authority 2018a; and Tennessee Valley Authority 2019b.

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

Fossil Plant	Units Affected	Existing Scrubbers and SCRs*	Requirements Under Environmental Agreements	Retirements Implemented or planned by TVA for Business Reasons
Allen	3 of 3	SCRs on all three units	• Install scrubbers or retire no later than December 31, 2018	• 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	• Continuously operate existing emission control equipment	• Retire lone unit by December 2023
Colbert	5 of 5	SCR on Unit 5	• 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	• Retired Units 1-5 on April 16, 2016
John Sevier	2 of 4	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	• Retired Units 3 and 4 on June 25, 2014
Paradise	3 of 3	Scrubbers and SCRs on all three units	• Upgrade scrubbers on Units 1 and 2 no later than December 31, 2012 • Continuously operate emission control equipment on Units 1-3	• 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 • Retire Unit 3 of coal-fired plant by December 2020
Shawnee	1 of 10	None	• Control, convert, or retire Units 1 and 4 no later than December 31, 2017	• Retired Unit 10 on June 30, 2014
Widows Creek	2 of 8	Scrubbers and SCRs on Units 7 and 8	• Continuously operate existing emissions control equipment on Units 7 and 8	• Retired Units 7 and 8 on September 30, 2015

* Selective catalytic reduction systems ("SCR")

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

TVA plans to continue operating 24 other coal-fired units. These include both units at its Cumberland plant in Stewart County, all four units at its Gallatin plant in Sumner County, all nine units at its Kingston plant in Roane County, and the nine remaining units at its Shawnee plant in Kentucky. TVA decided to add pollution control devices to two of the units at Shawnee and all four units at Gallatin rather than retire them—TVA had the option to control or retire these units under the environmental settlements it agreed to in 2011 and has now completed all requirements of these settlements.[64] See table 4.

[64] Tennessee Valley Authority 2017b; and Tennessee Valley Authority 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*	Requirements Under Environmental Agreements	Other Actions Taken or Planned
Cumberland	2 of 2	Scrubbers and SCRs on both units	• Continuously operate existing emission control equipment	• Continuously operate existing emission control equipment
Gallatin	4 of 4	None	• Control, convert, or retire all four units no later than December 31, 2017	• Added scrubbers and SCRs on all four units
Kingston	9 of 9	Scrubbers and SCRs on all nine units	• Continuously operate existing emission control equipment	• Continuously operate existing emission control equipment
Shawnee	9 of 10	None	• Control, convert, or retire Units 1 and 4 no later than December 31, 2017	• Added scrubbers and SCRs on Units 1 and 4

* Selective catalytic reduction systems ("SCR")

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

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.[65] While TVA cited no need for another large nuclear facility when it announced the sale of its unfinished Bellefonte nuclear plant in Alabama in November 2016,[66] 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—the application was approved in 2019, though TVA says it has "no plans to build [small modular reactors] at this time."[67] TVA has contracts to purchase electricity from eight wind farms.[68] It has announced several agreements since 2015 to purchase solar power from projects being developed in Tennessee and Alabama,[69] and it completed construction of a solar facility at its Allen plant in Memphis in 2017.[70]

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

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

[65] Tennessee Valley Authority 2016f.
[66] Tennessee Valley Authority 2016b.
[67] Tennessee Valley Authority 2016e; and Flessner 2019a.
[68] Tennessee Valley Authority 2019b.
[69] Tennessee Valley Authority 2016c; Tennessee Valley Authority 2016d; Tennessee Valley Authority 2018b; Tennessee Valley Authority 2019f; and Tennessee Valley Authority 2019g.
[70] Tennessee Valley Authority 2017a.

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.

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

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.[71] Two other programs—Distributed Solar Solutions and the Renewable Standard Offer—purchase power from medium-sized projects.[72] Although TVA continues to purchase electricity from existing participants in these programs, it is no longer accepting new applicants for any of them.[73]

[71] 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.
[72] Tennessee Valley Authority 2017b; Tennessee Valley Authority "Guidelines for Renewable Standard Offer"; and Tennessee Valley Authority "Guidelines for Distributed Solar Solutions (2017)."
[73] 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.

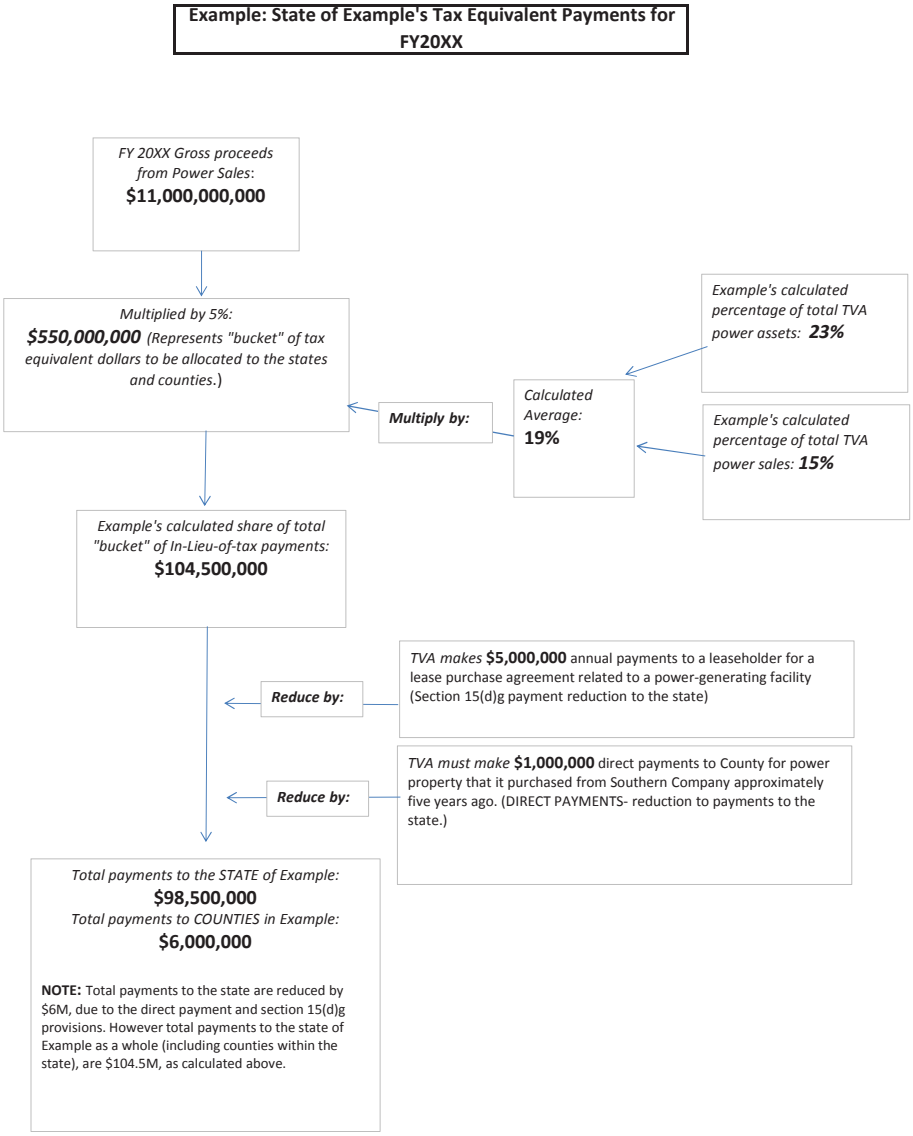
Section 15(d)g of the TVA Act:

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)



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

Source: Schoolfield 2017.

Appendix B: Tennessee's Allocation Formula

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

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

Tennessee Valley Authority (Tennessee State Revenue Sharing Act)

Title 67, Chapter 9, Part 1

From the Allocation of TVA Payments in Lieu of Taxes in Tennessee

(after direct payments to counties and 1977-78 base payment to state, counties, and cities)

