CONFIDENTIAL JANUARY 2014

#### STRATEGIC ASSESSMENT



### Disclaimer

This document has been prepared by Lazard Frères & Co. LLC ("Lazard") based upon information supplied by the Tennessee Valley Authority (the "TVA") and its representatives and information supplied by the Federal Government and its representatives (including representatives of the Treasury and the Office of Management and Budget (the "OMB")) and information provided by other sources, as well as publicly available information. Portions of the information herein may be based upon certain statements, estimates and forecasts provided by the TVA with respect to the historical or anticipated future performance of the TVA or certain TVA assets. We have relied upon the accuracy and completeness of all the foregoing information, and have not assumed any responsibility for any independent verification of such information or any independent appraisal of any of the assets or liabilities of the TVA or any other entity, or concerning solvency or fair value. With respect to financial forecasts, we have assumed that they have been reasonably prepared on bases reflecting the best currently available estimates and judgments as to the applicable future financial performance. We assume no responsibility for and express no view as to such forecasts or the assumptions on which they are based. The information set forth herein is based upon economic, monetary, market and other conditions as in effect on, and the information made available to us as of, the date hereof, unless indicated otherwise. Lazard does not have any obligation to update or otherwise revise this document. Lazard is not providing and is not responsible for any tax, accounting, actuarial, legal or other specialist advice. Accordingly, although Lazard has considered with the TVA such matters generally as they relate to possibly transferring ownership and/or operation of the TVA, this document does not incorporate analysis requiring any such specialist advice and Lazard understands that the TVA has obtained or will obtain any such advice as it deems necessary from qualified professionals. These materials are also summary in nature and do not purport to include all of the information that should be evaluated in considering alternatives for the TVA. Lazard is acting as investment banker to the TVA and any advice, recommendations, information or work product provided by Lazard is for the sole use of the TVA and the OMB. This document, and any advice, recommendations, information or work product provided by Lazard is not intended for the benefit of any third party and may not be relied upon by any third party.

This document may not be disclosed publicly or made available to third parties without the prior written consent of Lazard.

Financial analysis included in this report is based on market data as of November 14, 2013 unless otherwise noted.

# Abstract

On April 10, 2013, the budget proposal for fiscal year 2014 submitted to Congress by the President of the United States included the following passage:

"Since its creation in the 1930s during the Great Depression, the federally owned and operated Tennessee Valley Authority (TVA) has been producing low-cost electricity and managing natural resources for a large portion of the Southeastern United States. TVA's power service territory includes most of Tennessee and parts of Alabama, Georgia, Kentucky, Mississippi, North Carolina, and Virginia, covering 80,000 square miles and serving more than nine million people. TVA is a self-financing Government corporation, funding operations through electricity sales and bond financing. In order to meet its future capacity needs, fulfill its environmental responsibilities, and modernize its aging generation system, TVA's current capital investment plan includes more than \$25 billion of expenditures over the next 10 years. However, TVA's anticipated capital needs are likely to quickly exceed the agency's \$30 billion statutory cap on indebtedness. Reducing or eliminating the Federal Government's role in programs such as TVA, which have achieved their original objectives and no longer require Federal participation, can help put the Nation on a sustainable fiscal path. Given TVA's debt constraints and the impact to the Federal deficit of its increasing capital expenditures, the Administration intends to undertake a strategic review of options for addressing TVA's financial situation, including the possible divestiture of TVA, in part or as a whole."

Lazard was subsequently engaged in September 2013 by TVA to assist in the strategic review described in the budget, for which the scope of analysis was set out as follows:

"Contractor shall assist TVA and the Office of Management and Budget (OMB) in conducting a strategic review of TVA's financial situation and formulating potential alternatives, including the possible divestiture of TVA, in part or as a whole. The scope of the review includes, but is not limited to, assessment of:

- TVA's future needs for capital
- **TVA's debt constraints and the potential impact to the federal deficit**
- The potential impact any alternatives would have on TVA's non-power mission, including impacts on the region and federal budget
- Options or scenarios for full or partial divestiture of TVA from the Federal government
- Key advantages, disadvantages and potential impacts associated with relevant options/ scenarios"

The enclosed report was based on analysis conducted in consultation with TVA personnel and other representatives of the Federal Government (including representatives of the Treasury and OMB), and is based on written and oral inputs from these parties. The report was written with an assumption of an accompanying oral presentation, explanation and discussion, and should be considered in this context.

### Abstract (cont'd)

Lazard analyzed TVA's business and financial condition and evaluated a range of potential options for TVA, and has arrived at its conclusions based on illustrative evaluative criteria determined in consultation with the various parties involved. Lazard did not comment with regard to overall policy objectives of the Federal Government (e.g., whether TVA has "achieved their original objectives" or "no longer require[s] Federal participation"), as such matters were considered to be outside the scope of our engagement. Lazard was directed not to consider a standalone legislative change to remove the recording of TVA from the federal budget as one of its alternatives. In addition, Lazard understands that stakeholder feedback was gathered concurrently with the preparation of this report, but Lazard was not involved in those discussions, and Lazard did not, and was not requested to, perform any outreach to third parties for purposes of preparing its analysis. Lazard's analysis was performed without the assistance of legal, tax, regulatory or other advisors, and Lazard would recommend that further analysis would warrant the use of such additional advisors.

Based on information received, current financial market conditions and analyses performed and considering the criteria provided, Lazard recommends that TVA not be divested, due to factors which include the following:

- TVA's current strong financial position, ability to self-fund its construction program and anticipated improvements in cost structure, environmental profile and asset mix, and other benefits, as a result of ongoing long-term initiatives suggests no impetus for the Federal Government to change course
- TVA's financing does not appear to be a true draw on the government balance sheet, as TVA receives no current appropriations and its debt is not guaranteed by the Federal Government; in addition, TVA is not expected to exceed its \$30 billion statutory debt limit by 2023, and deleveraging contemplated by TVA's financial forecast would appear to *help* the federal budget over the next decade
- The high level of implementation complexity associated with a potential TVA divestiture would likely lead to a costly, multi-year process to execute any such strategy, during which time TVA would experience organizational disruption and which would result in an uncertain outcome
- The complex network of TVA stakeholders would further make it difficult to divest TVA in a manner that creates value for all parties
- The Federal Government appears likely to realize minimal, if any, value from a divestiture without a significant value transfer from ratepayers in the form of higher rates, even prior to taking into account various other costs which may significantly detract from value
- It is unclear how TVA's non-power mission and activities would logically fit within a divested TVA structure—any reductions in the scope of the non-power mission and activities could potentially have a negative impact on the region

TΜ

# Table of Contents

| Ι    | EXEC  | UTIVE SUMMARY   | 1  |  |  |  |  |  |  |  |
|------|---|---|----|--|--|--|--|--|--|--|
| II   | REVII   | EW OF STATUS QUO TVA  |    |  |  |  |  |  |  |  |
|      | А   | TVA SWOT Analysis   | 13 |  |  |  |  |  |  |  |
|      | В   | Overview of TVA Mission and Current Activities                    | 14 |  |  |  |  |  |  |  |
|      | С   | Financial Assessment—Current Plan                                 | 20 |  |  |  |  |  |  |  |
|      | D Financial Assessment—Prior Plan                 |   |    |  |  |  |  |  |  |  |
|      | Е   | Benchmarking Analysis   | 32 |  |  |  |  |  |  |  |
| III  | COMPARISON OF TVA VS. OTHER POWER PROVIDER MODELS |   |    |  |  |  |  |  |  |  |
| IV   | SUMN  | IARY REVIEW OF STRATEGIC ALTERNATIVES                             | 48 |  |  |  |  |  |  |  |
|      | А   | Summary Assessment of Status Quo/Enhanced Status Quo Alternatives | 52 |  |  |  |  |  |  |  |
|      | В   | Summary Assessment of Public Sector Spin-off Alternatives         | 57 |  |  |  |  |  |  |  |
|      | С   | Summary Assessment of Privatization Alternatives                  | 63 |  |  |  |  |  |  |  |
| V    | DIVE  | STITURE IMPLEMENTATION ISSUES                                     | 72 |  |  |  |  |  |  |  |
| VI   | ILLUS   | STRATIVE VALUATION ANALYSIS                                       | 78 |  |  |  |  |  |  |  |
| VII  | CONCLUSIONS 81                                    |   |    |  |  |  |  |  |  |  |
| APPE | NDIX  |   |    |  |  |  |  |  |  |  |

# Table of Contents

| А | Illustrative Valuation Analysis—Supporting Materials |                             |     |  |  |  |  |
|---|--|-----------------------------|-----|--|--|--|--|
|   | 1  | No Change in Rate Path Case | 86  |  |  |  |  |
|   | 2  | Rate Mitigation Case        | 95  |  |  |  |  |
|   | 3  | IOU Returns Rate Path Case  | 101 |  |  |  |  |
|   | 4  | Other Supporting Materials  | 110 |  |  |  |  |
| В | Supple   | emental Materials           |     |  |  |  |  |
|   | 1  | Power & Utility Industry    | 113 |  |  |  |  |
|   | 2  | Additional TVA Materials    | 119 |  |  |  |  |
|   | 3  | Public Sector Spin-off      | 128 |  |  |  |  |
|   | 4  | Privatization               | 137 |  |  |  |  |

# I Executive Summary

# TVA—"SWOT" Analysis

#### SELECTED STRENGTHS

One of the largest power providers in the U.S. Service area is protected from competition

Long-term contracts with strong credit counterparties

Power and non-power activities are integrated

Retail rates are in 2<sup>nd</sup> quartile nationally/at median regionally

Strong credit rating, self funding and low cost of capital

Low capital intensity following completion of Watts Bar 2

Efficiency initiatives may improve TVA cost structure

Generation fleet rotation (coal to nuclear and gas) is expected to continue to improve environmental profile

Strong post-2015 cash flow generation creates flexibility for deleveraging, rate mitigation and/or other strategic initiatives

Targeting 1st quartile industrial rates in 2014

Completion of strategic review could remove current operating and financing overhang

Benefits from improved and professional management

#### SELECTED OPPORTUNITIES

1 LAZARD



Lack of integration with distribution system

Restricted from participating in businesses outside of service territory or beyond mission

Cost structure appears to lag peers, although TVA's nonpower mission and other factors may affect this comparison

Nuclear fleet performance in bottom quartile

\$30 billion limit on statutory debt financing



Environmental and nuclear event risk

Continued uncertainty regarding strategic direction as a result of governmental commentary

Potential for slower than forecasted growth may result in higher implied rates<sup>(a)</sup>

Higher than forecasted capital intensity may cause increase in financing requirements<sup>(a)</sup>

Commodity price risk (though partially mitigated by diversified generation fleet)<sup>(a)</sup>

#### SELECTED THREATS

(a) Industry-wide issues which are not specific to TVA.





# **Observations Regarding Status Quo TVA**

TVA's strong financial position, ability to self-fund its construction program and anticipated environmental, cost structure and other benefits as a result of ongoing initiatives suggest there is no impetus for the Federal Government to change course— TVA's initiatives should generate benefits to stakeholders and enhance the value of TVA over time

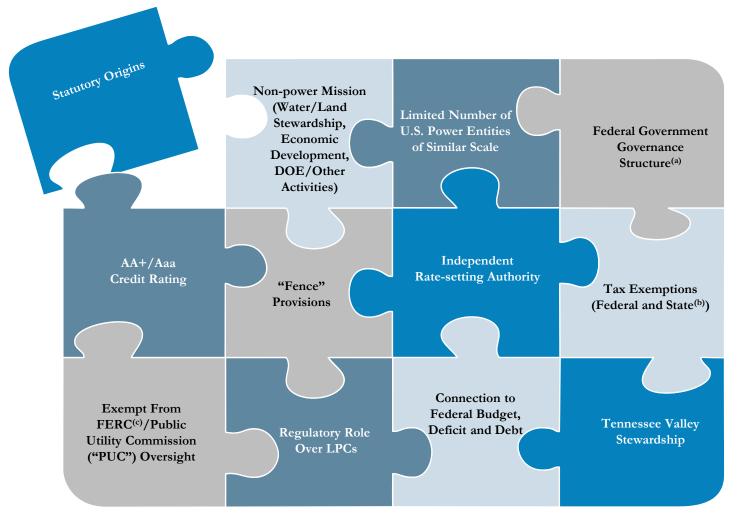
TVA's current financial plan (FY14 LRFP Management Plan) is self-financing and does not exceed TVA's \$30 billion statutory debt limit by 2023—based on its current forecast, TVA is expected to deleverage from a peak statutory debt level of \$26.5 billion in 2015 to \$20.8 billion by 2023<sup>(a)</sup> TVA's increased reliance on gas-fired generation and decreased reliance on coal and nuclear generation (e.g., accelerated coal retirements, decision not to pursue Bellefonte) is consistent with industry-wide trends toward natural gas as a result of, among other things, the structural **FINANCIAL** changes in the natural gas market (i.e., lower long-term natural gas prices and reduced volatility), environmental rules and regulations, and the ASSESSMENT cost and complexity of nuclear power **CURRENT PLAN** TVA is executing a plan to reduce annual O&M costs by \$500 million by 2015 through operational efficiencies, cost reductions and cost avoidance, and has achieved approximately \$150 million in savings through FY 2013—this program is expected to help TVA achieve first quartile industrial electric rates by 2014 TVA's current financial plan is anticipated to generate environmental, cost structure and other benefits to stakeholders and to enhance the value of TVA over time TVA's prior business plan (FY13 LRFP Management Plan) differs from the current plan in three primary respects: construction of Bellefonte nuclear facility, higher load growth assumptions and higher O&M cost inflation-Bellefonte accounts for the majority of cash flow differences between the plans **FINANCIAL** The prior plan generated a \$13.6 billion higher level of debt by 2023 (\$34.6 billion in statutory debt) vs. the FY14 Management Plan and would ASSESSMENT have resulted in TVA exceeding its \$30 billion statutory borrowing authority by 2019 **PRIOR PLAN** The decision to remove the construction of Bellefonte in the current financial plan reduces the plan risks, as nuclear construction has a history of cost overruns and operating issues, as well as significantly reduces the financing risks In Lazard's view, based on discussions with TVA Management and experience in reviewing industry plans, TVA's future financial plans are likely to experience similar fundamental changes in a way that materially improves the status quo TVA ranks in the second quartile nationally and near the median regionally in retail and industrial electricity rates TVA appears to lag its peers in production non-fuel O&M and SG&A, two of the largest areas of "controllable" costs that impact rates (falling BENCHMARKING in the 3<sup>rd</sup> and 4<sup>th</sup> quartiles), but rates well vs. peers in fuel sourcing (1<sup>st</sup> quartile) **ANALYSIS** This cost profile suggests that there may be significant cost efficiencies which could be accessed by TVA, including beyond current initiatives

(a) TVA's total debt is higher than the statutory debt and is forecasted to be \$28.4 billion in 2015 and \$21.8 billion in 2023.

Т

# Comparison of TVA vs. Other Power Provider Models

TVA is like no other participant in the U.S. Power & Utility Industry as a result of, among other things, its non-power mission, statutory origins, scale, market and rate structure, community importance and customer base



- (a) In addition to various forms of interaction and oversight, TVA is recorded in the federal budget.
- (b) TVA is legislatively required to pay PILOTs, which appear to be approximately equal to equivalent state and local taxes for other utilities.
- (c) TVA voluntarily complies with a subset of FERC rules.

### **Illustrative Evaluative Criteria**

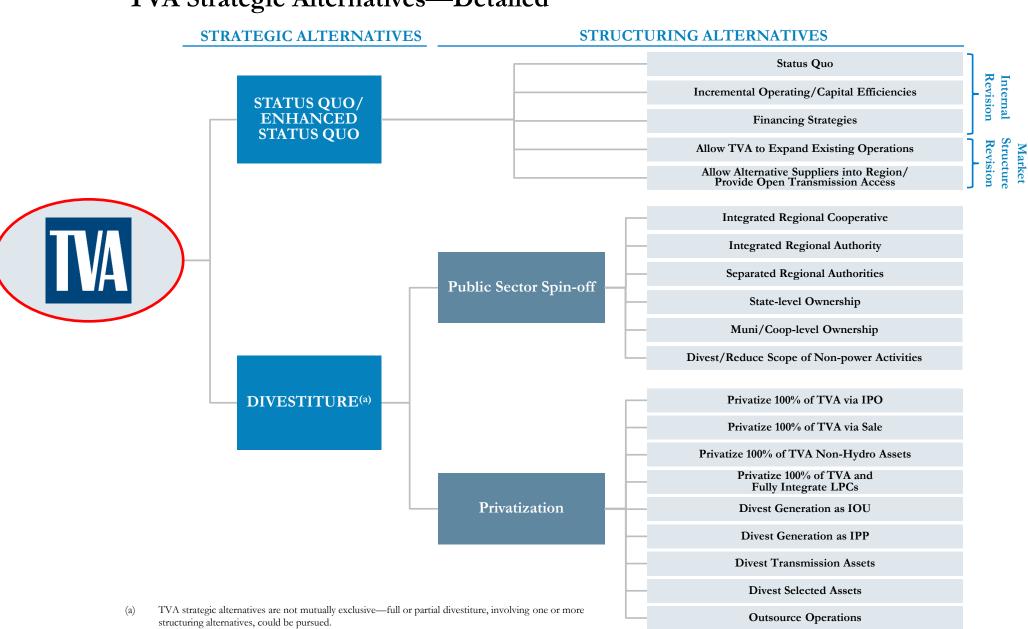
The following criteria have been assembled to facilitate a discussion of TVA's strategic alternatives based on input from TVA and representatives of the Federal Government (Treasury, OMB, etc.). "Threshold" criteria are essential for any alternatives considered, whereas "differentiating" criteria provide a basis for comparison across alternatives

Representatives of the Federal Government have also noted that other policy objectives may need to be considered in their assessment—such criteria are outside the scope of this report

**CRITERIA** 

| CUSTOMER SERVICE               | Reliable and available system that offers the appropriate levels of service, reliability and accountability  |
|--------------------------------|--|
| OVERSIGHT                      | <ul> <li>Governance principles that align TVA's interests with its mission, foster transparency and provide<br/>for robust functioning of the regional power system</li> </ul>                 |
| FINANCING ACCESS               | Access to capital (through public sources and otherwise) and competitive cost of capital for investments in support of the TVA mission   |
| NON-POWER MISSION              | Continuity and effectiveness of non-power mission serving the Tennessee Valley, whether via TVA or otherwise   |
| RATES                          | Rate impact to customers of possible structures  |
| VALUE<br>REALIZATION           | Realization of value of Federal Government ownership stake in TVA  |
| RISK TO FEDERAL<br>GOVERNMENT  | <ul> <li>Potential financial risks/burdens on Federal Government, taking into account the relevant benefits<br/>provided</li> </ul>  |
| TRANSACTABILITY/<br>DISRUPTION | Feasibility of execution, including with regard to stakeholder complexity, basic transaction complexity and potential level of disruption to TVA's provision of services during any transition |

"THRESHOLD" CRITERIA



### **TVA Strategic Alternatives—Detailed**

TVA

# TVA Strategic Alternatives—General Observations<sup>(a)</sup>

There does not appear to be a clear impetus for a divestiture of TVA today, given the expected future rate, value and other benefits of TVA's current initiatives relative to a less certain level of benefit, a very high expected degree of implementation complexity and potential downside outcomes from divestiture strategies

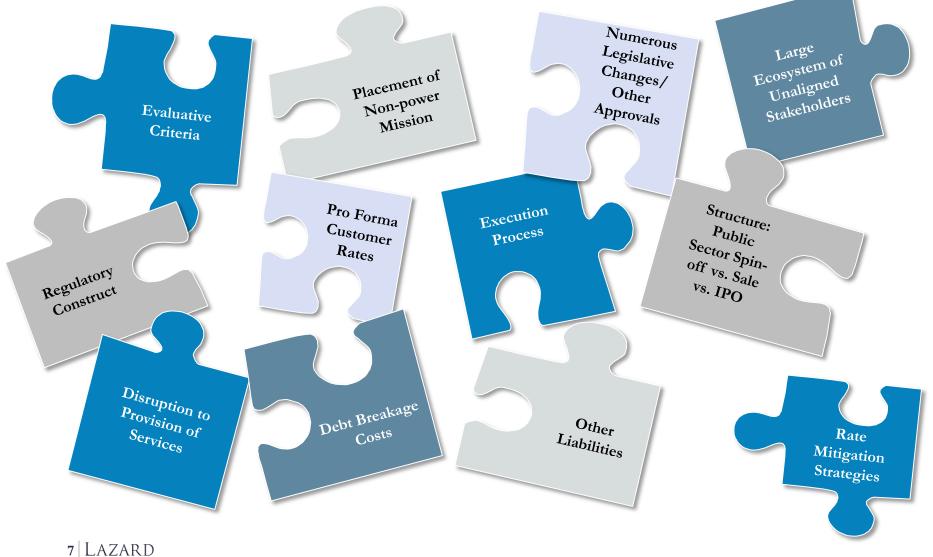
|  | STATUS QUO/   |  |   |
|--|---|--|---|
| NON-POWER<br>MISSION                                   | ENHANCED STATUS QUO <sup>(b)</sup> Integrated and continuing non-power mission within TVA   | <ul> <li>PUBLIC SECTOR SPIN-OFF<sup>(c)</sup></li> <li>Logical placement of non-power mission would need to be determined</li> </ul>   | <ul> <li>PRIVATIZATION<sup>(d)</sup></li> <li>Logical placement of non-power mission would need to be determined</li> </ul>   |
| RATES  | <ul> <li>Rate path expected to improve<br/>relative to peers through efficiencies</li> </ul>  | <ul> <li>Hypothetically similar rates as<br/>compared to Status Quo/Enhanced<br/>Status Quo<sup>(e)</sup></li> </ul>   | <ul> <li>Capital structure, cost of capital and taxatio<br/>imply higher rates and/or a trade-off with<br/>value, prior to taking into account other<br/>upside/downside factors<sup>(e)</sup></li> </ul> |
| RATES<br>VALUE<br>REALIZATION<br>RISK TO<br>FED. GOVT. | NA  | <ul> <li>Level of proceeds and benefits<br/>received to be determined</li> </ul>   | Value realized by government will depend<br>significantly on structure of privatized rate<br>regulation and other factors; would increase<br>tax revenues   |
| RISK TO<br>FED. GOVT.                                  | <ul> <li>Financial plan does not exceed debt<br/>ceiling and implies potential for<br/>deleveraging; operating risks retained<br/>by Federal Government</li> </ul>  | <ul> <li>Reduces overall financial and<br/>operating exposure, although certain<br/>liabilities may need to be retained by<br/>Federal Government</li> </ul>                     | <ul> <li>Reduces overall financial and operating<br/>exposure, although certain liabilities may<br/>need to be retained by Federal Government</li> </ul>  |
| TRANSACTABILITY/<br>DISRUPTION                         | <ul> <li>Current TVA structure appears to be<br/>functioning well and 10-year financial<br/>plan does not suggest major<br/>complications with ongoing Federal<br/>Government ownership</li> </ul>  | <ul> <li>Highly complex and time consuming<br/>to implement due to approval<br/>requirements, established<br/>stakeholder ecosystem, regulation<br/>and other factors</li> </ul> | <ul> <li>Highly complex and time consuming to<br/>implement due to approval requirements,<br/>established stakeholder ecosystem,<br/>regulation and other factors</li> </ul>                              |
| SUMMARY<br>OBSERVATIONS                                | <ul> <li>Healthy financial profile and ongoing efficiency</li> <li>initiatives expected to generate benefits for<br/>TVA's various stakeholders; no apparent<br/>detriment to ongoing Federal Government<br/>ownership</li> </ul>   | Potential to maintain existing rates and reduce<br>Federal Government's exposure to operating<br>risks at TVA, but extremely difficult to<br>implement                           | <ul> <li>Rate impacts and value would need to be evaluated,<br/>among other factors—potentially positive or negativ<br/>outcomes, but in all cases extremely difficult to<br/>implement</li> </ul>        |
| (b) Comm<br>(c) Comm                                   | al observations are meant to be representative of the issues associate<br>nform exactly to the general observations presented, and should als<br>nentary describes analysis of "Incremental Operating/Capital Efficie<br>nentary describes analysis of "Integrated Regional Cooperative" strue<br>nentary describes analysis of "Privatize 100% of TVA and Fully Inte | o be considered on their own merits.<br>encies" structural alternative.<br>ctural alternative.<br>grate LPCs" structural alternative.  | ithin each of the strategic alternatives may $= Better \qquad = Worse$  |

#### STRATEGIC ALTERNATIVES

Please see discussion in "Comparison of TVA vs. Other Power Provider Models" section regarding factors impacting rates under various TVA structures. (e)

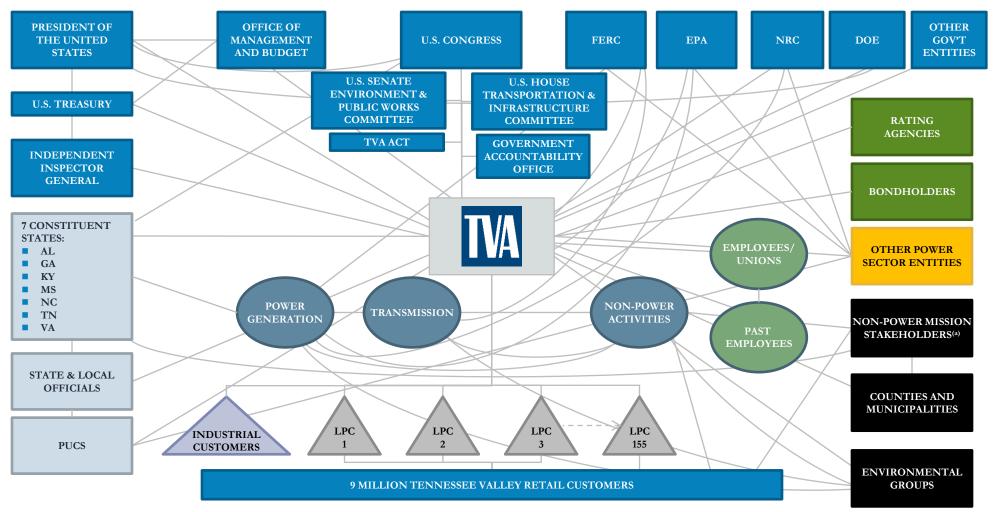
# **Divestiture Implementation Issues**

The high level of implementation complexity associated with a potential TVA divesture would likely lead to a costly, multi-year process to execute any such strategy, during which time TVA's ongoing internal initiatives would experience organization disruption and which would result in an unclear outcome; uncertainty regarding a prolonged strategic review process may also impact TVA's ability to operate effectively



### The TVA Ecosystem

Over its 80-year history, TVA has developed into a complicated "ecosystem" that is intertwined within its seven-state service territory—any effort to substantially reorganize the TVA would be an extraordinarily complex political, economic, regulatory, and financial undertaking



Note: Representation is illustrative only and is not comprehensive in its assessment of relationships between TVA and its various stakeholders. (a) Includes various stakeholders related to water and land stewardship, economic development and other activities.

8 | LAZARD

# Summary Parameters for Illustrative Analysis of Value Realized in Privatization

#### The analyses herein present several illustrative scenarios for a privatization of substantially all of TVA as an IOU

| OVERVIEW            | <ul> <li>The analysis presented herein is based on financial forecasts provided by TVA, which have been adjusted to reflect taxation, capital structure and financing assumptions similar to those of a typical IOU, including the following:</li> <li>TVA pays federal taxes at a 35% tax rate, and continues to pay state and local taxes at approximately its PILOT rate</li> <li>TVA is capitalized at a 50% equity/50% debt capital structure</li> <li>TVA's cost of debt is approximately 70 basis points above that of TVA status quo</li> <li>TVA pays out an annual dividend of 65% of its net income</li> <li>Both an IPO and a sale of TVA have been considered, as follows:</li> <li>IPO: Assumes the Federal Government pursues an IPO of 33% of its ownership stake in TVA<sup>(a)</sup></li> <li>Sale: Assumes the Federal Government sells TVA in its entirety to a third-party acquiror for a premium <ul> <li>Sale scenarios assume synergies (i.e., financial benefits related to the combining of similar companies) are reflected in this premium value</li> </ul> </li> <li>The analysis otherwise does not assume any changes in the operating profile of TVA post-privatization, although there are likely significant changes which would be implemented<sup>(b)</sup></li> </ul> |
|---------------------|--|
| CASES<br>CONSIDERED | <ul> <li>In order to illustrate the broad range of values that could be achieved depending on the regulatory construct in place post-privatization, the following cases have been considered:</li> <li>No Change in Rate Path Case: Assumes that the privatized TVA would follow the same customer rate path that is currently forecasted by TVA over the 2014 – 2023 period, based on the base revenue forecast provided by TVA (prior to the realization of any synergies)<sup>(c)</sup></li> <li>Rate Mitigation Case: Assumes that the privatized TVA would forgo deleveraging in order to mitigate customer rate increases over the 2019 – 2023 period, based on an alternative revenue forecast provided by TVA (prior to the realization of any synergies)<sup>(c)</sup></li> <li>IOU Returns Rate Path Case: Assumes that the privatized TVA is allowed to raise customer rates to a level that would generate a 10.0% ROE on TVA's estimated current ratebase, which implies a 13% increase in customer rates in year one (prior to any realization of synergies)<sup>(c)</sup></li> </ul>  |
| ANALYSIS            | <ul> <li>For the IPO, value is derived based on:</li> <li>Comparable Companies Multiples (in line with publicly-traded utility peers)</li> <li>Discounted Cash Flow ("DCF") analysis</li> <li>For the sale, value is derived based on:</li> <li>Comparable Companies Multiples (applied to TVA forecasts that incorporate financial adjustments for potential synergies)</li> <li>Precedent Transactions Multiples (which are assumed to reflect potential synergies in the "control premium")</li> <li>DCF analysis (applied to TVA forecasts that incorporate financial adjustments for potential synergies)</li> </ul>  |

Note: Illustrative valuation based on publicly-traded comparables as of November 14, 2013, applied as if TVA were valued on September 30, 2013 (reflecting TVA's fiscal year end). Privatization would likely require years to accomplish in reality.

(a) Assumes an illustrative 3.5% underwriting fee and 7.5% IPO discount on a secondary offering of shares. Historically realized fees and pricing have varied significantly and could differ materially from example parameters provided. Following the IPO, the Federal Government could subsequently sell down additional ownership stakes in its remaining 67% holdings in TVA (which would also incur additional discounts and fees not accounted for here).

(b) Assumes that pro forma TVA operates as an IOU under typical utility rate regulation. Notably, any non-power mission activities which may not belong in a private sector entity would be assumed to be separated from the

privatized TVA, but no explicit financial impacts of such action have been modeled herein. Other operating changes are likely as well.(c) Synergy assumptions could meaningfully impact value and/or the ability to mitigate customer rate increases that might otherwise occur.

(d) This rate scenario would result in a 8.0% lower total customer rate in 2023 vs. the No Change in Rate Path Case. TVA has expressed that this is a plausible alternative to their current financial plan.