	Basis of Apportionment (§67-9-101)	Proration to Counties and Municipalities (§67-9-102)
Paid to areas with TVA construction *(remainder allocated to CTAS, TACIR and Tennessee Central Economic Authority)*	3%	
Retained by the State	48.5%	
Paid to Local Governments	48.5%	
Counties—70% of Local Share		
·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)*
Municipalities—30% of Local Share Based on Percent of State Population		*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	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13
Anderson	$ 1,240,594	$ 1,209,200	$ 1,148,257	$ 1,140,471	$ 1,173,627	$ 1,157,568	$ 1,107,511	$ 1,136,571
Bedford	871,080	853,927	806,433	800,352	826,171	813,673	774,647	797,382
Benton	1,856,422	1,822,570	1,725,938	1,714,385	1,766,920	1,741,324	1,662,030	1,708,401
Bledsoe	545,815	525,639	496,430	492,676	508,555	500,872	476,869	490,848
Blount	1,593,273	1,538,002	1,454,729	1,443,998	1,489,557	1,467,505	1,398,641	1,438,757
Bradley	1,164,376	1,121,118	1,059,194	1,051,291	1,084,953	1,068,668	1,017,788	1,047,433
Campbell	1,428,757	1,392,427	1,316,850	1,307,542	1,348,530	1,328,569	1,266,520	1,302,746
Cannon	405,909	391,265	370,065	367,340	378,865	373,289	355,867	366,014
Carroll	865,172	832,797	786,049	780,040	805,454	793,157	754,741	777,115
Carter	927,466	879,608	831,239	825,098	851,393	838,655	798,916	822,077
Cheatham	614,263	591,333	558,137	553,870	571,916	563,184	535,905	551,793
Chester	441,037	424,574	400,739	397,676	410,633	404,364	384,777	396,185
Claiborne	1,025,956	1,005,159	950,425	943,604	973,360	958,919	913,968	940,195
Clay	306,230	294,798	278,249	276,122	285,118	280,766	267,166	275,086
Cocke	822,801	795,345	754,642	749,426	771,553	760,844	727,398	746,880
Coffee	1,066,873	1,027,328	969,841	962,603	993,854	978,703	931,481	959,016
Crockett	397,448	382,618	361,141	358,381	370,056	364,407	346,771	357,050
Cumberland	1,155,766	1,112,664	1,050,235	1,042,213	1,076,151	1,059,729	1,006,632	1,036,458
Davidson	5,088,979	4,900,954	4,628,778	4,593,798	4,741,771	4,670,173	4,446,488	4,576,766
Decatur	691,692	658,650	624,479	620,217	638,793	629,779	601,716	618,088
DeKalb	454,404	438,393	413,787	410,625	424,001	417,529	397,308	409,085
Dickson	897,964	864,514	816,079	809,854	836,184	823,445	783,642	806,824
Dyer	847,311	815,685	769,896	764,011	788,979	776,934	739,302	761,219
Fayette	1,051,342	1,011,838	955,036	947,735	978,614	963,673	916,995	944,181
Fentress	676,975	651,704	615,119	610,417	630,305	620,682	590,617	608,127
Franklin	1,371,158	1,183,321	1,120,924	1,113,088	1,147,012	1,130,560	1,079,303	1,109,196
Gibson	1,018,457	980,440	925,401	918,328	948,247	933,771	888,542	914,884
Giles	888,733	855,804	808,090	801,957	827,896	815,345	776,135	798,972
Grainger	1,071,128	1,036,650	983,113	976,602	1,005,707	991,550	947,604	973,279
Greene	1,219,325	1,172,530	1,107,440	1,099,096	1,134,480	1,117,355	1,063,869	1,095,024
Grundy	499,725	481,224	454,442	450,999	465,559	458,514	436,505	449,323
Hamblen	981,718	946,369	895,606	889,305	916,902	903,504	861,818	886,145
Hamilton	3,760,660	3,658,020	3,458,866	3,433,751	3,542,017	3,489,550	3,326,019	3,421,361
Hancock	294,472	283,481	267,569	265,524	274,174	269,989	256,913	264,528
Hardeman	933,732	899,025	848,556	842,070	869,506	856,231	814,757	838,912
Hardin	1,175,850	1,146,888	1,085,003	1,077,274	1,110,917	1,094,593	1,043,767	1,073,418
Hawkins	1,393,622	1,356,948	1,291,118	1,282,909	1,318,698	1,301,342	1,247,268	1,278,803
Haywood	735,421	707,991	668,267	663,010	684,599	674,151	641,516	660,525
Henderson	933,604	893,489	843,627	837,362	864,648	851,486	810,501	834,487
Henry	1,875,847	1,777,904	1,682,427	1,670,799	1,722,705	1,697,459	1,619,085	1,664,871
Hickman	866,351	834,577	788,690	782,792	807,737	795,667	757,959	779,742
Houston	454,519	440,770	417,012	414,070	426,986	420,714	401,205	412,591
Humphreys	1,687,868	1,648,788	1,562,903	1,552,477	1,599,168	1,576,452	1,505,955	1,547,147
Jackson	422,445	406,675	383,846	380,911	393,322	387,317	368,556	379,483
Jefferson	1,100,173	1,055,684	1,006,702	1,000,580	1,027,208	1,014,289	974,060	997,527
Johnson	543,332	521,881	494,271	490,759	505,769	498,499	475,815	489,034
Knox	3,870,233	3,735,811	3,532,625	3,506,590	3,617,045	3,564,161	3,397,172	3,493,517
Lake	242,296	233,251	220,157	218,474	225,592	222,148	211,388	217,655
Lauderdale	721,589	694,284	655,321	650,313	671,477	661,229	629,212	647,859
Lawrence	982,111	945,560	892,645	885,845	914,610	900,692	857,208	882,533

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

County	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13
Lewis	400,798	385,957	364,473	361,711	373,390	367,739	350,084	360,367
Lincoln	873,683	841,293	794,397	788,370	813,863	801,528	762,990	785,435
Loudon	1,212,826	1,189,182	1,137,478	1,131,078	1,159,187	1,145,537	1,103,081	1,127,861
Macon	497,620	479,044	452,186	448,729	463,349	456,275	434,174	447,046
Madison	1,324,771	1,275,651	1,204,133	1,194,946	1,233,824	1,214,961	1,156,193	1,190,421
Marion	1,302,034	1,242,589	1,180,630	1,172,933	1,206,616	1,190,264	1,139,383	1,169,001
Marshall	643,170	619,527	585,272	580,870	599,491	590,481	562,331	578,726
Maury	1,281,766	1,249,817	1,180,372	1,171,466	1,209,217	1,190,947	1,133,882	1,167,122
McMinn	977,685	944,436	895,732	889,511	915,988	903,169	863,151	886,466
McNairy	806,027	775,931	732,372	726,774	750,453	738,589	702,813	723,650
Meigs	849,100	833,143	789,534	779,845	803,409	791,935	756,365	777,159
Monroe	1,743,996	1,679,319	1,596,020	1,585,671	1,630,983	1,608,999	1,540,592	1,580,511
Montgomery	1,828,069	1,759,965	1,661,232	1,648,543	1,702,216	1,676,246	1,595,111	1,642,365
Moore	248,748	216,533	204,769	203,279	209,673	206,575	196,911	202,544
Morgan	737,230	709,774	670,131	664,854	686,398	675,974	643,406	662,374
Obion	833,471	802,361	757,329	751,541	776,021	764,176	727,170	748,723
Overton	635,041	611,335	577,016	572,606	591,262	582,235	554,033	570,458
Perry	729,051	703,299	665,771	661,077	681,478	671,581	640,758	658,738
Pickett	211,430	203,537	192,111	190,643	196,854	193,849	184,459	189,928
Polk	866,641	832,290	794,851	790,102	810,455	800,594	769,837	787,770
Putnam	957,698	921,975	870,259	863,646	891,761	878,158	835,657	860,410
Rhea	1,259,320	1,219,463	1,157,939	1,150,431	1,183,879	1,167,614	1,117,108	1,146,610
Roane	1,697,315	1,687,870	1,604,918	1,594,781	1,639,940	1,620,023	1,551,797	1,591,648
Robertson	999,490	962,217	908,258	901,323	930,656	916,354	872,017	897,839
Rutherford	2,571,699	2,476,705	2,338,930	2,321,247	2,396,046	2,359,854	2,246,782	2,312,637
Scott	740,572	712,926	672,904	667,760	689,517	678,990	646,101	665,256
Sequatchie	403,100	388,389	367,092	364,355	375,932	370,330	352,829	363,022
Sevier	1,374,699	1,323,002	1,249,557	1,240,164	1,280,090	1,260,762	1,200,413	1,235,571
Shelby	7,702,525	7,422,378	7,016,977	6,964,888	7,185,270	7,078,634	6,745,491	6,939,521
Smith	524,664	510,067	482,866	479,384	494,172	487,014	464,662	477,683
Stewart	3,066,904	2,946,487	2,791,312	2,772,961	2,857,324	2,816,181	2,688,874	2,763,366
Sullivan	1,924,751	1,891,853	1,788,290	1,775,264	1,831,340	1,804,161	1,719,425	1,768,826
Sumner	1,809,384	1,739,358	1,642,536	1,624,332	1,676,777	1,651,393	1,572,119	1,618,297
Tipton	937,835	902,844	852,219	845,712	873,233	859,917	818,315	842,544
Trousdale	230,477	223,026	211,912	210,501	216,542	213,616	204,485	209,807
Unicoi	336,068	323,508	305,365	303,033	312,896	308,124	293,214	301,897
Union	1,177,314	1,126,542	1,069,374	1,062,503	1,093,583	1,078,448	1,031,532	1,058,960
Van Buren	365,362	353,285	333,888	331,407	341,952	336,847	320,909	330,195
Warren	840,784	796,824	754,461	749,031	772,074	760,921	726,089	746,379
Washington	1,277,167	1,231,386	1,163,691	1,155,001	1,191,801	1,173,993	1,118,365	1,150,766
Wayne	942,190	906,454	855,624	849,097	876,736	863,361	821,581	845,916
Weakley	898,081	864,107	815,671	809,450	835,781	823,040	783,237	806,419
White	639,166	618,027	583,823	579,453	598,047	589,045	560,941	577,315
Williamson	1,978,126	1,902,192	1,796,604	1,783,034	1,840,433	1,812,660	1,725,892	1,776,427
Wilson	1,461,825	1,407,649	1,329,458	1,319,411	1,361,917	1,341,350	1,277,095	1,314,518
Total	**$ 109,601,944**	**$ 105,652,995**	**$ 99,936,128**	**$ 99,201,346**	**$ 102,309,124**	**$ 100,805,418**	**$ 96,107,481**	**$ 98,843,609**

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

City	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13
Adams	$ 7,786	$ 7,496	$ 7,178	$ 7,142	$ 7,428	$ 7,337	$ 7,003	$ 7,219
Adamsville	27,258	26,248	25,139	25,015	26,012	25,693	24,530	25,281
Alamo	30,275	29,149	27,912	27,773	28,886	28,529	27,233	28,071
Alcoa	103,918	100,053	95,807	95,330	99,149	97,925	93,477	96,351
Alexandria	11,881	11,439	10,954	10,899	11,336	11,196	10,687	11,016
Algood	42,986	41,388	39,632	39,434	41,014	40,508	38,667	39,856
Allardt	7,798	7,508	7,189	7,153	7,440	7,348	7,014	7,230
Altamont	12,853	12,375	11,850	11,791	12,263	12,112	11,561	11,917
Ardmore	14,919	14,364	13,755	13,686	14,235	14,059	13,420	13,833
Arlington	162,561	156,516	137,094	136,411	141,876	140,125	133,759	131,338
Ashland City	64,277	61,886	51,493	51,236	53,289	52,631	50,240	51,785
Athens	165,670	159,514	152,751	151,990	158,074	156,125	149,039	153,617
Atoka	116,525	112,191	107,430	94,630	98,422	97,207	92,791	95,644
Atwood	11,537	11,108	10,636	10,583	11,007	10,872	10,378	10,697
Auburntown	3,309	3,186	3,050	3,035	3,157	3,118	2,976	3,068
Baileyton	5,301	5,104	4,887	4,863	5,058	4,995	4,768	4,915
Baneberry	5,928	5,708	5,466	5,438	5,656	5,586	5,333	5,497
Bartlett	694,770	668,931	640,545	637,351	662,887	654,705	604,217	622,796
Baxter	16,789	16,164	15,478	15,401	16,018	15,821	15,102	15,566
Bean Station	37,562	36,165	34,631	34,458	35,839	35,257	33,656	34,303
Beersheba Spring	5,867	5,649	5,409	5,382	5,598	5,529	5,277	5,440
Bell Buckle	6,150	5,921	5,670	5,641	5,868	5,795	5,532	5,702
Belle Meade	35,816	34,484	33,021	32,856	34,172	33,751	32,217	33,208
Bells	29,974	28,859	27,634	27,497	28,598	28,245	26,962	27,791
Benton	17,035	16,401	15,705	15,627	16,253	16,052	15,323	15,794
Berry Hill	11,844	11,404	10,920	10,865	6,302	6,224	5,941	6,124
Bethel Springs	8,831	8,503	8,142	8,101	8,426	8,322	7,944	8,188
Big Sandy	7,530	7,276	6,996	6,964	7,216	7,135	6,842	7,032
Blaine	22,828	21,979	21,046	20,941	21,780	21,511	20,534	21,165
Bluff City	21,765	20,972	20,101	20,003	20,787	20,536	19,623	20,213
Bolivar	66,626	64,148	61,426	61,120	63,569	62,784	59,932	61,774
Braden	3,468	3,339	3,198	3,182	3,309	3,268	3,120	3,216
Bradford	12,913	12,434	11,907	11,848	12,322	12,170	11,618	11,975
Brentwood	539,809	519,734	458,127	455,842	474,106	429,531	410,018	422,625
Brighton	33,639	32,388	31,013	30,859	32,095	31,699	30,259	31,189
Bristol	331,981	319,767	306,349	304,839	316,910	313,042	298,983	308,066
Brownsville	126,750	122,043	116,871	116,289	120,942	119,451	114,032	117,533
Bruceton	18,179	17,502	16,760	16,676	17,344	17,130	16,352	16,855
Bulls Gap	9,077	8,739	8,369	8,327	8,660	8,554	8,165	8,416
Burlison	5,227	5,033	4,819	4,795	4,987	4,926	4,702	4,847
Burns	18,056	17,384	16,646	16,563	17,227	17,014	16,241	16,741
Byrdstown	9,876	9,509	9,106	9,060	9,423	9,307	8,884	9,157
Calhoun	6,027	5,803	5,556	5,529	5,750	5,679	5,421	5,588
Camden	44,057	42,418	40,618	40,416	42,035	41,516	39,630	40,848
Carthage	28,362	27,308	26,149	26,018	27,061	26,727	25,513	26,297
Caryville	28,252	27,201	26,047	25,917	26,955	26,623	25,413	26,195
Cedar Hill	3,862	3,718	3,561	3,543	3,685	3,639	3,474	3,581
Celina	18,388	17,704	16,953	16,868	17,544	17,327	16,540	17,049
Centertown	2,989	2,878	2,755	2,742	2,852	2,816	2,688	2,771
Centerville	44,977	43,310	41,479	41,273	42,921	42,393	40,474	41,714
Chapel Hill	17,773	17,112	16,386	16,304	16,957	16,748	15,987	16,479

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

City	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13
Charleston	8,007	7,709	7,382	7,345	7,639	7,545	7,202	7,424
Charlotte	15,190	14,625	14,004	13,934	14,493	14,314	13,664	14,084
Chattanooga	2,105,311	2,028,614	1,944,355	1,934,875	2,010,675	1,986,387	1,898,099	1,955,139
Church Hill	82,861	79,780	76,394	76,013	79,059	78,083	74,536	76,827
Clarksburg	4,834	4,654	4,456	4,434	4,612	4,555	4,348	4,482
Clarksville	1,634,997	1,574,193	1,507,393	1,499,878	1,559,970	1,540,715	1,470,723	1,515,943
Cleveland	508,544	489,660	468,913	466,579	485,242	479,262	457,524	471,568
Clifton	33,135	31,902	30,549	30,396	31,614	31,224	29,805	30,722
Clinton	123,169	118,667	113,722	113,165	117,614	116,189	111,007	114,355
Coalmont	10,344	9,959	9,537	9,489	9,869	9,747	9,305	9,591
Collegedale	101,864	98,075	93,914	93,445	97,189	95,990	91,629	94,446
Collierville	560,239	539,403	516,514	513,938	534,530	527,932	503,948	519,443
Collinwood	12,078	11,629	11,135	11,080	11,524	11,382	10,864	11,199
Columbia	432,461	416,597	399,169	397,208	412,886	407,863	389,602	401,400
Cookeville	383,176	368,926	353,270	351,509	365,593	361,080	344,676	348,409
Coopertown	52,617	50,660	48,510	48,268	50,202	49,583	47,330	48,785
Copperhill	4,354	4,192	4,014	3,994	4,154	4,103	3,917	4,037
Cornersville	14,686	14,139	13,539	13,472	14,012	13,839	13,210	13,616
Cottage Grove	1,082	1,042	998	993	1,033	1,020	974	1,004
Covington	111,162	107,028	102,486	101,975	106,061	104,752	99,993	103,068
Cowan	21,614	20,819	19,946	19,848	20,633	20,382	19,467	20,058
Crab Orchard	9,249	8,905	8,527	8,485	8,825	8,716	8,320	8,576
Cross Plains	21,081	20,297	19,436	19,339	20,114	19,866	18,963	19,546
Crossville	142,231	136,941	124,984	124,361	129,343	127,747	119,432	123,104
Crump	17,564	16,910	16,193	16,112	16,758	16,551	15,799	16,285
Cumberland City	16,992	16,849	16,693	16,676	16,816	16,771	16,607	16,713
Cumberland Gap	6,076	5,850	5,602	5,574	5,797	5,726	5,465	5,633
Dandridge	35,396	34,110	32,697	32,538	33,809	33,402	31,921	32,878
Dayton	90,997	87,708	84,094	83,688	86,938	85,897	82,110	84,557
Decatur	19,654	18,924	18,121	18,030	18,753	18,521	17,680	18,223
Decaturville	10,739	10,343	9,907	9,858	10,250	10,124	9,668	9,963
Decherd	29,060	27,980	26,794	26,660	27,727	27,385	26,142	26,945
Dickson	178,809	172,159	164,853	164,032	170,604	168,498	160,843	165,789
Dover	17,428	16,780	16,068	15,988	16,629	16,423	15,677	16,159
Dowelltown	4,366	4,204	4,026	4,005	4,166	4,115	3,928	4,048
Doyle	6,605	6,359	6,089	6,059	6,302	6,224	5,941	6,124
Dresden	36,960	35,585	34,075	33,905	35,264	34,828	33,246	34,268
Ducktown	5,842	5,625	5,386	5,359	5,574	5,505	5,255	5,417
Dunlap	59,245	57,042	54,622	54,350	56,527	55,829	53,294	54,932
Dyer	28,793	27,722	26,546	26,413	27,472	27,133	25,900	26,696
Dyersburg	210,874	203,031	194,415	193,446	201,197	198,713	189,686	195,518
Eagleville	7,429	7,153	6,849	6,815	7,088	7,000	6,682	6,888
East Ridge	258,030	248,433	237,891	236,705	246,189	243,150	232,104	239,240
Eastview	8,671	8,349	7,994	7,954	8,273	8,171	7,800	8,040
Elizabethton	175,645	169,161	162,037	161,236	167,644	165,591	158,127	162,949
Elkton	7,109	6,845	6,554	6,522	6,783	6,699	6,395	6,591
Englewood	20,034	19,333	18,563	18,476	19,169	18,947	18,140	18,661
Enville	2,325	2,238	2,143	2,132	2,218	2,191	2,091	2,155
Erin	16,284	15,679	15,013	14,939	15,537	15,345	14,648	15,099
Erwin	75,014	72,225	69,161	68,816	71,573	70,690	67,479	69,553
Estill Springs	27,673	26,733	25,700	25,584	26,513	26,215	25,133	25,832
Ethridge	5,719	5,507	5,273	5,247	5,457	5,389	5,145	5,303
Etowah	42,925	41,329	39,575	39,377	40,955	40,450	38,612	39,799