Notably, the illustrative adjusted

equity values presented do not account

for any potential debt breakage costs,

transaction costs other than IPO

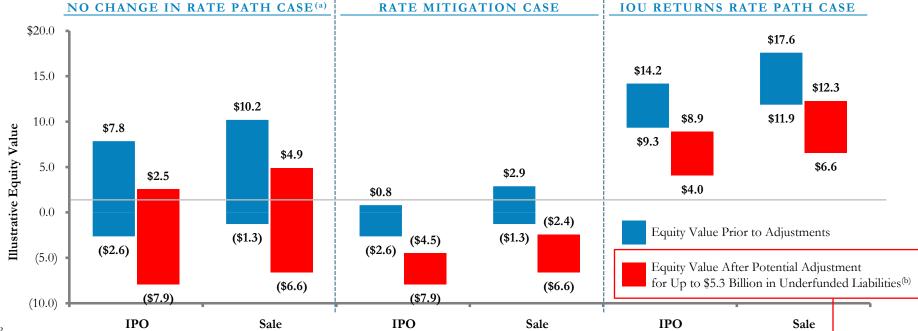
discount/fees, or other adjustments

# Illustrative Range of Equity Values Potentially Realized by Federal Government—Base Financial Plan

#### (\$ in billions)

The Federal Government appears likely to realize minimal, if any, value in a divestiture without a significant value transfer from ratepayers in the form of higher rates (as reflected in the form of regulatory construct afforded to a privatized TVA)—in addition, the net equity value received must take into account costs potentially borne by the Federal Government, including underfunded liabilities, debt breakage costs, transaction costs (other than the IPO costs illustrated) and various other costs

• The analysis herein does not consider tax revenues generated by a privatized TVA, which the Federal Government may consider an additional source of "value"



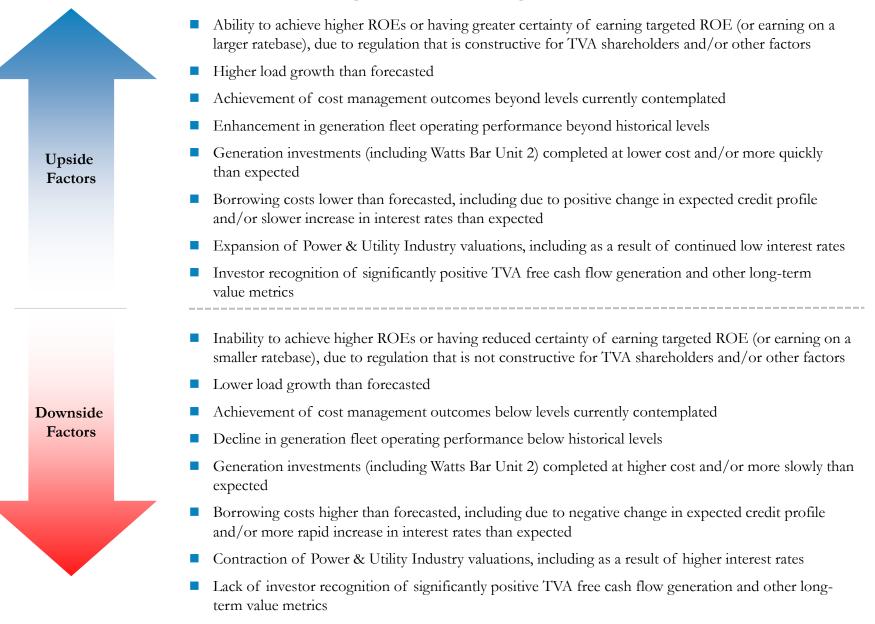
Source: TVA FY14 LRFP.

Note: Illustrative valuation based on publicly-traded comparables as of November 14, 2013, applied as if TVA were valued on September 30, 2013 (reflecting TVA's fiscal year end). IPO values have been adjusted for illustrative 3.5% underwriting fee and 7.5% IPO discount on a secondary offering of 33% of TVA shares. Historically realized fees and pricing have varied significantly and could differ materially from example parameters provided. Following the IPO, the Federal Government could subsequently sell down its remaining 67% equity interest in TVA (which would also incur additional discounts and fees not accounted for here). Sale values assume synergies of 10% of TVA non-fuel O&M (shared 50% with customers) are valued by buyers in TVA's purchase price in the Comparable Companies Multiples and Discounted Cash Flow analyses, and that buyers accord historical transaction multiples to TVA in the Precedent Transactions Multiples analysis. Synergies are incremental to TVA's current target of ~15% reduction in non-fuel O&M by 2015.

(a) The wide range in values reflects low value attribution for TVA based on near-term financial projections as compared to high value attribution for TVA based on its long-term projections, which generate high free cash flow and increasing earnings. The ultimate value realization may depend on the level of regulatory certainty afforded to a buyer or investor in achieving the 10-year rate path. Without such protections, the value range may be more similar to the Rate Mitigation Case.

(b) Equity value after potential adjustment (red bars) assume full \$5.3 billion in underfunded liabilities deducted (planned funding through rates would significantly decrease this amount and implies a "net" underfunding of \$2.4 billion; in addition, changes in yield assumptions may significantly lower this amount). Underfunded liabilities may be ignored by investors/buyers if they believe rate recovery for such liabilities is reasonably likely.

# Illustrative Factors Enhancing and Reducing TVA's Illustrative Value



# **Summary Conclusions**

TVA

Based on information received, current financial market conditions and analyses performed, and considering the criteria provided, Lazard recommends that TVA focus on long-term internal strategies to fully realize the benefits of cost and capital efficiencies accessible to the organization, and believes that its various stakeholders (including the Federal Government) would likely benefit from fostering a supportive environment for TVA's transformation

- TVA appears to be evolving toward a more "business-like" approach to its organization that should create benefits for all TVA stakeholders for years to come; specific improvements Lazard believes TVA should focus on include:
  - Continuing focus on driving cost efficiencies
  - Ongoing scrutiny of all capital allocation decisions
  - New approaches to long-term resource planning
  - Highlighting, and making more evident, the non-power activities of TVA
- While Lazard has recommended for privatization in other situations in the U.S. Power & Utility Industry, the following factors have led Lazard to recommend against pursuing a divestiture of TVA:
  - TVA's current strong financial position, ability to self-fund its construction program and anticipated improvements in cost structure, environmental profile and asset mix, and other benefits, as a result of ongoing long-term initiatives suggests there is no impetus for the Federal Government to change course—TVA's initiatives should generate benefits to stakeholders and enhance the value of TVA over time
  - Although changes in TVA's debt appear as part of the federal budget, TVA's financing does not appear to be a true draw on the government balance sheet, as TVA receives no current appropriations and its debt is not guaranteed by the Federal Government; in addition, TVA is not expected to exceed its \$30 billion statutory debt limit by 2023, and deleveraging contemplated by TVA's financial forecast would appear to *help* the federal budget over the next decade
  - The high level of implementation complexity associated with a potential TVA divesture would likely lead to a costly, multi-year process to execute any such strategy, during which time TVA would experience organization disruption and which would result in an unclear outcome; uncertainty regarding a prolonged strategic review process may also impact TVA's ability to operate effectively
  - The complex network of TVA stakeholders would further make it difficult to divest TVA in a manner that creates value for all parties numerous TVA stakeholders (e.g., the Administration, Congress, TVA's LPC and wholesale customers, state and local governments, beneficiaries of TVA's non-power mission, etc.) would need to be broadly aligned in order to effectively implement a divestiture
  - The Federal Government appears likely to realize minimal, if any, value in a divestiture without a significant value transfer from ratepayers in the form of higher rates, even prior to taking into account underfunded liabilities, debt breakage costs, transaction costs and other potential divestiture costs (which may significantly detract from value)
  - It is unclear how TVA's non-power mission and activities would logically fit within a divested TVA structure—any reductions in the scope of the non-power mission and activities could potentially have a negative impact on the region

II Review of Status Quo TVA

# A TVA SWOT Analysis

# TVA—"SWOT" Analysis

#### SELECTED STRENGTHS

One of the largest power providers in the U.S.

Service area is protected from competition

Long-term contracts with strong credit counterparties

Power and non-power activities are integrated

Retail rates are in 2<sup>nd</sup> quartile nationally/at median regionally

Strong credit rating, self funding and low cost of capital

Low capital intensity following completion of Watts Bar 2

Efficiency initiatives may improve TVA cost structure

Generation fleet rotation (coal to nuclear and gas) is expected to continue to improve environmental profile

Strong post-2015 cash flow generation creates flexibility for deleveraging, rate mitigation and/or other strategic initiatives

Targeting 1st quartile industrial rates in 2014

Completion of strategic review could remove current operating and financing overhang

Benefits from improved and professional management

#### **SELECTED OPPORTUNITIES**

13 LAZARD



Lack of integration with distribution system

Restricted from participating in businesses outside of service territory or beyond mission

Cost structure appears to lag peers, although TVA's nonpower mission and other factors may affect this comparison

Nuclear fleet performance in bottom quartile

\$30 billion limit on statutory debt financing



Environmental and nuclear event risk

Continued uncertainty regarding strategic direction as a result of governmental commentary

Potential for slower than forecasted growth may result in higher implied rates<sup>(a)</sup>

Higher than forecasted capital intensity may cause increase in financing requirements<sup>(a)</sup>

Commodity price risk (though partially mitigated by diversified generation fleet)<sup>(a)</sup>

#### SELECTED THREATS

(a) Industry-wide issues which are not specific to TVA.



# **B** Overview of TVA Mission and Current Activities

### **Overview of TVA Mission**

TVA's core mission in support of the regional stewardship of the Tennessee Valley has been refined and refocused over time and now has a "look and feel" similar to that of conventional private sector corporations with public responsibilities<sup>(a)</sup>

#### TVA ACT OF 1933

- "An act to improve the navigability and to provide for the flood control of the Tennessee River; to provide for reforestation and the proper use of marginal lands in the Tennessee Valley; to provide for the agricultural and industrial development of said valley; to provide for the national defense by the creation of a corporation for the operation of Government properties at and near Muscle Shoals in the State of Alabama, and for other purposes"
- "... the Corporation... shall have power to construct dams, reservoirs, power houses, power structures, transmission lines, navigation projects... and to unite the various power installations into one or more systems by transmission lines"

#### MISSION (AS OF 2011)

- Provide low-cost, reliable power in the Tennessee Valley region
- Environmental stewardship
- Economic and agricultural development
- Integrated river system management
- Technological innovation

#### 2013 10-K BUSINESS DESCRIPTION

- "TVA was created to, among other things, improve navigation on the Tennessee River, reduce the damage from destructive flood waters within the Tennessee River system and downstream on the lower Ohio and Mississippi Rivers, further the economic development of TVA's service area in the southeastern U.S. and sell the electricity generated at the facilities TVA operates"
- "TVA's Environmental Policy. … provides objectives for an integrated approach related to providing cleaner, reliable, and affordable energy, supporting sustainable economic growth, and engaging in proactive environmental stewardship. … including water resource protection and improvements, sustainable land use, and natural resource management"
- "TVA makes investments in science and technological innovation to assist TVA in meeting future challenges in key areas. ... SMRs, grid modernization. ... and energy utilization technologies"

#### FEBRUARY 2013 TVA PRESIDENT'S REPORT

- To execute TVA's mission, we must actively manage a portfolio of assets to deliver superior value to our customers as measured by:
  - Financial excellence
    - Rates
    - Financial Health
    - Budget Commitment
  - Operational Excellence
    - Nuclear
    - Coal
    - Gas
    - Transmission
    - Construction
  - Stewardship
    - Safety
    - Environment
    - People

Source: TVA Act, TVA website, TVA 2013 10-K and TVA's February 2013 President's Report.

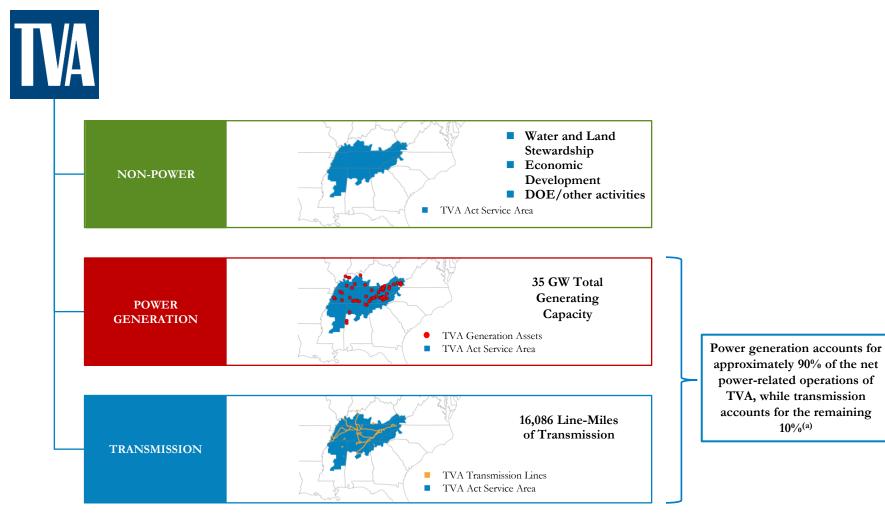
<sup>(</sup>a) One notable difference, however, is the lack of the shareholder as a key constituency.



10%<sup>(a)</sup>

# **Overview of Current TVA Business Mix**

TVA's activities can be generally broken down into three areas: non-power, generation and transmission. The power and nonpower missions of TVA are highly related and integrated (e.g., the provision of low-cost power is viewed by TVA as a facilitator of economic development in the region and water stewardship is jointly managed with TVA's hydro operations)



Source: TVA Brown Book and TVA data.

(a) Per net PP&E and O&M breakdown provided by TVA.

### **Overview of Current TVA Activities—Non-power Mission**

TVA's non-power operations are integrated across the organization, including within the power and transmission organizations. TVA's non-power mission is funded primarily through energy revenues, supplemented by fees and other modest revenues collected for river and land services—in other regions of the U.S., these activities tend to be provided by governments

| STAKEHOLDERS                     | The residents of the Tennessee Valley are the key stakeholder for TVA's non-power mission <sup>(a)</sup>   |
|----------------------------------|--|
| WATER AND<br>LAND<br>STEWARDSHIP | <ul> <li>Responsible for stewardship of the waters and public lands in the Tennessee Valley</li> <li>Manages 650,000 acres of surface water, 293,000 acres of reservoir land, 11,000 miles of shoreline and more than 100 public recreation areas</li> <li>Operates regional system of dams and reservoirs</li> <li>Manages approximately 42,000 miles of rivers, streams and tributaries, with 49 dams and 14 navigation locks</li> <li>Provides flood control management delivering approximately \$250 million annually in flood damage avoidance (\$7 billion since program inception)<sup>(a)</sup></li> <li>Flood control and river navigation management take precedence over hydropower generation<sup>(a)</sup></li> </ul>  |
| ECONOMIC<br>DEVELOPMENT          | <ul> <li>Stated economic development goals include the following:</li> <li>Recruiting major industrial operations to locate in the Tennessee Valley</li> <li>Encouraging the location and expansion of companies that provide quality jobs</li> <li>Preparing communities in the Tennessee Valley for economic growth</li> <li>Offering support to help grow and sustain small businesses</li> <li>Recent activities have included the following:</li> <li>The Megasites program, which was developed to independently certify large industrial properties</li> <li>The Data Center Site Assessment program, which was created to help communities attract data center projects</li> <li>The Valley Investment Initiative program, which makes financial incentive awards to qualifying existing companies and new companies that are contributing to the economic development of the TVA service area</li> <li>TVA helped to create 52,000 jobs and attracted \$5 billion of capital investment within the Tennessee Valley region in 2013<sup>(a)</sup></li> </ul> |
| DOE/OTHER<br>ACTIVITIES          | <ul> <li>TVA supports a number of technology initiatives and partners with the Department of Energy ("DOE") to further the development of technologies such as Small Modular Nuclear Reactors ("SMRs"), grid modernization and energy utilization</li> <li>Through a contract with the DOE, TVA supplies tritium for use in maintaining the U.S.'s nuclear weapons arsenal (co-produced with power generation at TVA's nuclear facilities)</li> <li>TVA purchases low enriched uranium through an arrangement with the DOE, Energy Northwest ("EN"), Bonneville Power Authority ("BPA") and the United States Enrichment Corporation ("USEC")</li> </ul>   |
|                                  | Source: TVA Brown Book and TVA data.   |

### **Overview of Current TVA Activities—Power Generation**

TVA's generation fleet serves customers in its defined service territory (the "Fence"), inside of which TVA has rate-setting authority and exclusive rights to sell power, but outside of which TVA is entirely restricted from operating

| GENERATION<br>ASSETS | <ul> <li>Owns and operates ~35 GW of electricity generating capacity</li> <li>2013 capacity mix consists of 39% coal, 26% gas/oil, 19% nuclear and 16% hydro/renewable/other by installed capacity (GW)</li> <li>2013 generation mix consists of 48% coal, 5% gas/oil, 37% nuclear, 10% hydro/renewable/other by GWh production</li> <li>Expected 2024 generation mix to consist of 40% nuclear, 20% coal, 20% gas and 20% hydro/renewable/other by installed capacity (GW)<sup>(a)</sup></li> <li>Maintains emissions controls program (approximately \$5.4 billion spent between 1977 and 2012)</li> <li>SO<sub>2</sub> scrubbers installed on 17 coal-fired units and NO<sub>x</sub> selective catalyst reduction systems installed on 21 coal-fired units (out of a total of 51 coal-fired units)</li> </ul>   |
|----------------------|--|
| CUSTOMERS            | <ul> <li>Sells power primarily to local power companies ("LPCs") in its service territory (comprised of 105 munis and 50 coops) on a wholesale basis (134 TWh in 2014E, ~87% of total)</li> <li>LPCs resell power to their customers (~9 million customers in 7 states) at retail rates</li> <li>Contracts between TVA and LPCs typically incorporate 5 to 15 year notice for termination</li> <li>Also sells power to large wholesale commercial and industrial customers and federal agencies (19 TWh in 2014E, ~13% of total)</li> <li>Major customers include Alcoa, DuPont, Nucor and Praxair</li> <li>Partners with state and local governments to promote economic development in the region by providing recruitment, technical services, industry expertise and site selection assistance to new and existing businesses</li> </ul>   |
| REGULATION           | <ul> <li>TVA has independent rate-setting authority and also serves as the regulator for LPC retail rates in the region</li> <li>TVA is not subject to Federal Energy Regulatory Commission ("FERC") regulation (only subject to certain aspects of jurisdiction) or state-level regulatory authorities</li> <li>However, TVA voluntarily adopts a number of FERC guidelines in its operations</li> <li>TVA is legislatively restricted from selling electricity outside of its defined service territory and, conversely, other power companies are not allowed to transmit into, or sell energy inside, TVA's service territory</li> <li>This region is bounded by what is known as the "Fence"</li> <li>TVA's customer base is not restricted from choosing other energy suppliers, but the restrictions disallowing third-party power suppliers in TVA's service territory and contract terms practically limit customers' ability to do so</li> <li>Historically, only a small number of customers at the edge of TVA's service territory have switched energy suppliers</li> </ul> |

Source: TVA Brown Book and TVA data.

<sup>(</sup>a) TVA November 2013 Board presentation.



# **Overview of Current TVA Activities—Transmission**

TVA's transmission system is comprised of a high-voltage long-distance network that integrates with its generation portfolio to provide power to customers in its region; as currently legislated, TVA's transmission system does not provide for open access to third parties

|                        | Owns and operates one of the largest electric transmission systems in North America, comprised of:  |
|------------------------|---|
|                        | 16,086 miles of transmission lines; 103,485 transmission line structures; 509 power stations and switchyards; 239,000 acres of transmission right-of-way  |
| TRANSMISSION<br>ASSETS | System has 64 interconnections with 12 neighboring electric systems   |
|                        | System includes 2,466 miles of 500 kV lines, 11,407 miles of 161 kV lines and 1,452 miles of 69 kV lines  |
|                        | System includes 9,422 miles of transmission lines in Tennessee, 2,381 miles in Alabama, 2,051 miles in Mississippi, 1,644 miles in Kentucky and 588 miles in other states   |
| CUSTOMERS              | <ul> <li>TVA's transmission and generation functions operate in an integrated fashion to serve TVA's LPC and large commercial<br/>and industrial customer base</li> </ul>   |
|                        | TVA is not subject to FERC regulation (only subject to certain aspects of jurisdiction) or state-level regulatory authorities   |
|                        | However, TVA voluntarily adopts a number of FERC guidelines in its operations <sup>(a)</sup>  |
| REGULATION             | TVA's transmission costs are bundled with its generation and other costs to provide an "all in" cost to its LPC and large commercial and industrial customers—as with generation, TVA has independent rate-setting authority  |
|                        | TVA may supply its customers from purchased power if more economical than TVA resources <sup>(a)</sup>  |
|                        | TVA is not obligated to wheel power for wholesale suppliers if the power will be consumed within TVA's Fence; however, TVA is subject to requirements to provide transmission service when the power will be wheeled outside of or across the TVA system <sup>(a)</sup> |

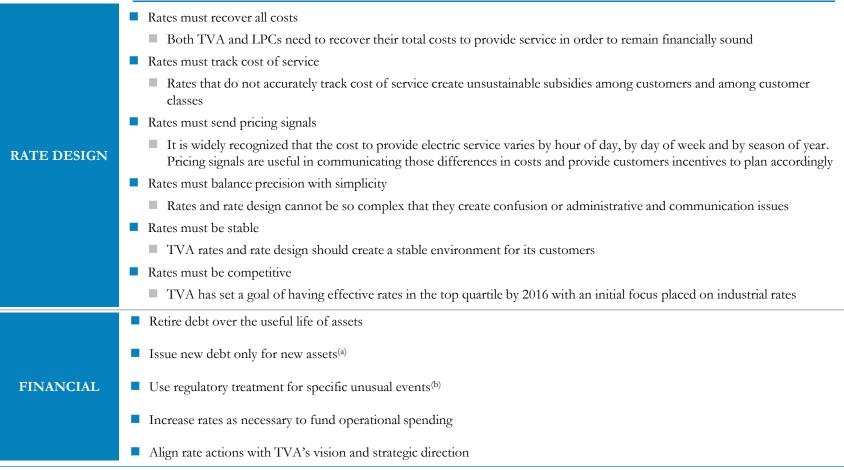
Source: TVA Brown Book and TVA data. (a) Per TVA.

### **TVA Rate-setting and Financial Guiding Principles**

TVA is statutorily authorized to set its electricity rates, which has led to its development of a set of principles for rate design and for guiding its financing strategy

Rates are set by TVA's nine-member Board of Directors, who are nominated by the President and confirmed by the Senate

#### **GUIDING PRINCIPLES**



Source: "Rate Design: A Brief Discussion of Wholesale and Retail Rate Design" (TVA whitepaper) and TVA public filings (Delivering the Vision, September 2011).

(a) TVA is permitted (but not required) to issue new debt for new assets.

(b) Amortization of Kingston ash spill costs as a regulatory asset is one example.

# C Financial Assessment—Current Plan

### Summary TVA Financial Projections—Current Plan

(\$ in millions)

TVA (along with the broader Power & Utility Industry) is expected to experience stagnant load growth over the next decade and is focused on managing its O&M profile through cost reduction programs and steady rate increases to support its capital expenditure program, while lowering its debt levels to stay beneath its statutory debt ceiling

| Loss of large industrial<br>customer (USEC) and<br>stagnant overall volume<br>growth drives significant<br>near-term decline in total<br>power sales | 2<br>Load growth fored<br>of (0.0%) annually<br>over forecast perio<br>limits revenue gro<br>outside of rate<br>increases | cast<br>y od<br>owth growth in excess of<br>volume growth<br>(2.4% vs. (0.0%)) |                         |                         | Cost reduction efforts<br>expected to reduce O&M by<br>~\$357 million by 2015 vs.<br>2013 and 10-year O&M<br>roughly unchanged |                         |                         | Bar<br>serv             | ry of Watts<br>Unit 2 into<br>ice increas<br>M in 2017 | es O<br>in<br>de        | 6<br>Net income expected<br>to increase, driven by<br>O&M reductions, rate<br>increases and<br>decreasing interest<br>expense |                |  |
|--|---|--|-------------------------|-------------------------|--|-------------------------|-------------------------|-------------------------|--|-------------------------|---|----------------|--|
|  | 2013A   | 2014E  | 2015E                   | 2016E                   | 2017E  | 2018E                   | 2019E                   | 2020E                   | 2021E  | 2022E                   | 2023E   | CAGR           |  |
| GWh Sales<br>% Growth  | 1 160,289   | 153,638<br><i>(4.1%)</i>   | 154,390<br>0.5%         | 155,015<br><i>0.4%</i>  | 155,526<br><i>0.3%</i>   | 156,270<br><i>0.5%</i>  | 156,997<br><i>0.5%</i>  | 158,007<br><i>0.6%</i>  | 158,358<br>0.2%  | 159,047<br><i>0.4%</i>  | 159,831<br><i>0.5%</i>  | 2<br>(0.0%)    |  |
| Gross Revenue<br>% Growth  | \$10,984<br>-   | \$10,468<br><i>(4.7%)</i>  | \$10,766<br><i>2.8%</i> | \$10,870<br><i>1.0%</i> | \$11,185<br><i>2.9%</i>  | \$11,589<br><i>3.6%</i> | \$12,019<br><i>3.7%</i> | \$12,398<br><i>3.2%</i> | \$12,805<br><i>3.3%</i>                                | \$13,282<br><i>3.7%</i> | \$13,914<br><i>4.8%</i>   | 2.4%           |  |
| Less: Fuel Cost  | (3,883)   | (3,498)  | (3,595)                 | (3,481)                 | (3,583)  | (3,728)                 | (3,847)                 | (3,996)                 | (4,148)  | (4,267)                 | (4,451)   |                |  |
| Net Revenues<br>% Growth   | \$7,101   | <b>\$6,9</b> 70<br><i>(1.8%)</i>   | \$7,171<br><i>2.9%</i>  | \$7,389<br><i>3.0%</i>  | \$7,602<br>2.9%  | \$7,861<br><i>3.4%</i>  | \$8,172<br><i>4.0%</i>  | \$8,402<br><i>2.8%</i>  | \$8,657<br><i>3.0%</i>                                 | \$9,015<br><i>4.1%</i>  | \$9,463<br><i>5.0%</i>  | 2.9%           |  |
| Less: Non-fuel O&M   | (\$3,541)   | (\$3,437)  | (\$3,184)               | (\$3,164)               | (\$3,257)  | (\$3,226)               | (\$3,309)               | (\$3,352)               | (\$3,438)  | (\$3,479)               | (\$3,584)   | 0.1%           |  |
| Less: Payments in Lieu of Taxes <sup>(a)</sup><br>Plus: Other Income   | (549)<br>44   | (513)<br>41  | (513)<br>36             | (518)<br>36             | (537)<br>36  | (557)<br>36             | (574)<br>36             | (594)<br>38             | (615)<br>39  | (637)<br>36             | (668)<br>38   |                |  |
| EBITDA<br>% Margin   | \$3,055<br><i>43.0%</i>   | \$3,061<br><i>43.9%</i>  | \$3,511<br><i>49.0%</i> | \$3,744<br><i>50.7%</i> | \$3,843<br><i>50.6%</i>  | \$4,114<br><i>52.3%</i> | \$4,325<br><i>52.9%</i> | \$4,494<br><i>53.5%</i> | \$4,642<br><i>53.6%</i>                                | \$4,935<br><i>54.7%</i> | \$5,249<br><i>55.5%</i>   | 5.6%           |  |
| Less: D&A  | (1,710)   | (1,791)  | (1,749)                 | (1,903)                 | (1,956)  | (2,014)                 | (2,087)                 | (2,098)                 | (2,146)  | (2,097)                 | (2,060)   |                |  |
| EBIT   | \$1,345   | \$1,270  | \$1,762                 | \$1,840                 | \$1,887  | \$2,100                 | \$2,238                 | \$2,395                 | \$2,496  | \$2,838                 | \$3,189   | 9.0%           |  |
| Less: Net Interest Expense   | (\$1,257)   | (\$1,269)  | (\$1,292)               | (\$1,477)               | (\$1,560)  | (\$1,531)               | (\$1,494)               | (\$1,459)               | (\$1,423)  | (\$1,375)               | (\$1,349)   |                |  |
| Net Income   | \$88  | \$1  | <b>\$</b> 470           | \$364                   | \$327  | \$570                   | \$744                   | \$936                   | \$1,073  | \$1,463                 | \$1,840   | 35.6%          |  |
| Total Debt <sup>(b)</sup>  | \$26,865  | \$27,863   | \$28,357                | \$28,042                | \$27,275   | \$26,400                | \$25,430                | \$25,037                | \$23,537   | \$22,477                | \$21,783  |                |  |
| Proprietary Capital <sup>(c)</sup>   | 5,431   | 5,406  | 5,865                   | 6,217                   | 6,531  | 7,086                   | 7,817                   | 8,739                   | 9,798  | 11,247                  | 13,073  |                |  |
| Total Capitalization   | \$32,296  | \$33,269   | \$34,223                | \$34,259                | \$33,806   | \$33,486                | \$33,247                | \$33,776                | \$33,335   | \$33,724                | \$34,856  |                |  |
| Cash Flow from Operations  | \$2,509   | \$2,230  | \$2,648                 | \$2,788                 | \$2,882  | \$3,186                 | \$3,536                 | \$3,746                 | \$3,977  | \$4,370                 | \$4,666   | '14 – '23      |  |
| Capital Expenditures & Other<br>Cash Flow from Operations - Capex  | (2,655)   | (3,281)<br>(1,051)   | (3,161)<br>(514)        | (2,441)<br>347          | (2,081)<br>800   | (2,276)<br>910          | (2,532)<br>1,003        | (2,685)<br>1,061        | (3,080)<br>897   | (3,277)<br>1,092        | (3,020)<br>1,645  | Total<br>6,192 |  |
| Net PP&E   | 29,339  | 30,633   | 31,813                  | 30,666                  | 30,676   | 30,665                  | 30,853                  | 31,081                  | 31,512   | 32,207                  | 32,500  | 0,172          |  |

Source: TVA FY14 LRFP Management Plan and TVA filings.

(a) Amount of these payments is five percent of gross revenues from sales of power during the preceding year, excluding sales or deliveries to other federal agencies and off-system sales with other utilities, with a provision for minimum payments under certain circumstances.

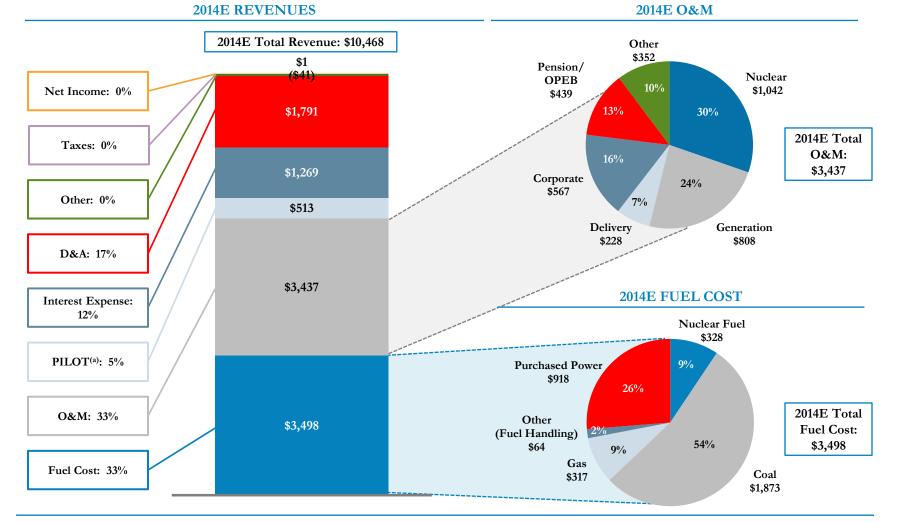
(b) Total debt includes current maturities of long-term debt (including Variable Interest Entities ("VIEs")), short-term debt and long-term debt.