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

City	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13
Fairview	98,420	94,760	90,739	90,286	90,594	89,476	85,411	88,037
Farragut	278,902	268,529	257,134	255,852	242,633	239,638	228,751	235,785
Fayetteville	84,020	80,898	77,467	77,081	80,167	79,178	75,584	77,906
Finger	3,665	3,529	3,379	3,362	3,497	3,454	3,297	3,398
Forest Hills	61,989	59,684	57,151	56,866	59,144	58,414	55,761	54,875
Franklin	872,269	839,835	804,202	748,991	778,995	769,381	691,474	712,731
Friendship	8,221	7,915	7,580	7,542	7,844	7,747	7,395	7,623
Friendsville	11,229	10,812	10,353	10,301	10,714	10,582	10,101	10,412
Gadsden	5,781	5,566	5,330	5,303	5,515	5,447	5,200	5,360
Gainesboro	11,832	11,392	10,909	10,854	11,289	11,150	10,643	10,970
Gallatin	423,998	408,229	390,906	388,957	355,313	350,927	334,984	345,284
Gallaway	8,364	8,053	7,711	7,672	7,980	7,881	7,523	7,755
Garland	3,813	3,671	3,515	3,498	3,638	3,593	3,430	3,535
Gates	7,958	7,662	7,337	7,300	7,593	7,499	7,158	7,378
Gatlinburg	48,509	46,705	44,723	44,500	46,283	45,712	43,635	44,977
Germantown	493,490	475,137	454,974	452,706	470,844	465,032	443,906	457,555
Gibson	4,871	4,689	4,490	4,468	4,647	4,590	4,381	4,516
Gilt Edge	5,867	5,649	5,409	5,382	5,598	5,529	5,277	5,440
Gleason	17,773	17,112	16,386	16,304	16,957	16,748	15,987	16,479
Goodlettsville	195,819	188,537	180,536	179,636	186,833	184,527	176,144	181,560
Gordonsville	14,919	14,364	13,755	13,686	14,235	14,059	13,420	13,833
Grand Junction	3,997	3,849	3,685	3,667	3,814	3,767	3,596	3,706
Graysville	18,474	17,787	17,032	16,947	17,626	17,408	16,618	17,129
Greenback	13,087	12,600	12,065	12,005	12,486	12,332	11,772	12,134
Greenbrier	79,122	76,180	72,947	72,583	75,491	74,560	71,172	73,361
Greeneville	185,471	178,581	171,012	170,160	176,969	174,788	166,857	171,981
Greenfield	26,837	25,839	24,743	24,619	25,606	25,290	24,141	24,883
Gruetli-Laager	22,299	21,470	20,558	20,456	21,276	21,013	20,058	20,675
Guys	5,732	5,518	5,284	5,258	5,469	5,401	5,156	5,314
Halls	27,735	26,704	25,571	25,443	26,462	26,136	24,948	25,716
Harriman	81,100	78,195	75,004	74,645	77,516	76,596	73,252	75,412
Harrogate	53,982	51,975	49,769	49,521	51,505	50,869	48,558	50,051
Hartsville	29,137	28,054	26,863	26,729	27,800	27,457	26,210	27,016
Henderson	77,597	74,711	71,541	71,184	74,036	73,122	69,800	71,947
Hendersonville	631,846	608,348	582,532	579,628	602,851	595,410	568,360	585,836
Henning	11,623	11,191	10,716	10,662	11,090	10,953	10,455	10,777
Henry	5,707	5,495	5,262	5,235	5,445	5,378	5,134	5,291
Hickory Valley	1,218	1,172	1,123	1,117	1,162	1,147	1,095	1,129
Hohenwald	46,463	44,744	42,856	42,644	44,342	43,798	41,820	43,098
Hollow Rock	8,831	8,503	8,142	8,101	8,426	8,322	7,944	8,188
Hornbeak	6,556	6,312	6,044	6,014	6,255	6,178	5,897	4,835
Hornsby	3,727	3,588	3,436	3,419	3,556	3,512	3,352	3,455
Humboldt	103,958	100,092	95,845	95,367	99,188	97,964	93,513	96,388
Huntingdon	49,013	47,190	45,188	44,963	46,764	46,187	44,089	45,444
Huntland	10,725	10,326	9,888	9,839	10,233	10,107	9,647	9,944
Huntsville	19,470	18,746	17,950	17,861	18,577	18,023	17,204	17,482
Jacksboro	24,845	23,921	22,906	22,792	23,705	23,412	22,349	23,036
Jackson	803,618	773,789	741,019	737,332	766,812	757,366	723,030	745,213
Jamestown	24,095	23,198	22,214	22,103	22,989	22,705	21,674	22,340
Jasper	40,871	39,351	37,681	37,493	38,995	38,514	36,278	37,393
Jefferson City	104,855	100,971	96,705	96,225	100,063	98,833	94,363	92,199
Jellico	28,965	27,888	26,704	26,571	27,636	27,295	26,055	26,856
Johnson City	779,745	750,858	719,123	715,553	744,102	734,954	701,702	723,185

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

City	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13
Jonesborough	62,124	59,814	57,276	56,990	59,274	58,542	55,882	57,601
Kenton	15,756	15,170	14,526	14,453	15,033	14,847	14,173	14,608
Kimball	17,158	16,520	15,819	15,740	16,370	16,168	15,434	15,908
Kingsport	630,641	607,187	581,421	578,522	601,701	594,274	567,165	576,588
Kingston	75,804	73,090	70,108	69,772	72,455	71,595	68,471	70,490
Kingston Springs	33,897	32,637	31,252	31,096	32,342	31,942	30,491	31,429
Knoxville	2,237,563	2,155,743	2,065,855	2,055,742	2,136,605	2,110,695	2,016,510	2,077,360
Lafayette	55,028	52,981	50,733	50,480	52,502	51,854	49,499	51,021
Lafollette	91,868	88,458	84,711	84,289	87,660	86,580	82,654	85,190
Lagrange	1,636	1,575	1,508	1,501	1,561	1,541	1,471	1,517
Lakeland	152,882	147,196	140,950	140,247	145,866	144,066	137,521	141,749
Lakesite	22,459	21,624	20,706	20,603	21,428	21,164	20,202	20,823
La Vergne	423,272	407,531	369,531	367,689	382,421	377,700	360,541	371,627
Lawrenceburg	128,258	123,488	118,248	117,659	122,373	120,862	115,371	118,919
Lebanon	403,370	388,398	371,949	370,099	308,125	304,331	290,541	299,451
Lenoir City	107,816	103,863	99,520	99,032	102,938	101,687	97,136	100,076
Lewisburg	137,196	132,119	126,541	125,914	130,931	129,324	123,479	127,255
Lexington	94,314	90,814	86,969	86,536	89,995	88,887	84,858	87,461
Liberty	3,813	3,671	3,515	3,498	3,638	3,593	3,430	3,535
Linden	11,175	10,759	10,303	10,252	10,662	10,531	10,053	10,362
Livingston	49,911	48,055	46,016	45,786	47,621	47,033	44,896	46,277
Lobelville	11,033	10,622	10,172	10,121	10,526	10,396	9,924	10,229
Lookout Mountain	22,533	21,695	20,774	20,670	21,499	21,233	20,269	20,892
Loretto	21,081	20,297	19,436	19,339	20,114	19,866	18,963	19,546
Loudon	69,456	66,994	64,290	63,986	66,419	65,639	62,806	64,636
Louisville	49,444	47,605	45,585	45,357	47,175	28,268	26,984	27,814
Luttrell	13,210	12,718	12,179	12,118	12,603	12,448	11,882	12,248
Lynchburg	7,109	6,847	6,560	6,527	6,786	6,703	6,402	6,596
Lynnville	3,586	3,454	3,310	3,294	3,424	3,382	3,231	3,328
Madisonville	56,294	54,201	51,901	51,642	53,711	53,048	50,638	52,195
Manchester	124,249	119,628	114,551	113,980	118,547	117,084	111,765	115,201
Martin	141,524	136,276	130,511	129,862	135,049	133,387	127,346	131,249
Maryville	338,677	326,081	312,244	310,687	323,135	319,147	304,648	314,015
Mason	19,790	19,054	18,245	18,154	18,882	18,649	17,801	18,349
Maury City	8,290	7,982	7,643	7,605	7,909	7,812	7,457	7,686
Maynardville	29,679	28,575	27,362	27,226	28,317	27,967	26,697	27,517
McEwen	21,677	20,877	19,997	19,898	20,690	20,436	19,515	20,110
McKenzie	65,310	62,881	60,213	59,912	62,313	61,544	58,748	60,554
McLemoresville	4,329	4,168	3,992	3,972	4,131	4,080	3,894	4,014
McMinnville	167,592	161,369	154,532	153,763	159,913	157,943	150,779	155,407
Medina	59,308	57,102	54,679	49,487	51,470	50,834	38,490	39,674
Medon	2,780	2,676	2,563	2,550	2,652	2,619	2,500	2,577
Memphis	8,153,386	7,857,488	7,532,413	7,495,841	7,788,276	7,694,573	7,353,958	7,574,020
Michie	7,269	6,999	6,702	6,668	6,935	6,850	6,539	6,740
Middleton	8,683	8,360	8,006	7,966	8,285	8,183	7,811	8,051
Milan	96,563	92,972	89,026	88,582	92,132	90,994	86,860	89,531
Milledgeville	3,259	3,138	3,005	2,990	3,110	3,071	2,932	3,022
Millersville	79,208	76,263	73,026	72,662	75,573	74,641	71,250	73,441
Millington	136,917	131,825	126,231	125,602	130,634	129,022	115,526	116,045
Minor Hill	6,605	6,359	6,089	6,059	6,302	6,224	5,941	6,124
Mitchellville	2,325	2,238	2,143	2,132	2,218	2,191	2,091	2,155
Monteagle	14,661	14,116	13,517	13,449	13,988	13,815	13,188	13,593
Monterey	35,121	33,818	32,386	32,224	33,513	33,100	31,599	32,569

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

City	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13
Morrison	8,536	8,218	7,870	7,830	8,144	8,044	7,678	7,914
Morristown	358,368	345,041	330,399	328,751	341,923	337,703	322,361	332,273
Moscow	6,838	6,584	6,305	6,273	6,525	6,444	6,151	6,341
Mosheim	29,051	27,971	26,784	26,650	27,718	27,376	26,132	26,936
Mount Carmel	66,774	64,290	61,562	61,255	63,709	62,923	60,064	61,911
Mount Juliet	385,907	371,555	319,309	317,717	330,446	284,515	271,590	279,941
Mount Pleasant	63,008	60,678	52,086	51,828	53,890	53,230	50,828	52,380
Mountain City	31,130	29,972	28,700	28,557	29,701	29,335	28,002	28,863
Munford	75,149	72,355	69,284	66,874	69,553	68,695	65,574	67,590
Murfreesboro	1,512,580	1,456,362	1,237,287	1,231,123	1,280,412	1,264,619	1,207,209	1,244,300
Nashville	5,539,230	5,333,483	4,876,338	4,852,060	5,046,186	4,983,984	4,757,875	4,903,958
New Hope	13,308	12,813	12,269	12,208	12,697	12,541	11,971	12,339
New Johnsonville	24,482	23,590	22,610	22,499	23,381	23,099	22,071	22,735
New Market	16,407	15,797	15,127	15,051	15,655	15,461	14,759	15,213
New Tazewell	37,353	35,964	34,438	34,266	35,639	35,199	33,600	34,633
Newbern	40,748	39,233	37,568	37,380	38,878	38,398	36,654	37,781
Newport	85,565	82,388	78,898	78,505	81,645	80,639	76,982	79,345
Niota	10,287	9,958	9,597	9,556	9,881	9,777	9,399	9,643
Nolensville	136,487	131,411	89,990	89,541	93,129	67,930	64,844	66,838
Normandy	1,734	1,670	1,599	1,591	1,655	1,634	1,560	1,608
Norris	20,036	19,291	18,472	18,380	19,116	18,880	18,023	18,577
Oak Hill	57,672	55,527	53,171	52,906	55,025	54,346	50,107	51,648
Oak Ridge	364,025	350,609	335,870	334,212	347,471	343,222	327,779	337,756
Oakdale	2,607	2,511	2,404	2,392	2,488	2,457	2,345	2,418
Oakland	81,459	78,430	75,101	74,727	77,721	76,762	73,274	75,527
Obion	13,763	13,251	12,689	12,626	13,131	12,969	12,380	12,761
Oliver Springs	39,739	38,262	36,638	36,455	37,916	37,448	35,747	36,846
Oneida	46,147	44,431	42,546	42,334	44,030	43,486	41,511	42,787
Orlinda	10,565	10,172	9,741	9,692	10,080	9,956	9,504	9,796
Orme	1,550	1,492	1,429	1,422	1,479	1,460	1,394	1,437
Palmer	8,265	7,958	7,620	7,582	7,886	7,789	7,435	7,663
Paris	124,913	120,267	115,164	114,590	119,181	117,710	112,362	115,817
Parkers Crossroads	4,059	3,908	3,742	3,723	3,873	3,825	3,651	3,763
Parrottsville	3,235	3,114	2,982	2,967	3,086	3,048	2,910	2,999
Parsons	29,680	28,595	27,403	27,268	28,341	27,997	26,748	27,555
Pegram	25,743	24,785	23,734	23,615	24,561	24,258	23,156	23,868
Petersburg	7,071	6,823	6,549	6,518	6,764	6,686	6,399	6,584
Philadelphia	8,068	7,768	7,439	7,402	7,698	7,603	7,258	7,481
Pigeon Forge	72,259	69,572	66,619	66,287	68,943	68,092	64,999	66,997
Pikeville	19,777	19,042	18,234	18,143	18,870	18,637	17,790	18,337
Piperton	24,722	19,326	18,506	18,414	16,957	16,748	15,987	16,479
Pittman Center	6,174	5,945	5,692	5,664	5,891	5,818	5,554	5,725
Plainview	26,136	25,164	24,096	23,976	24,937	24,629	23,510	24,233
Pleasant Hill	6,925	6,667	6,384	6,352	6,607	6,525	6,229	6,420
Pleasant View	51,928	49,997	47,875	46,813	48,689	48,088	45,903	47,314
Portland	141,197	135,946	130,177	129,528	134,718	133,055	127,010	130,916
Powells Crossroads	16,260	15,655	14,991	14,916	15,514	15,322	14,626	15,076
Pulaski	96,796	93,197	89,242	88,797	92,355	91,215	87,071	89,748
Puryear	8,253	7,946	7,609	7,571	7,874	7,777	7,424	7,652
Ramer	3,924	3,778	3,617	3,599	3,743	3,697	3,529	3,638
Red Bank	143,301	137,971	132,116	131,458	136,725	135,037	128,902	132,866
Red Boiling Springs	13,677	13,168	12,610	12,547	13,049	12,888	12,303	12,681
Ridgely	22,077	21,256	20,354	20,253	21,064	20,804	19,859	20,470

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

City	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13
Ridgeside	4,797	4,618	4,422	4,400	4,577	4,520	4,315	4,447
Ridgetop	25,263	24,323	23,291	23,175	21,991	21,720	20,733	21,371
Ripley	103,869	100,006	95,762	95,285	99,102	97,879	93,432	96,305
Rives	4,010	3,860	3,697	3,678	3,826	3,778	3,607	3,718
Rockford	10,528	10,137	9,707	9,658	10,045	9,921	9,470	9,762
Rockwood	68,409	65,865	63,070	62,756	65,270	64,464	61,536	63,428
Rocky Top	22,405	21,590	20,696	20,595	21,400	21,142	20,204	20,810
Rogersville	54,363	52,342	50,121	49,871	51,869	51,229	48,901	50,405
Rossville	13,013	10,670	10,217	10,166	7,792	7,696	7,346	7,572
Rutherford	14,157	13,630	13,052	12,987	13,507	13,340	12,734	13,126
Rutledge	15,977	15,383	14,730	14,657	15,244	15,056	14,372	14,814
Saltillo	7,220	6,951	6,656	6,623	6,888	6,803	6,494	6,694
Samburg	2,669	2,570	2,461	2,448	2,547	2,515	2,401	2,475
Sardis	4,686	4,512	4,320	4,299	4,471	4,416	4,215	4,345
Saulsbury	1,378	1,326	1,270	1,264	1,314	1,298	1,239	924
Savannah	86,078	82,884	79,376	78,981	82,137	81,126	77,449	79,825
Scotts Hill	12,103	11,653	11,158	11,102	11,547	11,405	10,887	11,221
Selmer	54,074	52,063	49,854	49,605	51,593	50,956	48,641	50,137
Sevierville	182,118	175,345	167,904	167,067	173,760	171,616	163,819	168,856
Sharon	11,650	11,218	10,744	10,690	11,117	10,980	10,483	10,805
Shelbyville	254,064	244,762	234,544	233,394	242,587	239,641	228,934	235,852
Signal Mountain	102,860	99,035	94,832	94,359	98,140	96,929	92,525	86,144
Silerton	1,365	1,314	1,259	1,252	1,303	1,287	1,228	1,266
Slayden	2,189	2,108	2,018	2,008	2,089	2,063	1,969	2,030
Smithville	55,716	53,644	51,368	51,112	53,160	52,503	50,118	51,659
Smyrna	584,481	562,744	538,864	536,177	469,095	463,305	442,257	455,856
Sneedville	17,059	16,425	15,728	15,649	16,276	16,076	15,345	15,817
Soddy Daisy	156,375	150,559	144,170	143,451	149,199	147,357	140,663	144,988
Somerville	38,054	36,639	35,084	34,909	36,308	35,860	34,231	35,283
South Carthage	16,260	15,655	14,991	14,916	15,514	15,322	14,626	15,076
South Fulton	28,953	27,876	26,693	26,560	27,624	27,283	26,044	26,845
South Pittsburg	37,119	35,751	34,247	34,078	35,430	34,997	33,422	34,439
Sparta	62,750	60,430	57,882	57,595	59,888	59,153	56,483	58,208
Spencer	19,691	18,959	18,155	18,064	18,788	18,556	17,713	18,257
Spring City	25,736	24,830	23,834	23,722	24,618	24,331	23,288	23,962
Spring Hill	497,339	478,843	414,231	412,166	376,142	371,499	321,243	331,121
Springfield	202,203	194,683	186,421	185,492	192,924	190,542	181,886	187,479
St. Joseph	9,618	9,260	8,867	8,823	9,177	9,064	8,652	8,918
Stanton	5,559	5,353	5,125	5,100	5,304	5,239	5,001	5,155
Stantonville	3,481	3,351	3,209	3,193	3,321	3,280	3,131	3,227
Sunbright	6,789	6,537	6,259	6,228	6,478	6,398	6,107	6,295
Surgoinsville	22,151	21,327	20,422	20,321	21,135	20,874	19,926	20,538
Sweetwater	74,397	71,648	68,628	68,288	71,005	70,135	66,970	69,015
Tazewell	27,317	26,301	25,185	25,059	26,063	25,742	24,572	25,328
Tellico Plains	10,862	10,459	10,017	9,967	10,365	10,238	9,774	10,074
Tennessee Ridge	16,826	16,200	15,512	15,435	16,054	15,855	15,135	15,600
Thompson's Station	58,127	55,965	53,590	30,250	31,462	31,073	24,274	25,020
Three Way	21,020	20,238	19,379	19,283	20,055	19,808	18,908	19,489
Tiptonville	54,905	52,863	50,619	50,367	52,385	51,738	49,388	50,907
Toone	4,477	4,310	4,128	4,107	4,272	4,219	4,027	4,151
Townsend	5,510	5,305	5,080	5,055	5,257	5,192	4,957	5,109
Tracy City	18,215	17,538	16,794	16,710	17,380	17,165	16,385	16,889
Trenton	52,445	50,494	48,352	48,110	50,038	49,420	47,175	48,626