(c) Proprietary capital includes the remaining portion of the U.S. Treasury's Power Program Appropriation Investment (~\$270 million) and retained earnings.

# **TVA 2014E Revenue Stack Analysis**

#### (\$ in millions)

The majority of TVA's 2014E forecasted revenue requirement is comprised of fuel and O&M costs (~66% of total revenues), with financing costs (interest expense and net income) comprising approximately 12% of total revenues



Source: TVA FY14 LRFP Management Plan and TVA filings.

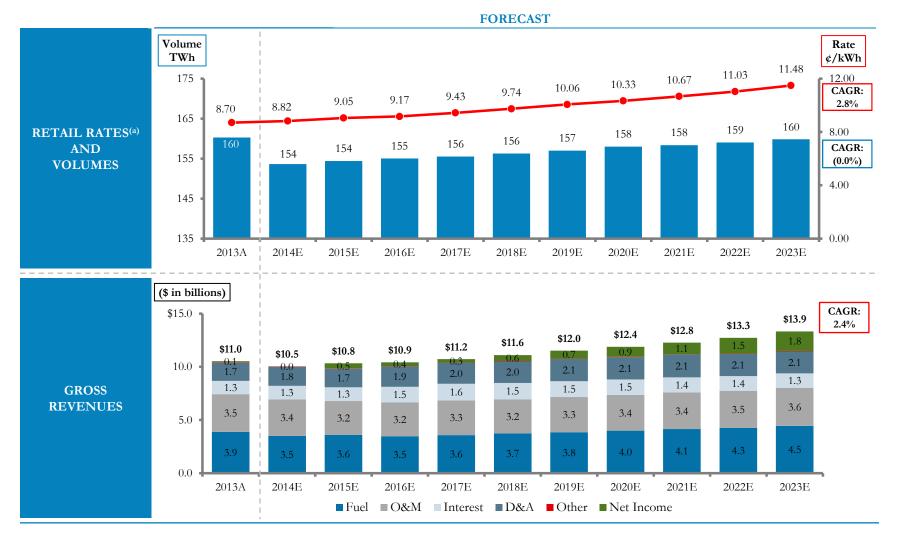
Note: Distribution revenue requirements are not shown herein.

(a) Payments in Lieu of Taxes ("PILOT"); amount of these payments is five percent of gross revenues from sales of power during the preceding year, excluding sales or deliveries to other federal agencies and off-system sales with other utilities, with a provision for minimum payments under certain circumstances.



### **TVA Rate Forecast**

TVA forecasts a 2.8% retail rate CAGR over 2013 – 2023, supporting its 2.4% revenue CAGR despite flat volume growth over the same period



Source: TVA FY14 LRFP Management Plan and TVA filings.

(a) Retail rate estimate per TVA includes a retail distribution rate adder.

### **TVA Cash Flow and Credit Profile—Current Plan**

(\$ in millions)

Following the completion of Watts Bar Unit 2, TVA is expected to generate recurring positive free cash flow (\$6.2 billion in net free cash flow over the 2014 – 2023 period) that will be used to reduce TVA's leverage levels

|  | 2)               | (         |  | ,            |            | (4              |                |             |          | (5)        |            |                    | 6                 |                       |
|--|------------------|-----------|--|--------------|------------|-----------------|----------------|-------------|----------|------------|------------|--------------------|-------------------|-----------------------|
| Capital expenditures   | Expected to be   |           | Despite a                              | a ~\$22.6 bi | illion cap |                 | /<br>TVA will  | remit \$145 | 5        |            | ted 2023 t | otal debt to       |                   | ificant               |
| during 2013 – 2016 driven                                      | cash flow positi |           |  |              |            |                 |                |             |          | below peak | <b>U</b>   | ovement in         |                   |                       |
| by construction of Watts                                       | in the medium    | to        |  |              |            |                 |                |             |          | total de   | ebt levels | expected in        | credi             | t metrics             |
| Bar Unit 2 and investment                                      | long term, drivi | ng        | the forecast period, only \$1.3 period |              |            |                 |                |             |          | 2015. E    | Debt level | s do not           | antic             | ipated over the       |
| in pollution control   | reduction in     |           | billion of                             | gross exte   | ernal      | _   L           |                |             |          | exceed     | statutory  | debt limits        |                   | ast period as a       |
| equipment  | leverage         |           | financing requirements                 |              |            |                 |                |             | in any   | year       |            | resul              | t of deleveraging |                       |
|  |                  |           |  |              | For        | the Fiscal Year | r Ended Septen | ıber 30,    |          |            |            | '14 - '23          |                   |                       |
| CASH FLOW PROFILE  | 2013A            | 2014E     | 2015E                                  | 2016E        | 2017E      | 2018E           | 2019E          | 2020E       | 2021E    | 2022E      | 2023E      | Total              |                   |                       |
| Net Income   | \$88             | \$1       | \$470                                  | \$364        | \$327      | \$570           | \$744          | \$936       | \$1,073  | \$1,463    | \$1,840    | \$7,787            |                   |                       |
| Depreciation & Amortization                                    | 2,085            | 2,187     | 2,178                                  | 2,398        | 2,482      | 2,594           | 2,728          | 2,769       | 2,834    | 2,809      | 2,780      | 25,757             |                   |                       |
| Working Capital and Other                                      | 336              | 41        | 0                                      | 27           | 73         | 23              | 64             | 41          | 70       | 98         | 47         | 483                |                   |                       |
| Cash Flow from Operations                                      | \$2,509          | \$2,230   | \$2,648                                | \$2,788      | \$2,882    | \$3,186         | \$3,536        | \$3,746     | \$3,977  | \$4,370    | \$4,666    | \$34,028           |                   |                       |
| Base Capital Expenditures                                      |                  | (946)     | (1,027)                                | (1,032)      | (1,106)    | (1,037)         | (1,026)        | (1,042)     | (1,206)  | (1,290)    | (1,091)    | (\$10,803)         |                   |                       |
| Incremental Capital Expenditures                               | (1,464)          | (1,905)   | (1,667)                                | (1,015)      | (625)      | (730)           | (1,014)        | (1,049)     | (1,135)  | (1,393)    | (1,262)    | (\$11,796)         |                   |                       |
| Nuclear Fuel & Other   | (392)            | (431)     | (468)                                  | 2 (395)      | (350)      | (508)           | (492)          | (594)       | (738)    | (594)      | (668)      | (5,237)            |                   |                       |
| Free Cash Flow   | (\$146)          | (\$1,051) | (\$514)                                | \$347        | \$800      | \$910           | \$1,003        | \$1,061     | \$897    | \$1,092    | \$1,645    | (145)<br>(145)     |                   |                       |
| Payments to Treasury <sup>(a)</sup>                            | (26)             | (26)      | (10)                                   | (12)         | (14)       | (14)            | (14)           | (14)        | (14)     | (14)       | (14)       | (145)              |                   |                       |
| Net External Financing Requirements                            | \$172            | \$1,078   | \$524                                  | (\$336)      | (\$787)    | (\$896)         | (\$989)        | (\$1,047)   | (\$883)  | (\$1,078)  | (\$1,632)  | (\$6,047)<br>7 322 |                   |                       |
| Long-term Debt Maturities                                      | 34               | 1,034     | 34                                     | 1,557        | 1,684      | 34              | 32             | 1,862       | 1,030    | 31         | 24         | 7,322              |                   |                       |
| Gross External Financing Requirement                           | s \$206          | \$2,112   | \$558                                  | \$1,222      | \$897      | (\$862)         | (\$958)        | \$815       | \$147    | (\$1,047)  | (\$1,607)  | \$1,275            |                   |                       |
|  |                  |           |  |              |            |                 |                |             |          |            |            |                    |                   |                       |
| CREDIT PROFILE   | \$1,287          | \$1,187   | \$1,137                                | \$1,137      | \$1,137    | \$1,137         | \$1,137        | \$1,772     | \$1,137  | \$1,137    | \$2,060    |                    |                   |                       |
| Cash & Cash Equivalents<br>Total Statutory Debt <sup>(b)</sup> | 24,815           | 25,907    |  | 26,296       | 25,641     | 24,883          | 24,028         | 23,731      | 22,465   | 21,468     |            | Г                  | Credit I          | Rating/Outlook        |
| Total Debt <sup>(c)</sup>                                      | 26,865           | 27,863    | <u>5</u> 28,357                        | 28,042       | 27,275     | 24,000          | 25,430         | 25,037      | 23,537   | 22,477     | 21,783     |                    | &P                | AA+/Stable            |
| Proprietary Capital <sup>(d)</sup>                             | 5,431            | 5,406     | 5,865                                  | 6,217        | 6,531      | 7,086           | 7,817          | 8,739       | 9,798    | 11,247     | 13,073     | J                  | foody's           | Aaa/Stable            |
| Total Capitalization   | \$32,296         | \$33,269  | \$34,223                               | \$34,259     | \$33,806   | \$33,486        | \$33,247       | \$33,776    | \$33,335 | \$33,724   | \$34,856   | L                  | 2                 | ,                     |
|  |                  |           |  |              |            |                 |                |             |          |            | 、          |                    |                   | Credit Statistics (e) |
| PE0 /4   | 6                |           |  | •            | •          |                 |                |             | • •      |            |            | <b>۱</b> –         |                   | Modest                |
| FFO/Interest   | 3.1x             | 2.9x      | 3.2x                                   | 3.0x         | 2.9x       | 3.2x            | 3.5x           | 3.7x        | 3.9x     | 4.3x       | 4.6x       |                    | 4.5x              | - 6.0x                |
| FFO/Total Debt   | 10.0%            | 8.5%      | 10.2%                                  | 10.8%        | 11.1%      | 12.8%           | 14.6%          | 15.7%       | 17.7%    | 20.2%      | 22.6%      |                    | 45.0%             | - 60.0%               |
| Total Debt/EBITDA  | 8.8x             | 9.1x      | 8.1x                                   | 7.5x         | 7.1x       | 6.4x            | 5.9x           | 5.6x        | 5.1x     | 4.6x       | 4.2x       |                    | 2.0x              | - 1.5x                |
| Total Debt/Total Capitalization                                | 83.2%            | 83.8%     | 82.9%                                  | 81.9%        | 80.7%      | 78.8%           | 76.5%          | 74.1%       | 70.6%    | 66.6%      | 62.5%      | J                  | 35.0%             | - 25.0%               |

Source: TVA FY14 LRFP Management Plan and TVA filings.

(a) Repayment of and return on U.S. Treasury's Power Program Appropriation Investment. Outstanding investment is approximately \$270 million. Return rate is based on average interest rate payable to U.S. Treasury and its total marketable obligations on a given date.

(b) Reflects Statutory Debt as defined by TVA; excludes debt associated with VIEs.

(c) Total debt includes current maturities of long-term debt (including VIEs), short-term debt, long-term debt and capitalized leases.

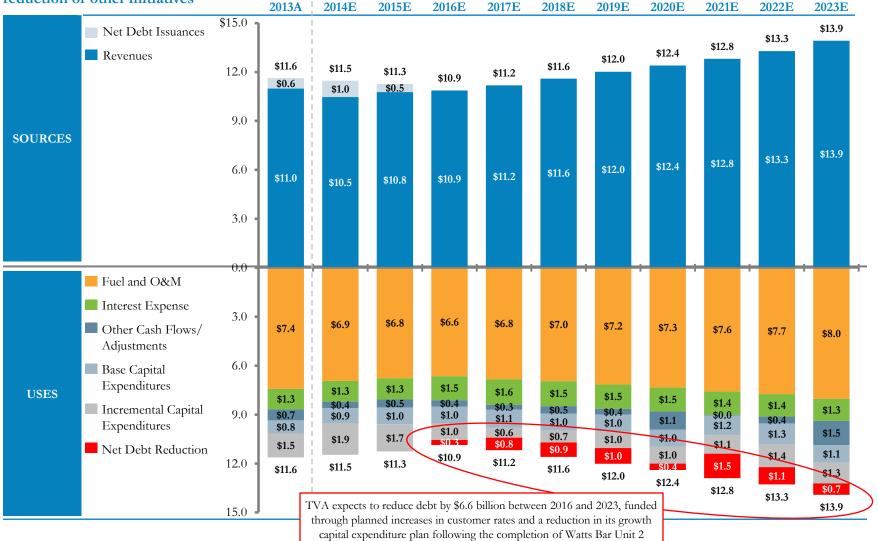
(d) Proprietary capital includes the remaining portion of the U.S. Treasury's Power Program Appropriation Investment (~\$270 million) and retained earnings.

(e) Credit metric ranges implied for a company with a business risk profile of "Excellent" and a financial risk profile of "Modest," for which the expected credit ratings under S&P methodology would be AA.

### **TVA Sources & Uses of Capital**

#### (\$ in billions)

TVA anticipates that its rate structure will support the self-financing of its capital needs over the forecast period and expects to reduce debt by \$6.6 billion between 2016 and 2023—funds currently allocated toward deleveraging could also be applied to rate reduction or other initiatives

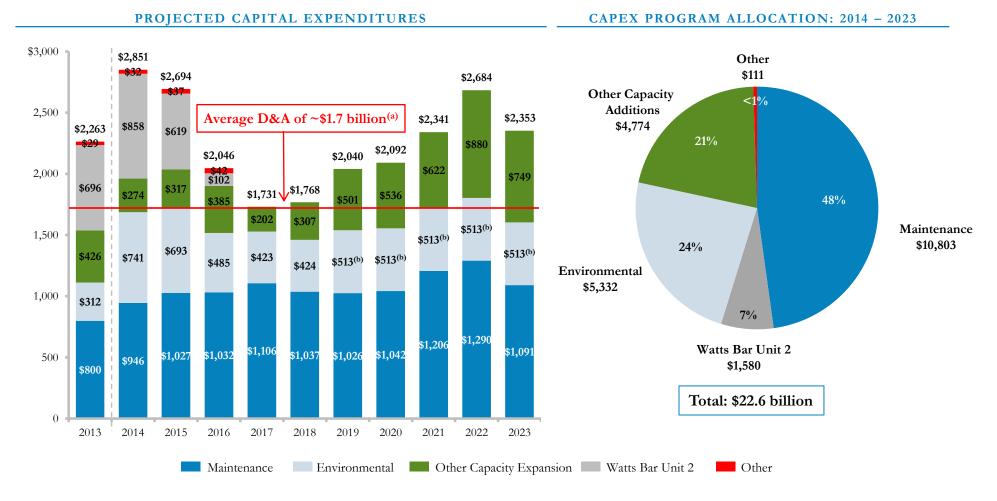


Source: TVA FY14 LRFP Management Plan and TVA filings. 24 LAZARD

# **TVA Capital Expenditure Program**

(\$ in millions)

TVA's capital investment program of approximately \$22.6 billion over the 2014 – 2023 period consists largely of generation capital expenditures, including \$5.3 billion of environmental investment and \$6.4 billion of capacity additions



Source: TVA FY14 LRFP Management Plan and TVA filings.