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

City	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13
Trezevant	10,565	10,172	9,741	9,692	10,080	9,956	9,504	9,796
Trimble	7,835	7,543	7,223	7,187	7,475	7,383	7,048	7,264
Troy	16,863	16,235	15,546	15,469	16,089	15,890	15,168	15,635
Tullahoma	230,120	221,587	212,212	211,158	219,591	216,889	207,066	213,412
Tusculum	32,753	31,535	30,197	30,046	31,250	30,865	29,462	30,368
Unicoi	44,672	43,010	41,185	40,980	42,622	42,095	40,183	41,419
Union City	134,002	129,019	123,544	122,928	127,853	126,275	120,538	124,244
Vanleer	4,858	4,678	4,479	4,457	4,635	4,578	4,370	4,505
Viola	1,611	1,551	1,485	1,478	1,537	1,518	1,449	1,494
Vonore	18,129	17,455	16,714	16,631	17,297	17,084	16,308	16,809
Walden	23,344	22,476	21,522	21,415	22,273	21,998	20,999	21,644
Wartburg	11,291	10,871	10,410	10,358	10,773	10,640	10,156	10,469
Wartrace	8,007	7,709	7,382	7,345	7,639	7,545	7,202	7,424
Watauga	5,633	5,424	5,193	5,168	5,375	5,308	5,067	5,223
Watertown	18,166	17,491	16,748	16,665	17,333	17,119	16,341	16,843
Waverly	50,489	48,611	46,549	46,317	48,172	47,578	45,416	46,813
Waynesboro	30,121	29,001	27,770	27,632	28,739	28,384	27,095	27,928
Westmoreland	27,133	26,123	25,015	24,890	25,887	25,568	24,406	25,157
White Bluff	39,432	37,965	36,354	36,173	37,622	37,158	35,470	36,561
White House	142,673	137,367	131,538	115,707	120,343	118,857	113,457	116,946
White Pine	27,010	26,005	24,902	24,777	25,770	25,452	24,296	25,043
Whiteville	57,045	54,923	52,593	52,330	54,427	53,755	51,313	52,891
Whitwell	20,897	20,120	19,266	19,170	19,938	19,692	18,797	19,375
Williston	4,858	4,678	4,479	4,457	4,635	4,578	4,370	4,505
Winchester	107,948	104,046	99,760	99,278	103,134	101,898	97,407	100,308
Winfield	12,853	12,375	11,850	11,791	12,263	12,112	11,561	11,917
Woodbury	32,962	31,737	30,390	30,238	31,450	31,062	29,651	30,562
Woodland Mills	4,649	4,476	4,286	4,265	4,436	4,381	4,182	4,311
Yorkville	3,518	3,387	3,243	3,227	3,356	3,315	3,164	3,261
Total	**$ 45,694,727**	**$ 44,002,320**	**$ 41,552,235**	**$ 41,237,328**	**$ 42,569,233**	**$ 41,924,787**	**$ 39,911,386**	**$ 41,084,012**

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

County	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13
Anderson	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Bedford	-	-	-	-	-	-	-	-
Benton	-	-	-	-	-	-	-	-
Bledsoe	-	-	-	-	-	-	-	-
Blount	-	-	-	-	-	-	-	-
Bradley	-	-	-	-	-	-	-	-
Campbell	-	-	-	-	-	-	-	-
Cannon	-	-	-	-	-	-	-	-
Carroll	-	-	-	-	-	-	-	-
Carter	-	-	-	-	-	-	-	-
Cheatham	-	-	-	-	-	-	-	-
Chester	-	-	-	-	-	-	-	-
Claiborne	-	-	-	-	-	-	-	-
Clay	-	-	-	-	-	-	-	-
Cocke	-	-	-	-	-	-	-	-
Coffee	-	-	-	-	-	-	-	-
Crockett	-	-	-	-	-	-	-	-
Cumberland	-	-	-	-	-	-	-	-
Davidson	-	-	-	-	-	-	-	-
Decatur	-	-	-	-	-	-	-	-
DeKalb	-	-	-	-	-	-	-	-
Dickson	-	-	-	-	-	-	-	-
Dyer	-	-	-	-	-	-	-	-
Fayette	-	-	-	-	-	-	-	-
Fentress	-	-	-	-	-	-	-	-
Franklin	-	-	-	-	-	-	-	-
Gibson	-	-	-	-	-	-	-	-
Giles	-	-	-	-	-	-	-	-
Grainger	-	-	-	-	-	-	-	-
Greene	-	-	-	-	-	-	-	-
Grundy	-	-	-	-	-	-	-	-
Hamblen	-	-	-	-	-	-	-	-
Hamilton	-	-	-	-	-	-	-	-
Hancock	-	-	-	-	-	-	-	-
Hardeman	-	-	-	-	-	-	-	-
Hardin	-	-	-	-	-	-	-	-
Hawkins	-	-	-	94,093	192,291	291,767	371,390	382,108
Haywood	-	-	-	-	-	138,513	264,448	270,577
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	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13
Lawrence	-	-	-	-	-	-	-	-
Lewis	-	-	-	-	-	-	-	-
Lincoln	-	-	-	-	-	-	-	-
Loudon	-	-	-	-	-	-	-	-
Macon	-	-	-	-	-	-	-	-
Madison	-	-	-	-	-	-	-	-
Marion	-	-	-	-	-	-	-	-
Marshall	-	-	-	-	-	-	-	-
Maury	-	-	-	-	-	-	-	-
McMinn	-	26	9,785	39,170	160,097	158,150	150,970	154,469
McNairy	-	-	-	-	-	-	-	-
Meigs	-	200,358	380,086	569,656	776,106	766,666	731,857	748,819
Monroe	-	22	8,363	33,425	136,614	134,953	128,825	131,811
Montgomery	-	-	-	-	-	-	-	-
Moore	-	-	-	-	-	-	-	-
Morgan	-	-	-	-	-	-	-	-
Obion	-	-	-	-	-	-	-	-
Overton	-	-	-	-	-	-	-	-
Perry	-	-	-	-	-	-	-	-
Pickett	-	-	-	-	-	-	-	-
Polk	-	-	-	-	-	-	-	-
Putnam	-	-	-	-	-	-	-	-
Rhea	-	170,414	323,282	484,521	660,117	652,088	622,481	636,908
Roane	-	117,906	223,672	335,230	456,721	451,166	430,682	440,663
Robertson	-	-	-	-	-	-	-	-
Rutherford	-	-	-	-	-	-	-	-
Scott	-	-	-	-	-	-	-	-
Sequatchie	-	-	-	-	-	-	-	-
Sevier	-	-	-	-	-	-	-	-
Shelby	372,309	481,630	457,129	456,750	-	-	-	-
Smith	-	-	-	-	-	-	-	-
Stewart	-	-	-	-	-	-	-	-
Sullivan	628,740	610,017	578,612	578,132	-	-	-	-
Sumner	408,575	528,545	501,334	501,840	501,559	495,459	472,964	-
Tipton	-	-	-	-	-	-	-	-
Trousdale	-	-	-	-	-	-	-	-
Unicoi	-	-	-	-	-	-	-	-
Union	-	-	-	-	-	-	-	-
Van Buren	-	-	-	-	-	-	-	-
Warren	-	-	-	-	-	-	-	-
Washington	608,469	590,350	559,958	559,493	-	-	-	-
Wayne	-	-	-	-	-	-	-	-
Weakley	-	-	-	-	-	-	-	-
White	-	-	-	-	-	-	-	-
Williamson	-	-	-	-	-	-	-	-
Wilson	-	-	-	-	-	-	-	-
Total	**$ 2,018,093**	**$ 2,699,268**	**$ 3,042,223**	**$ 3,652,310**	**$ 2,883,505**	**$ 3,088,761**	**$ 3,173,617**	**$ 2,765,355**