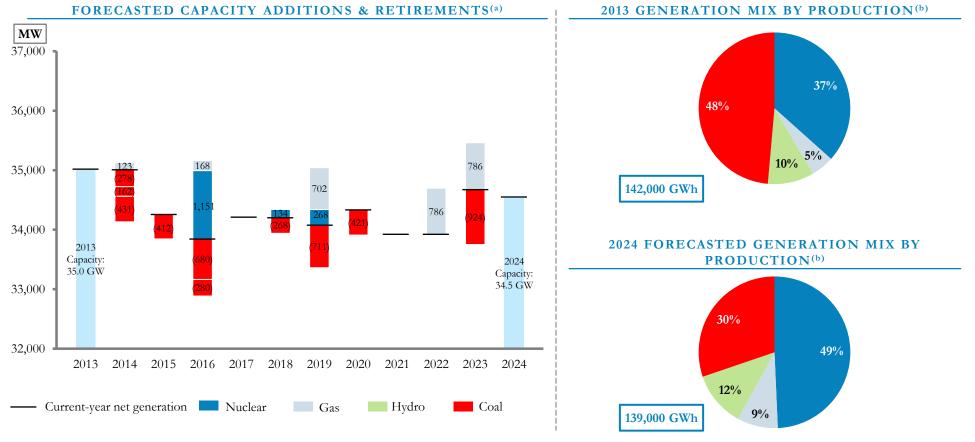
(a) Excludes D&A for regulatory assets, capital leases, Asset Retirement Obligation ("ARO") accretion, requisition costs, nuclear fuel and Kingston ash remediation.

(b) Environmental capital expenditures in 2019 – 2023 represent TVA estimates based on the average annual environmental spending over the prior six years.

#### **TVA Resource Plan**

TVA expects to retire, idle, or convert  $\sim$ 4.6 GW of coal capacity over the next decade and expects to replace these capacity reductions with nuclear and gas capacity expansions and new construction

TVA's increased reliance on gas-fired generation and decreased reliance on coal and nuclear generation (e.g., decision not to pursue Bellefonte) is consistent with industry-wide trends toward natural gas as a result of, among other things, the structural changes in the natural gas market (i.e., lower long-term natural gas prices and reduced volatility), environmental rules and regulations, and the cost and complexity of nuclear power



Source: TVA FY14 LRFP Management Plan and TVA filings.

(a) Only includes capacity additions and reductions at TVA-owned and operated facilities. Excludes diesel, demand side management, PPA, and market capacity.

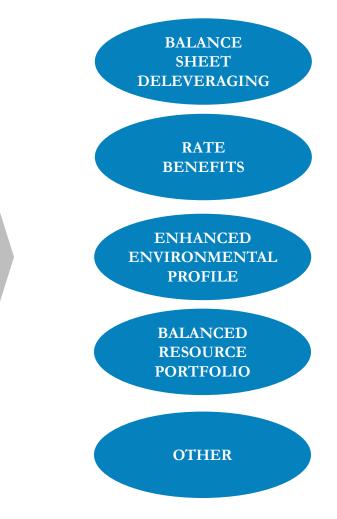
(b) Only includes generation at TVA-owned and operated facilities. Excludes diesel, demand side management, PPA, and market capacity.

# Potential TVA Cost and Capital Efficiency Opportunities

A variety of different opportunities may exist for TVA to improve its cost and capital efficiency, which may generate a variety of benefits to TVA's stakeholders over time—implementation of such strategies would take place over an extended period of time

- Additional non-fuel O&M reductions
- Fuel purchasing efficiency
- Energy efficiency
- Rate structure redesign
- Resource planning
- Capex de-risking
- Reduction in capital intensity
- Further coal retirement acceleration
- Environmental spending impacts resulting from coal retirements

• Other



## **TVA** Cost and Capital Efficiency Initiatives—Current

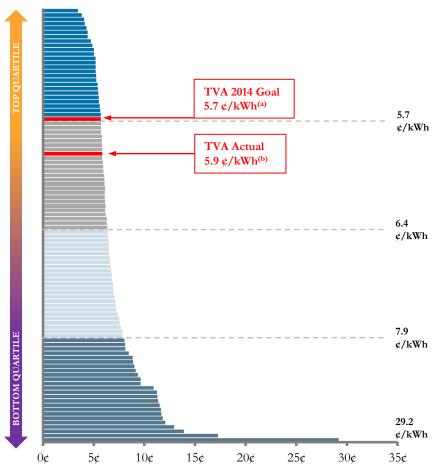
TVA is executing a plan to reduce O&M costs by \$500 million by 2015 through operational efficiencies, cost reductions and cost avoidance, and has achieved approximately \$150 million in savings through FY 2013. As will be discussed in the comparison of the current and prior plans, TVA has also rationalized and de-risked its capital investment program by switching from a nuclear build strategy to natural gas construction with accelerated coal retirements. TVA expects, based on its internal plan and a forecast of the industry, to be in the top quartile of industrial rates by 2014

| OBJECTIVES                | <ul> <li>TVA has an overall goal to reduce O&amp;M expenses by \$500<br/>million in 2015</li> </ul>   |
|---------------------------|---|
|                           | <ul> <li>TVA is currently engaged in an organizational realignment to<br/>achieve its expense reduction goal</li> </ul>                                       |
| DRGANIZATIONAL<br>CHANGES | New functional organizations have been established, and the next<br>year of business planning (FY 2014) will incorporate cost<br>reductions to meet this goal |
|                           | 80% of current O&M is labor-related (TVA and contractor), and<br>the majority of cost reductions would likely come from this area                             |
| TARGETED<br>COST AREAS    | Labor reductions will include contract labor as well as TVA positions   |
|                           | In addition to labor savings, all O&M costs will be evaluated to<br>achieve efficiencies and reduce costs   |
| STATUS                    | Through FY 2013, approximately \$150 million of O&M savings<br>have been achieved   |

**OBSERVATIONS** 

28 LAZARD

#### TVA INDUSTRIAL RATE COMPARISON (12 MONTHS ENDING DECEMBER 2012)



Source: TVA data and TVA analysis (based on EIA and SNL data). (a) Per TVA.

<sup>(</sup>b) TVA observed 2012 industrial rate.

# **Overview of Selected TVA Liabilities**

(\$ in millions)

While TVA holds approximately \$5.3 billion in underfunded liabilities as of 2013, its financial plan includes approximately \$2.9 billion in cash contributions to defease these liabilities over 2014 – 2023 (implies "net" underfunding of \$2.4 billion), paid for through rates

In addition, any future increases in current yields may materially reduce the magnitude of pension/other post-employment benefits ("OPEB") underfunding, which represent the majority of TVA's underfunded liabilities

| ED   |                                     | ASSETS  | LIABILITIES            | NET<br>OVERFUNDED/<br>(UNDERFUNDED)<br>POSITION | OBSERVATIONS  |
|--|-------------------------------------|---------|------------------------|---|---|
| BERFUNDED LIABILITIES<br>HOUT FULLY MATCHED<br>CONTRIBUTIONS IN<br>FINANCIAL PLAN                  | PENSION                             | \$7,221 | (\$11,471)             | (\$4,250)                                       | <ul> <li>TVA's current plan includes \$250 million of annual pension contributions (\$2.5 billion over ten years)</li> <li>A 50 basis point change in the discount rate TVA uses to calculate this liability (current rate is 5.00%) would lead to a change of approximately \$700 million</li> </ul> |
| UNDERFUNDED<br>WITHOUT FULLX<br>CONTRIBUTI<br>FINANCIAL  | OPEB                                |         | (\$656)                | (\$656)   | <ul> <li>A 50 basis point change in the discount rate TVA uses to calculate this liability (current rate is 5.05%) would lead to a change of approximately \$44 million</li> </ul>  |
| LIABILITIES<br>WITH FULLY<br>RRIBUTIONS<br>AL PLAN   | KINGSTON ASH SPILL                  |         | (\$169)                | (\$169)   | <ul> <li>TVA's current plan includes contributions to fully defease this liability<br/>by 2015</li> </ul>   |
| D LIABII<br>S WITH<br>TTRIBUT<br>IAL PLA   | ENVIRONMENTAL<br>AGREEMENTS         |         | (\$267)                | (\$267)   | <ul> <li>TVA is contractually obligated to make future payments and expects to<br/>fully defease this liability by 2018</li> </ul>  |
| FULLY FUNDED LIABILITIES<br>ND LIABILITIES WITH FULL<br>MATCHED CONTRIBUTIONS<br>IN FINANCIAL PLAN | NUCLEAR<br>DECOMMISSIONING<br>TRUST | \$1,310 | (\$996) <sup>(a)</sup> | \$314 <sup>(a)</sup>                            | <ul> <li>TVA contributes to its trust balances (at the unit level) when they fall<br/>below a specific (annually rising) level, per an agreement with the<br/>Nuclear Regulatory Commission ("NRC")</li> </ul>  |
| FULLY<br>MATC  |                                     |         |                        |   |   |

Total: (\$5,342)<sup>(b)</sup>

(a) Based on TVA's NRC Assurance Level, the current NRC monitoring formula.

(b) Excludes fully-funded nuclear decommissioning trust.

29 LAZARD

# **D** Financial Assessment—Prior Plan

## Summary Observations: Differences Between Prior Plan and Current Plan

The table below summarizes some of the key factors affecting TVA's current plan as compared to TVA's prior financial plan in Lazard's view, based on discussions with TVA Management and experience in reviewing industry plans, TVA's future financial plans are likely to experience similar fundamental changes in a way that materially improves the status quo

|                      | PRIOR PLAN   | CURRENT PLAN  | KEY DRIVERS   |
|----------------------|--|---|---|
| ELECTRICITY<br>SALES | <ul> <li>173 TWh in 2023</li> <li>0.4% CAGR over 2013 – 2023</li> </ul>  | <ul> <li>160 TWh in 2023</li> <li>(0.0%) CAGR over 2013 – 2023</li> </ul>   | <ul> <li>13 TWh (8%) difference by 2023<br/>based on revised load forecast</li> </ul>   |
| RATES                | TVA rates reach 8.63 ¢/kWh by 2023 <sup>(a)</sup>  | <ul> <li>TVA rates reach 8.71 ¢/kWh by 2023<sup>(a)</sup></li> </ul>  | Rates are not materially increased to<br>offset lower expected electricity sales<br>in current plan   |
| NON-FUEL<br>O&M      | <ul> <li>\$4.5 billion in 2023</li> <li>2.1% CAGR over 2013 – 2023</li> </ul>  | <ul> <li>\$3.6 billion in 2023</li> <li>0.1% CAGR over 2013 – 2023</li> </ul>   | \$940 million difference by 2023 based<br>on cost management, including<br>through current \$500 million efficiency<br>initiative, and exclusion of Bellefonte<br>costs |
| CAPEX/CASH<br>FLOW   | <ul> <li>\$33.2 billion in capital expenditures<br/>over 2014 – 2023</li> </ul>  | <ul> <li>\$22.6 billion in capital expenditures<br/>over 2014 – 2023</li> </ul>   | \$10.6 billion difference primarily<br>accounted for by exclusion of<br>Bellefonte in lieu of gas-fired<br>generation in current plan                                   |
| FINANCING            | <ul> <li>Statutory debt levels exceed \$30 billion by 2019</li> <li>Peak debt of \$35.5 billion (\$34.7 billion statutory debt) in 2022</li> </ul> | <ul> <li>Neither total debt nor statutory debt levels exceed \$30 billion</li> <li>Peak debt of \$28.4 billion (\$26.5 billion statutory debt) in 2015; deleveraging to \$21.8 billion by 2023</li> </ul> | \$13.6 billion difference in debt levels<br>by 2023 primarily reflects factors<br>affecting cash flows over 2013 – 2024<br>as described above                           |

Source: TVA FY13 LRFP Management Plan and TVA FY14 LRFP Management Plan.

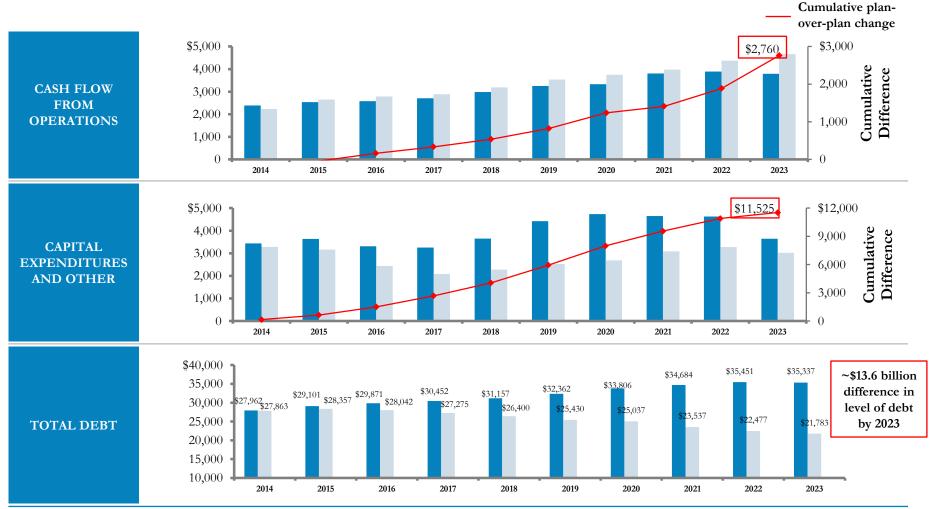
(a) Does not include retail rate adder.

# TVA Financial Comparison: Prior Plan vs. Current Plan

#### (\$ in millions)

The replacement of the planned construction of the Bellefonte nuclear facility in the prior plan with natural gas generation<sup>(a)</sup> accounts for the majority of the difference in forecasted debt levels between the two forecasts, with cost reductions and other factors also contributing to the forecasted improvement in balance sheet profile

Prior Plan
Current Plan



Source: TVA FY13 LRFP Management Plan and TVA FY14 LRFP Management Plan.

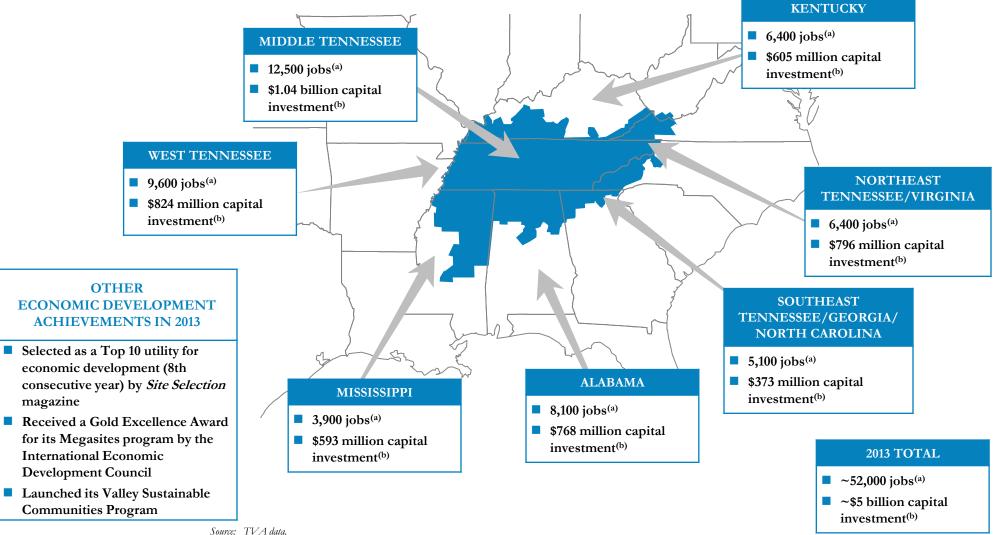
(a) Overnight costs for Bellefonte are \$3,430/kW vs. \$861/kW for a natural gas combined cycle gas turbine ("CCGT") per TVA Management.

# **E** Benchmarking Analysis

Ε

# **Overview of TVA Economic Impact on Tennessee Valley Region**

TVA measures the success of its non-power mission through job creation and investment metrics across the seven-state region in which it operates



Note: Figures shown for FY13.

(a) Defined as the jobs created and retained on projects where TVA's Economic Development Group provided assistance.

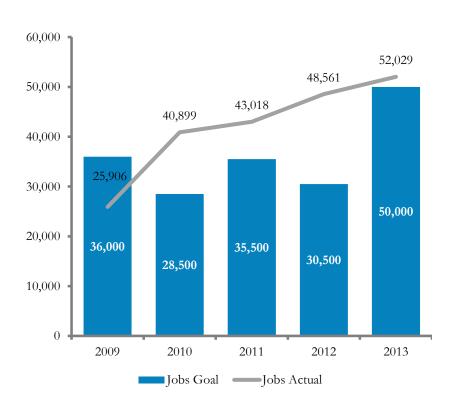
(b) Defined as capital investment attracted to the Tennessee Valley on projects where TVA's Economic Development Group provided assistance.

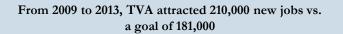


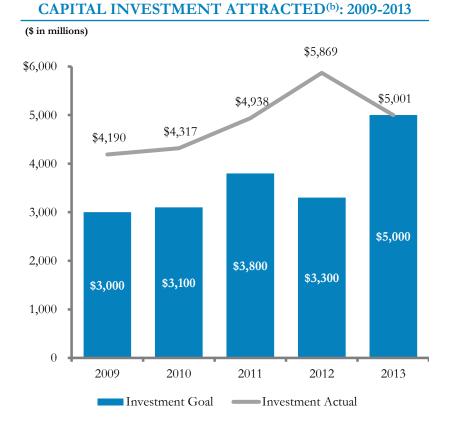
### Overview of TVA Economic Impact on Tennessee Valley Region (cont'd)

Based on its internal estimates, TVA helped create over 210,000 jobs and attracted over \$24 billion of capital investment within the Tennessee Valley region between 2009 and 2013

JOBS CREATED AND RETAINED<sup>(a)</sup>: 2009-2013







Е

From 2009 to 2013, TVA attracted \$24 billion of capital investment vs. a goal of \$18 billion

Source: TVA data.

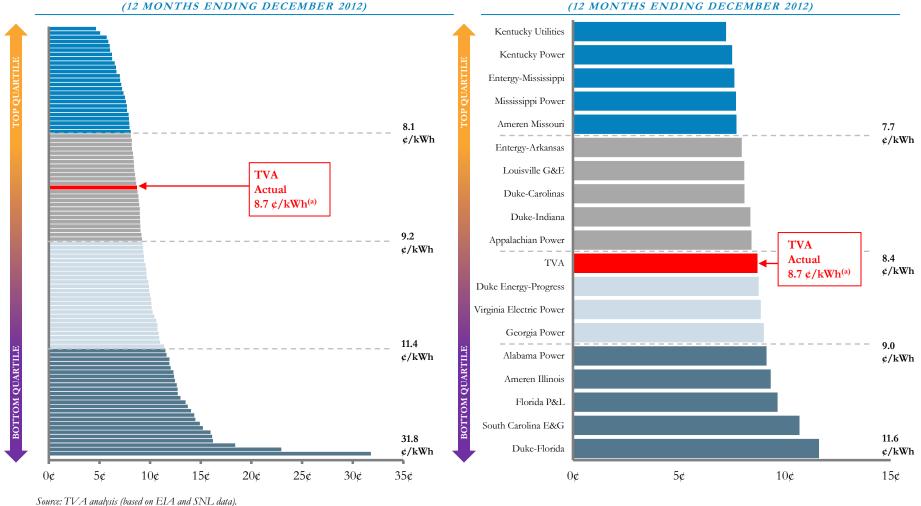
(a) Defined as the jobs created and retained on projects where TVA's Economic Development Group provided assistance.

(b) Defined as capital investment attracted to the Tennessee Valley on projects where TVA's Economic Development Group provided assistance.

**REGIONAL ELECTRIC COMPANIES** 

# **TVA Comparison—Retail Rates**

In 2012, TVA's retail rates were in the second quartile nationally and were near the median within its region



**TOP 100 U.S. COMPANIES** 

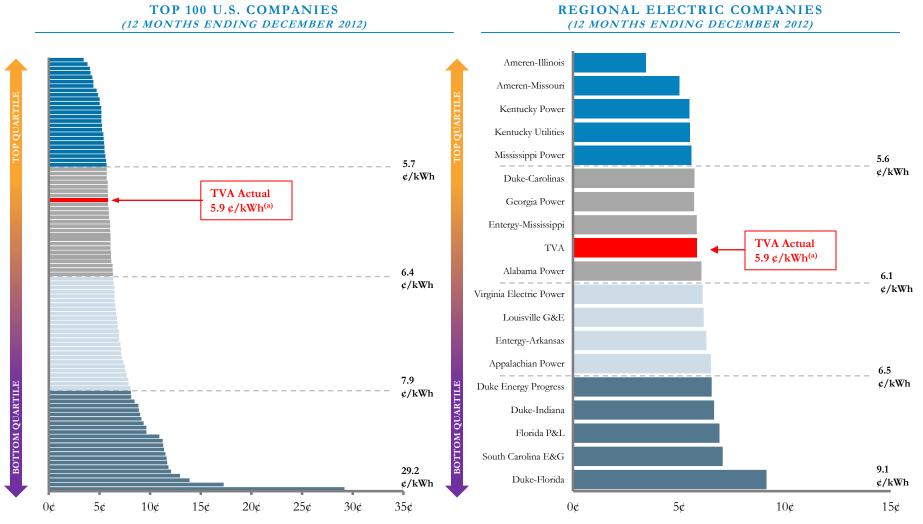
34 LAZARD

TVA observed 2012 retail rate.

(a)

### **TVA** Comparison—Industrial Rates

In 2012, TVA's industrial rates were in the second quartile nationally and regionally



Source: TVA analysis (based on EIA and SNL data). (a) TVA observed 2012 industrial rate.

# Industry Benchmarking—Cost Structure<sup>(a)</sup>

TVA appears to lag its peers in production non-fuel O&M and SG&A, two of the largest areas of "controllable" costs that impact rates; these 3<sup>rd</sup> and 4<sup>th</sup> quartile positions are offset somewhat by 1<sup>st</sup> and 2<sup>nd</sup> quartile performance in fuel expense

TVA's relative cost position is projected to improve following the conclusion of its current efficiency initiatives, and, importantly, as further opportunities are identified

|                                 | STEAM <sup>(b)</sup>   | NUCLEAR  | HYDRO   | OTHER <sup>(c)</sup>   | TOTAL   |
|---------------------------------|--|--|---|--|---|
| PRODUCTION<br>NON-FUEL O&M      | <b>4<sup>th</sup> Quartile</b><br>(15 <sup>th</sup> of 18 Peers)<br>TVA: \$10.61/MWh<br>Median: \$7.70/MWh<br>Range: \$4.37 – \$10.80 <sup>(d)</sup> | 4th Quartile           (8th of 10 Peers)           TVA: \$16.66/MWh           Median: \$14.14/MWh           Range: \$11.77 - \$21.42 | <b>3<sup>rd</sup> Quartile</b><br>(10 <sup>th</sup> of 13 Peers)<br>TVA: \$10.19/MWh<br>Median: \$9.09/MWh<br>Range: \$3.03 – \$14.24 | <b>3rd Quartile</b><br>(9 <sup>th</sup> of 15 Peers)<br>TVA: \$5.49/MWh<br>Median: \$5.36/MWh<br>Range: \$1.95 – \$8.92 <sup>(d)</sup> | 4 <sup>th</sup> Quartile<br>(18 <sup>th</sup> of 18 Peers)<br>TVA: \$12.24/MWh<br>Median: \$8.39/MWh<br>Range: \$6.25 – \$12.24     |
| FUEL EXPENSE                    | 2 <sup>nd</sup> Quartile<br>(6 <sup>th</sup> of 18 Peers)<br>TVA: \$28.38/MWh<br>Median: \$34.18/MWh<br>Range: \$18.48 – \$58.32                     | <b>1st Quartile</b><br>(1st of 10 Peers)<br>TVA: \$4.98/MWh<br>Median: \$7.21/MWh<br>Range: \$4.98 – \$8.47                          |   | <b>1st Quartile</b><br>(1st of 14 Peers)<br>TVA: \$33.71/MWh<br>Median: \$43.12/MWh<br>Range: \$30.22 – \$65.73                        | <b>1st Quartile</b><br>( <b>3<sup>rd</sup> of 18 Peers</b> )<br>TVA: \$18.08/MWh<br>Median: \$27.32/MWh<br>Range: \$14.11 – \$48.47 |
| NON-PRODUCTION<br>NON-FUEL SG&A |  |  |   |  | <b>4<sup>th</sup> Quartile</b><br>(18 <sup>th</sup> of 19 Peers)<br>TVA: \$7.85/MWh<br>Median: \$5.62/MWh<br>Range: \$2.02– \$8.19  |

#### **TVA PERFORMANCE**

Source: TVA Benchmarking Study.

(a) Represents average figures over 2010 – 2012 period. Figures ranked on \$/MWh basis.

(b) Includes coal-fired generation plants.

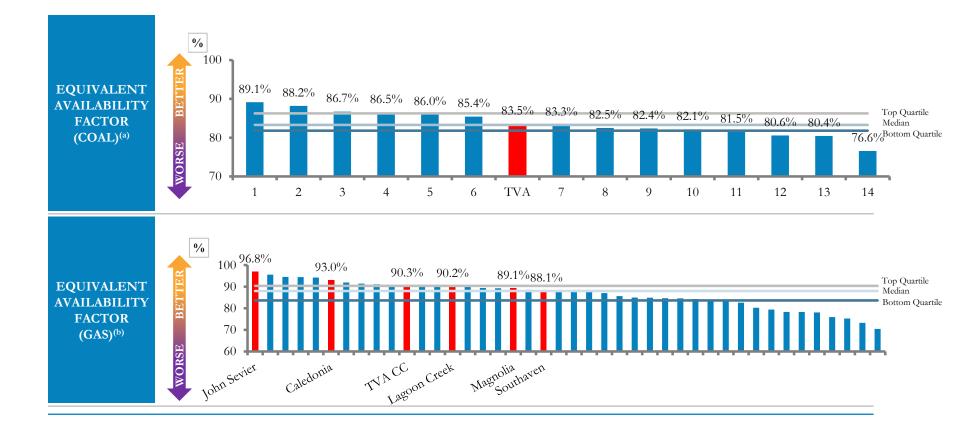
(c) Includes non-steam, non-nuclear, non-hydro (e.g., gas and renewables) generation plants.

(d) Excludes high-end outliers.

Ε

## Industry Benchmarking—Non-nuclear Generation Operational Performance

TVA appears to be relatively high performing among its peers in ensuring the availability of natural gas-fired generation and operates at the median of its peers for coal generation



Source: TVA Benchmarking Study.

Note: Peer sets are confidential.

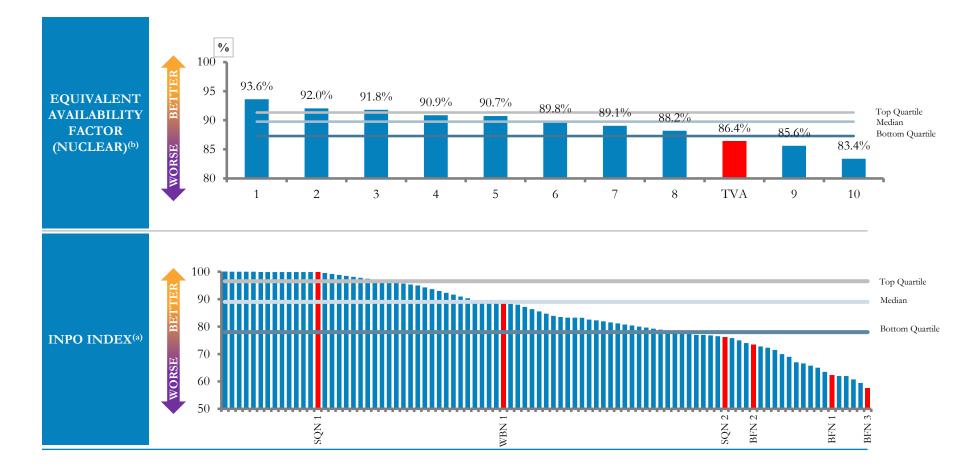
- (a) Represents average figures over the 2008 2012 period.
- (b) Represents average figures over the 2010 2012 period.



Ε

# Industry Benchmarking—Nuclear Generation Operational Performance

TVA appears to be relatively low performing amongst its peers in ensuring the availability of nuclear generation; additionally, many of TVA's individual nuclear units rank relatively low on the Institute of Nuclear Power Operations ("INPO") Index<sup>(a)</sup>



Source: TVA Benchmarking Study and SNL data.

Note: Peer sets are confidential.

38 LAZARD

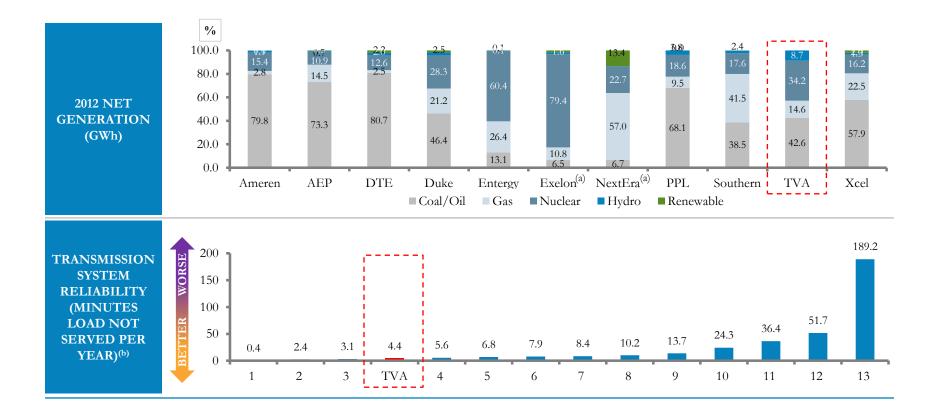
(a) The INPO Index is a weighted combination of several key safety and performance indicators in the nuclear industry. Figure represents data over 2008 – 2012 period.

(b) Represents average figures over the 2010 – 2012 period.

TVA

## Industry Benchmarking—Operational Performance

TVA operates a relatively balanced generation mix and delivers high transmission reliability as compared to peers



Source: SNL and TVA Benchmarking Study.

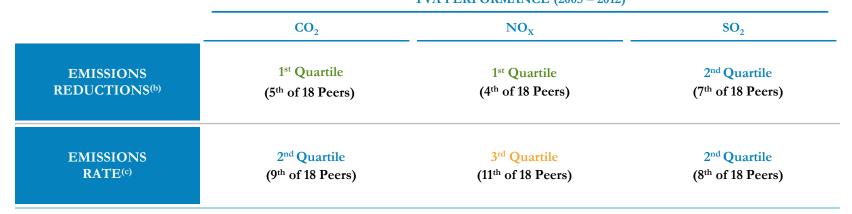
(a) Includes significant non-regulated investments.

(b) Represents average figures over the 2010 – 2012 period; represents system minutes without power over one year period.