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

City	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13
Adams	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Adamsville	-	-	-	-	-	-	-	-
Alamo	-	-	-	-	-	-	-	-
Alcoa	-	-	-	-	-	-	-	-
Alexandria	-	-	-	-	-	-	-	-
Algood	-	-	-	-	-	-	-	-
Allardt	-	-	-	-	-	-	-	-
Altamont	-	-	-	-	-	-	-	-
Ardmore	-	-	-	-	-	-	-	-
Arlington	5,305	6,862	5,958	5,953	-	-	-	-
Ashland City	-	-	-	-	-	-	-	-
Athens	-	7	2,520	10,086	41,224	40,722	38,873	39,774
Atoka	-	-	-	-	-	-	-	-
Atwood	-	-	-	-	-	-	-	-
Auburntown	-	-	-	-	-	-	-	-
Baileyton	-	-	-	-	-	-	-	-
Baneberry	-	-	-	-	-	-	-	-
Bartlett	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	6,948	6,741	6,394	6,389	-	-	-	-
Bolivar	-	-	-	-	-	-	-	-
Braden	-	-	-	-	-	-	-	-
Bradford	-	-	-	-	-	-	-	-
Brentwood	-	-	-	-	-	-	-	-
Brighton	-	-	-	-	-	-	-	-
Bristol	107,054	103,867	98,519	98,438	-	-	-	-
Brownsville	-	-	-	-	-	75,881	144,872	148,229
Bruceton	-	-	-	-	-	-	-	-
Bulls Gap	-	-	-	1,222	2,497	3,789	4,823	4,962
Burlison	-	-	-	-	-	-	-	-
Burns	-	-	-	-	-	-	-	-
Byrdstown	-	-	-	-	-	-	-	-
Calhoun	-	0.24	92	367	1,501	1,483	1,415	1,448
Camden	-	-	-	-	-	-	-	-
Carthage	-	-	-	-	-	-	-	-
Caryville	-	-	-	-	-	-	-	-
Cedar Hill	-	-	-	-	-	-	-	-
Celina	-	-	-	-	-	-	-	-

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

City	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13
Centertown	-	-	-	-	-	-	-	-
Centerville	-	-	-	-	-	-	-	-
Chapel Hill	-	-	-	-	-	-	-	-
Charleston	-	-	-	-	-	-	-	-
Charlotte	-	-	-	-	-	-	-	-
Chattanooga	-	-	-	-	-	-	-	-
Church Hill	-	-	-	11,154	22,794	34,586	44,025	45,295
Clarksburg	-	-	-	-	-	-	-	-
Clarksville	-	-	-	-	-	-	-	-
Cleveland	-	-	-	-	-	-	-	-
Clifton	-	-	-	-	-	-	-	-
Clinton	-	-	-	-	-	-	-	-
Coalmont	-	-	-	-	-	-	-	-
Collegedale	-	-	-	-	-	-	-	-
Collierville	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	140,723	143,985
Decatur	-	27,242	51,679	77,453	105,523	104,240	99,507	101,813
Decaturville	-	-	-	-	-	-	-	-
Decherd	-	-	-	-	-	-	-	-
Dickson	-	-	-	-	-	-	-	-
Dover	-	-	-	-	-	-	-	-
Dowelltown	-	-	-	-	-	-	-	-
Doyle	-	-	-	-	-	-	-	-
Dresden	-	-	-	-	-	-	-	-
Ducktown	-	-	-	-	-	-	-	-
Dunlap	-	-	-	-	-	-	-	-
Dyer	-	-	-	-	-	-	-	-
Dyersburg	-	-	-	-	-	-	-	-
Eagleville	-	-	-	-	-	-	-	-
East Ridge	-	-	-	-	-	-	-	-
Eastview	-	-	-	-	-	-	-	-
Elizabethton	-	-	-	-	-	-	-	-

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

City	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13
Elkton	-	-	-	-	-	-	-	-
Englewood	-	1	287	1,148	4,693	4,636	4,425	4,528
Enville	-	-	-	-	-	-	-	-
Erin	-	-	-	-	-	-	-	-
Erwin	-	-	-	-	-	-	-	-
Estill Springs	-	-	-	-	-	-	-	-
Ethridge	-	-	-	-	-	-	-	-
Etowah	-	2	653	2,616	10,690	10,560	10,081	10,314
Fairview	-	-	-	-	-	-	-	-
Farragut	-	-	-	-	-	-	-	-
Fayetteville	-	-	-	-	-	-	-	-
Finger	-	-	-	-	-	-	-	-
Forest Hills	-	-	-	-	-	-	-	-
Franklin	-	-	-	-	-	-	-	-
Friendship	-	-	-	-	-	-	-	-
Friendsville	-	-	-	-	-	-	-	-
Gadsden	-	-	-	-	-	-	-	-
Gainesboro	-	-	-	-	-	-	-	-
Gallatin	87,677	113,421	107,582	107,690	94,533	93,383	89,143	-
Gallaway	-	-	-	-	-	-	-	-
Garland	-	-	-	-	-	-	-	-
Gates	-	-	-	-	-	-	-	-
Gatlinburg	-	-	-	-	-	-	-	-
Germantown	16,103	20,832	19,772	19,756	-	-	-	-
Gibson	-	-	-	-	-	-	-	-
Gilt Edge	-	-	-	-	-	-	-	-
Gleason	-	-	-	-	-	-	-	-
Goodlettsville	14,248	18,431	17,482	17,500	49,708	49,103	46,874	-
Gordonsville	-	-	-	-	-	-	-	-
Grand Junction	-	-	-	-	-	-	-	-
Graysville	-	8,047	15,265	22,879	31,170	30,791	29,393	30,074
Greenback	-	-	-	-	-	-	-	-
Greenbrier	-	-	-	-	-	-	-	-
Greeneville	-	-	-	-	-	-	-	-
Greenfield	-	-	-	-	-	-	-	-
Gruetli-Laager	-	-	-	-	-	-	-	-
Guys	-	-	-	-	-	-	-	-
Halls	-	-	-	-	-	-	-	-
Harriman	-	13,819	26,214	39,289	53,528	52,877	50,476	51,646
Harrogate	-	-	-	-	-	-	-	-
Hartsville	-	-	-	-	-	-	-	-
Henderson	-	-	-	-	-	-	-	-
Hendersonville	130,657	169,021	160,320	160,481	160,392	158,441	151,247	-
Henning	-	-	-	-	-	-	-	-
Henry	-	-	-	-	-	-	-	-
Hickory Valley	-	-	-	-	-	-	-	-
Hohenwald	-	-	-	-	-	-	-	-
Hollow Rock	-	-	-	-	-	-	-	-

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

City	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13
Hornbeak	-	-	-	-	-	-	-	-
Hornsby	-	-	-	-	-	-	-	-
Humboldt	-	-	-	-	-	-	-	-
Huntingdon	-	-	-	-	-	-	-	-
Huntland	-	-	-	-	-	-	-	-
Huntsville	-	-	-	-	-	-	-	-
Jacksboro	-	-	-	-	-	-	-	-
Jackson	-	-	-	-	-	-	-	-
Jamestown	-	-	-	-	-	-	-	-
Jasper	-	-	-	-	-	-	-	-
Jefferson City	-	-	-	-	-	-	-	-
Jellico	-	-	-	-	-	-	-	-
Johnson City	305,921	296,811	281,531	281,297	-	-	-	-
Jonesborough	24,991	24,247	22,999	22,980	-	-	-	-
Kenton	-	-	-	-	-	-	-	-
Kimball	-	-	-	-	-	-	-	-
Kingsport	194,127	188,346	178,650	263,392	173,482	263,229	334,998	339,940
Kingston	-	12,913	24,497	36,715	50,021	49,413	47,169	48,262
Kingston Springs	-	-	-	-	-	-	-	-
Knoxville	-	-	-	-	-	-	-	-
Lafayette	-	-	-	-	-	-	-	-
Lafollette	-	-	-	-	-	-	-	-
Lagrange	-	-	-	-	-	-	-	-
Lakeland	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	13,245	13,551
Manchester	-	-	-	-	-	-	-	-
Martin	-	-	-	-	-	-	-	-
Maryville	-	-	-	-	-	-	-	-
Mason	-	-	-	-	-	-	-	-
Maury City	-	-	-	-	-	-	-	-

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

City	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13
Maynardville	-	-	-	-	-	-	-	-
McEwen	-	-	-	-	-	-	-	-
McKenzie	-	-	-	-	-	-	-	-
McLemoresville	-	-	-	-	-	-	-	-
McMinnville	-	-	-	-	-	-	-	-
Medina	-	-	-	-	-	-	-	-
Medon	-	-	-	-	-	-	-	-
Memphis	259,628	335,863	318,777	318,513	-	-	-	-
Michie	-	-	-	-	-	-	-	-
Middleton	-	-	-	-	-	-	-	-
Milan	-	-	-	-	-	-	-	-
Milledgeville	-	-	-	-	-	-	-	-
Millersville	12,658	16,375	15,532	15,548	15,539	15,350	14,653	-
Millington	4,468	5,780	5,486	5,481	-	-	-	-
Minor Hill	-	-	-	-	-	-	-	-
Mitchellville	481	622	590	590	590	583	556	-
Monteagle	-	-	-	-	-	-	-	-
Monterey	-	-	-	-	-	-	-	-
Morrison	-	-	-	-	-	-	-	-
Morristown	-	-	-	-	-	-	-	-
Moscow	-	-	-	-	-	-	-	-
Mosheim	-	-	-	-	-	-	-	-
Mount Carmel	-	-	-	8,988	18,369	27,871	35,477	36,501
Mount Juliet	-	-	-	-	-	-	-	-
Mount Pleasant	-	-	-	-	-	-	-	-
Mountain City	-	-	-	-	-	-	-	-
Munford	-	-	-	-	-	-	-	-
Murfreesboro	-	-	-	-	-	-	-	-
Nashville	-	-	-	-	-	-	-	-
New Hope	-	-	-	-	-	-	-	-
New Johnsonville	-	-	-	-	-	-	-	-
New Market	-	-	-	-	-	-	-	-
New Tazewell	-	-	-	-	-	-	-	-
Newbern	-	-	-	-	-	-	-	-
Newport	-	-	-	-	-	-	-	-
Niota	-	-	135	539	2,202	2,176	2,077	2,125
Nolensville	-	-	-	-	-	-	-	-
Normandy	-	-	-	-	-	-	-	-
Norris	-	-	-	-	-	-	-	-
Oak Hill	-	-	-	-	-	-	-	-
Oak Ridge	-	63,827	121,081	181,471	247,239	244,231	233,143	238,546
Oakdale	-	-	-	-	-	-	-	-
Oakland	-	-	-	-	-	-	-	-
Obion	-	-	-	-	-	-	-	-
Oliver Springs	-	7,031	13,338	19,991	27,236	26,905	25,683	26,278
Oneida	-	-	-	-	-	-	-	-
Orlinda	-	-	-	-	-	-	-	-
Orme	-	-	-	-	-	-	-	-

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

City	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13
Palmer	-	-	-	-	-	-	-	-
Paris	-	-	-	-	-	-	-	-
Parkers Crossroads	-	-	-	-	-	-	-	-
Parrottsville	-	-	-	-	-	-	-	-
Parsons	-	-	-	-	-	-	-	-
Pegram	-	-	-	-	-	-	-	-
Petersburg	-	-	-	-	-	-	-	-
Philadelphia	-	-	-	-	-	-	-	-
Pigeon Forge	-	-	-	-	-	-	-	-
Pikeville	-	-	-	-	-	-	-	-
Piperton	-	-	-	-	-	-	-	-
Pittman Center	-	-	-	-	-	-	-	-
Plainview	-	-	-	-	-	-	-	-
Pleasant Hill	-	-	-	-	-	-	-	-
Pleasant View	-	-	-	-	-	-	-	-
Portland	29,053	37,583	35,648	35,684	35,842	35,406	33,799	-
Powells Crossroads	-	-	-	-	-	-	-	-
Pulaski	-	-	-	-	-	-	-	-
Puryear	-	-	-	-	-	-	-	-
Ramer	-	-	-	-	-	-	-	-
Red Bank	-	-	-	-	-	-	-	-
Red Boiling Springs	-	-	-	-	-	-	-	-
Ridgely	-	-	-	-	-	-	-	-
Ridgeside	-	-	-	-	-	-	-	-
Ridgetop	-	-	-	-	-	-	-	-
Ripley	-	-	-	-	-	-	-	-
Rives	-	-	-	-	-	-	-	-
Rockford	-	-	-	-	-	-	-	-
Rockwood	-	12,104	22,961	34,413	46,885	46,315	44,212	45,237
Rocky Top	-	-	-	-	-	-	-	-
Rogersville	-	-	-	7,318	14,955	22,691	28,884	29,717
Rossville	-	-	-	-	-	-	-	-
Rutherford	-	-	-	-	-	-	-	-
Rutledge	-	-	-	-	-	-	-	-
Saltillo	-	-	-	-	-	-	-	-
Samburg	-	-	-	-	-	-	-	-
Sardis	-	-	-	-	-	-	-	-
Saulsbury	-	-	-	-	-	-	-	-
Savannah	-	-	-	-	-	-	-	-
Scotts Hill	-	-	-	-	-	-	-	-
Selmer	-	-	-	-	-	-	-	-
Sevierville	-	-	-	-	-	-	-	-
Sharon	-	-	-	-	-	-	-	-
Shelbyville	-	-	-	-	-	-	-	-
Signal Mountain	-	-	-	-	-	-	-	-
Silerton	-	-	-	-	-	-	-	-
Slayden	-	-	-	-	-	-	-	-
Smithville	-	-	-	-	-	-	-	-

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

City	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13
Smyrna	-	-	-	-	-	-	-	-
Sneedville	-	-	-	-	-	-	-	-
Soddy Daisy	-	-	-	-	-	-	-	-
Somerville	-	-	-	-	-	-	-	-
South Carthage	-	-	-	-	-	-	-	-
South Fulton	-	-	-	-	-	-	-	-
South Pittsburg	-	-	-	-	-	-	-	-
Sparta	-	-	-	-	-	-	-	-
Spencer	-	-	-	-	-	-	-	-
Spring City	-	10,613	20,133	30,175	41,111	40,611	38,767	39,665
Spring Hill	-	-	-	-	-	-	-	-
Springfield	-	-	-	-	-	-	-	-
St. Joseph	-	-	-	-	-	-	-	-
Stanton	-	-	-	-	-	3,333	6,362	6,510
Stantonville	-	-	-	-	-	-	-	-
Sunbright	-	-	-	-	-	-	-	-
Surgoinsville	-	-	-	2,982	6,094	9,246	11,769	12,109
Sweetwater	-	3	1,129	4,512	18,443	18,218	17,391	17,794
Tazewell	-	-	-	-	-	-	-	-
Tellico Plains	-	0.44	165	661	2,700	2,668	2,546	2,605
Tennessee Ridge	-	-	-	-	-	-	-	-
Thompson's Station	-	-	-	-	-	-	-	-
Three Way	-	-	-	-	-	-	-	-
Tiptonville	-	-	-	-	-	-	-	-
Toone	-	-	-	-	-	-	-	-
Townsend	-	-	-	-	-	-	-	-
Tracy City	-	-	-	-	-	-	-	-
Trenton	-	-	-	-	-	-	-	-
Trezevant	-	-	-	-	-	-	-	-
Trimble	-	-	-	-	-	-	-	-
Troy	-	-	-	-	-	-	-	-
Tullahoma	-	-	-	-	-	-	-	-
Tusculum	-	-	-	-	-	-	-	-
Unicoi	-	-	-	-	-	-	-	-
Union City	-	-	-	-	-	-	-	-
Vanleer	-	-	-	-	-	-	-	-
Viola	-	-	-	-	-	-	-	-
Vonore	-	1	277	1,107	4,523	4,468	4,265	4,364
Walden	-	-	-	-	-	-	-	-
Wartburg	-	-	-	-	-	-	-	-
Wartrace	-	-	-	-	-	-	-	-
Watauga	430	418	396	396	-	-	-	-
Watertown	-	-	-	-	-	-	-	-
Waverly	-	-	-	-	-	-	-	-
Waynesboro	-	-	-	-	-	-	-	-
Westmoreland	5,611	7,258	6,884	6,891	6,887	6,804	6,495	-
White Bluff	-	-	-	-	-	-	-	-
White House	14,797	19,142	18,157	16,588	16,579	16,377	15,633	-

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

City	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13
White Pine	-	-	-	-	-	-	-	-
Whiteville	-	-	-	-	-	-	-	-
Whitwell	-	-	-	-	-	-	-	-
Williston	-	-	-	-	-	-	-	-
Winchester	-	-	-	-	-	-	-	-
Winfield	-	-	-	-	-	-	-	-
Woodbury	-	-	-	-	-	-	-	-
Woodland Mills	-	-	-	-	-	-	-	-
Yorkville	-	-	-	-	-	-	-	-
Total	**$ 1,266,098**	**$ 1,625,188**	**$ 1,731,456**	**$ 2,053,041**	**$ 1,480,559**	**$ 1,657,675**	**$ 1,773,001**	**$ 1,445,274**

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 IRP 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, *Integrated Resource Plan* (2019), 9-3 and 9-4.