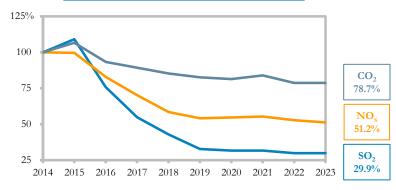


#### Industry Benchmarking—Emissions

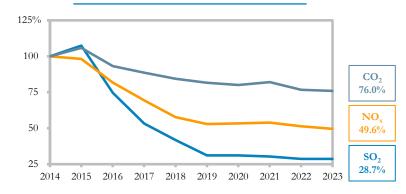
TVA has exhibited 1<sup>st</sup> and 2<sup>nd</sup> quartile performance in emissions reductions compared to a 2005 baseline and performs in the 2<sup>nd</sup> and 3<sup>rd</sup> quartiles in terms of emissions rate per unit of energy generated. TVA's generation portfolio transformation is expected to further improve the emissions profile of its fleet over the next decade; by 2023, TVA expects to further reduce total annual emissions (CO<sub>2</sub> by 21%, NO<sub>x</sub> by 49% and SO<sub>2</sub> by 70%)<sup>(a)</sup> and its emissions rates (CO<sub>2</sub> by 24%, NO<sub>x</sub> by 50% and SO<sub>2</sub> by 71%)<sup>(a)</sup> TVA PERFORMANCE (2005 – 2012)







Indexed Annual Emissions Rates



Source: TVA Benchmarking Study.

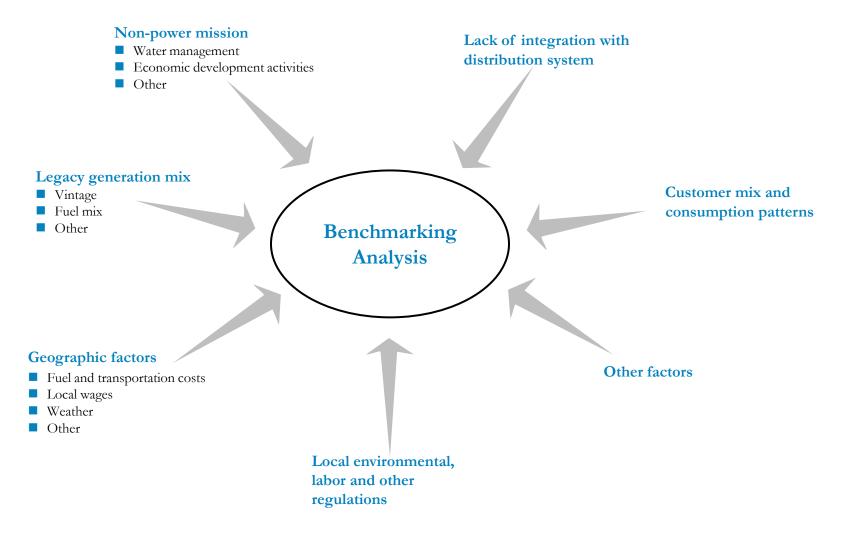
- (a) From 2014 levels.
- (b) Emissions reduction (tons) between 2005 baseline and 2012 level.
- (c) Average emissions rate (tons/GWh) over the five year period 2008 2012.



Ε

## Factors Potentially Affecting Benchmarking Comparability

Various factors which may affect the comparability of TVA's performance relative to its peers are highlighted below:

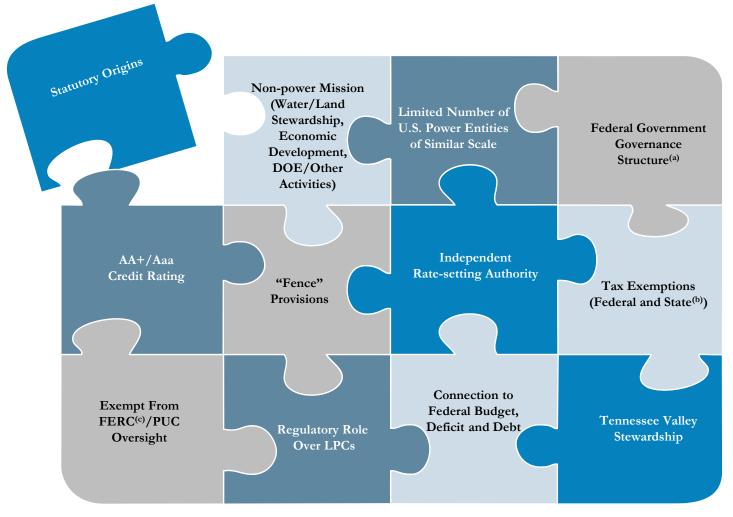


TVA

III Comparison of TVA vs. Other Power Provider Models

#### Comparison of TVA vs. Other Power Provider Models

TVA is like no other participant in the U.S. Power & Utility Industry as a result of, among other things, its non-power mission, statutory origins, scale, market and rate structure, community importance and customer base



- (a) In addition to various forms of interaction and oversight, TVA is recorded in the federal budget.
- (b) TVA is legislatively required to pay PILOTs, which appear to be approximately equal to equivalent state and local taxes for other utilities.
- (c) TVA voluntarily complies with a subset of FERC rules.

# Summary Comparison of TVA vs. Selected Federal Public Sector Models<sup>(a)</sup>

|   | TVA   | POWER MARKETING ADMINISTRATIONS  |
|---|---|--|
| EXAMPLES  | ΤΛ  |  |
| OWNERSHIP/<br>GOVERNANCE                                      | <ul> <li>Owned by Federal Government; operates as standalone entity</li> <li>Created by act of Congress</li> <li>Board members appointed by U.S. President and confirmed by U.S. Senate</li> <li>TVA also interacts with multiple federal departments</li> </ul>  | <ul> <li>Owned by Federal Government; subsidiary agencies of the DOE</li> <li>Created by act of Congress</li> <li>Each Power Marketing Administration ("PMA") is led by a DOE-appointed administrator</li> </ul>   |
| MARKET STRUCTURE/<br>RATE-SETTING<br>MECHANISM <sup>(b)</sup> | <ul> <li>Provides generation and transmission services to LPCs (primarily comprised of munis and coops) and wholesale customers in defined Tennessee Valley region (the "Fence")</li> <li>Protected from competition, but cannot sell outside Fence</li> <li>Independent, statutory rate-setting authority; rates approved by TVA Board</li> <li>TVA acts as regulator for LPCs in its service territory</li> </ul> | <ul> <li>Markets wholesale electricity primarily sourced from federal hydro projects and operates transmission in service territory</li> <li>Does not have defined regional generation monopoly; "competes" with other regional suppliers</li> <li>Independent, statutory rate-setting authority to recover costs and repay federal investment in a timely manner (rates also reflect market dynamics in practice)</li> </ul>                    |
| TAXATION  | <ul> <li>Does not pay federal taxes</li> <li>Exempt from state/local taxes; pays PILOTs, which appear to approximate state/local taxes</li> </ul>   | <ul> <li>Does not pay federal taxes</li> <li>Exempt from certain state/local taxes</li> </ul>  |
| OTHER ACTIVITIES  | <ul> <li>Has responsibility for non-power missions of water/land stewardship and economic development in its region; activities also include promoting energy efficiency, renewable energy and new technologies</li> <li>Operates on a non-profit basis</li> </ul>  | <ul> <li>Non-power activities may include promoting energy efficiency, renewable energy and new technologies</li> <li>Operates on a non-profit basis</li> </ul>  |
| CAPITAL ACCESS/<br>CREDIT                                     | <ul> <li>Self-funded; financed through internally-generated cash flows and taxable debt issuances</li> <li>Additional sources of financing include capital leases, leaseback obligations and VIEs</li> <li>Has not received federal appropriations since 1999</li> <li>S&amp;P credit rating of AA+; Moody's rating of Aaa</li> </ul>   | <ul> <li>Primarily self-funded; financed through internally-generated cash flows and taxable debt issuances</li> <li>Access to federal (U.S. Treasury) and taxable non-federal borrowing</li> <li>Western Area Power Administration and Southwestern Power Administration receive federal appropriations for certain initiatives (other PMAs do not)</li> <li>Credit rating typically in high investment-grade category (A or better)</li> </ul> |
| APPROXIMATE<br>% OF U.S. GENERATION <sup>(c)</sup>            | ■ <1%   | ■ <1%  |

Source: SNL, Company filings and Company websites.

(a) The comparisons of TVA against other business models are general in nature—a more extensive/detailed discussion of differences is beyond the scope of this presentation.

(b) Regulatory supervision by NRC, FERC and other governmental authorities not addressed unless related to rate-setting/pricing matters.

(c) Based on GWh of generation. Measurement using other metrics (e.g., customers, total assets, etc.) could yield different results.

TVA

# Summary Comparison of TVA vs. Selected Non-federal Public Sector Models<sup>(a)</sup>

|   | TVA   | STATE/MUNICIPAL<br>PUBLIC AUTHORITIES   | POWER SUPPLY<br>COOPERATIVES ("COOPs")  |
|---|---|---|---|
| EXAMPLES  | TVA   | GRDA LIPA Spectrum  | AMP   |
| OWNERSHIP/<br>GOVERNANCE                                      | <ul> <li>Owned by Federal Government</li> <li>Created by act of Congress</li> <li>Board members appointed by U.S. President and confirmed by U.S. Senate</li> <li>TVA also interacts with multiple federal departments</li> </ul>   | <ul> <li>Owned by state, municipality or other local authority<sup>(b)</sup></li> <li>Typically politically-appointed Boards of Directors/Trustees</li> </ul>   | <ul> <li>Owned by electric distribution members<br/>(wholesale/retail customers of the coop, typically<br/>municipalities and distribution coops)</li> <li>Each member typically holds governance and voting rights</li> </ul>  |
| MARKET STRUCTURE/<br>RATE-SETTING<br>MECHANISM <sup>(c)</sup> | <ul> <li>Provides generation and transmission services to LPCs (primarily comprised of munis and coops) and wholesale customers in defined Tennessee Valley region (the "Fence")</li> <li>Protected from competition, but cannot sell outside Fence</li> <li>Independent, statutory rate-setting authority; rates approved by TVA Board</li> <li>TVA acts as regulator for LPCs in its service territory</li> </ul> | <ul> <li>Provides a combination of generation, transmission, and/or distribution service to retail and wholesale customers</li> <li>Typically protected from competition, but cannot sell outside territory</li> <li>Typically has independent, statutory rate-setting authority; however, regulatory structures vary</li> <li>Some state/municipal public authorities have no PUC oversight/regulation</li> <li>Other state/municipal public authorities may have full or partial PUC oversight/regulation (e.g., rate increases over a certain threshold require PUC approval)</li> </ul> | <ul> <li>Provides generation and transmission services to members</li> <li>Members may procure power from the coop as well as from other sources</li> <li>Typically has independent, statutory rate-setting authority to recover costs; rates approved by coop board</li> </ul> |
| TAXATION  | <ul> <li>Does not pay federal taxes</li> <li>Exempt from state/local taxes, but pays PILOTs, which appear to approximate state/local taxes</li> </ul>   | <ul> <li>Does not pay federal taxes</li> <li>Typically exempt from state/local taxes, but pays PILOTs</li> </ul>  | <ul> <li>Does not pay federal taxes</li> <li>Typically exempt from state/local taxes, but pays PILOTs</li> </ul>  |
| OTHER ACTIVITIES  | <ul> <li>Has responsibility for non-power activities of water/land<br/>stewardship, economic development and technology/other in its<br/>region; activities also include promoting energy efficiency,<br/>renewable energy and new technologies</li> <li>Operates on a non-profit basis</li> </ul>  | <ul> <li>Non-power activities vary and may include water/land stewardship and promoting energy efficiency, renewable energy and new technologies</li> <li>Operates on a non-profit basis</li> </ul>   | <ul><li>Typically minimal non-power activities</li><li>Operates on a non-profit basis</li></ul>   |
| CAPITAL ACCESS/<br>CREDIT                                     | <ul> <li>Self-funded; financed through internally-generated cash flows and taxable debt issuances</li> <li>Additional sources of financing include capital leases, leaseback obligations and VIEs</li> <li>Has not received federal appropriations since 1999</li> <li>S&amp;P credit rating of AA+; Moody's rating of Aaa</li> </ul>   | <ul> <li>Self-funded; financed through internally-generated cash flows and debt issuances (typically tax-exempt debt)</li> <li>Does not receive federal appropriations</li> <li>Credit rating typically in high investment-grade category (A or better)</li> </ul>  | <ul> <li>Self-funded; financed through internally-generated cash flows and debt issuances (typically tax-exempt debt)</li> <li>Does not receive federal appropriations</li> <li>Credit rating typically in high investment-grade category (A or better)</li> </ul>              |
| APPROXIMATE<br>% OF U.S. GENERATION <sup>(d)</sup>            | <1%<br><1%  | ~7%   | ■ ~1%   |

Source: SNL, Company filings and Company websites.

The comparisons of TVA against other business models are general in nature-a more extensive/detailed discussion of differences is beyond the scope of this presentation. (a)

Could include state agencies/authorities, non-profit corporations/organizations and public benefit corporations, among other structures. (b)

Regulatory supervision by NRC, FERC and other governmental authorities not addressed unless related to rate-setting/pricing matters. (c)

(d) Based on GWh of generation. Measurement using other metrics (e.g., customers, total assets, etc.) could vield different results.

# Summary Comparison of TVA vs. Selected Private Sector Models<sup>(a)</sup>

|   | TVA   | INVESTOR OWNED UTILITIES   | INDEPENDENT POWER PRODUCERS   |
|---|---|--|---|
| EXAMPLES  | TVA   | DUKE<br>ENERGY SOUTHERN A O Xcel Energy  |   |
| OWNERSHIP/<br>GOVERNANCE                                      | <ul> <li>Owned by Federal Government</li> <li>Created by act of Congress</li> <li>Board members appointed by U.S. President and confirmed by U.S. Senate</li> <li>TVA also interacts with multiple federal departments</li> </ul>   | <ul> <li>Owned by private sector investors</li> <li>Ownership typically widely distributed as publicly-traded shares, but may also be owned by private investors (e.g., Puget, Duquesne)</li> <li>Shareholder-elected Board of Directors</li> </ul>  | <ul> <li>Owned by private sector investors</li> <li>Ownership typically widely distributed as publicly-traded shares, but may also be owned by private investors (e.g., Energy Capital Partners, Riverstone)</li> <li>Shareholder-elected Board of Directors</li> </ul>   |
| MARKET STRUCTURE/<br>RATE-SETTING<br>MECHANISM <sup>(b)</sup> | <ul> <li>Provides generation and transmission services to LPCs (primarily comprised of munis and coops) and wholesale customers in defined Tennessee Valley region (the "Fence")</li> <li>Protected from competition, but cannot sell outside Fence</li> <li>Independent, statutory rate-setting authority; rates approved by TVA Board</li> <li>TVA acts as regulator for LPCs in its service territory</li> </ul> | <ul> <li>Provides regulated generation, transmission and distribution services to retail and wholesale customers within a defined service territory</li> <li>Distribution function owned by IOU, whereas transmission and generation is sometimes owned by third parties</li> <li>Regulatory structures vary across U.S.</li> <li>Rates typically set by state regulatory agencies based on cost of service and well-established rate-setting process</li> </ul> | <ul> <li>Provides generation services to wholesale customers under electricity rates driven by market supply and demand</li> <li>IPPs typically sell power, capacity and ancillary services</li> <li>Limited regulatory oversight by FERC, but regional operators (Independent System Operators ("ISOs") and Regional Transmission Organizations ("RTOs")) play a key role in regulating markets</li> <li>No/limited state regulatory influence on pricing</li> </ul> |
| TAXATION  | <ul> <li>Does not pay federal taxes</li> <li>Exempt from state/local taxes, but pays PILOTs, which appear to approximate state/local taxes</li> </ul>   | <ul> <li>Pays federal taxes</li> <li>Pays applicable state and local taxes</li> </ul>  | <ul><li>Pays federal taxes</li><li>Pays applicable state and local taxes</li></ul>  |
| OTHER ACTIVITIES  | <ul> <li>Has responsibility for non-power activities of water/land<br/>stewardship, economic development and technology/other in its<br/>region; activities also include promoting energy efficiency,<br/>renewable energy and new technologies</li> <li>Operates on a non-profit basis</li> </ul>  | <ul> <li>May operate non-regulated (though usually power-related) businesses through affiliates</li> <li>Operates on a for-profit basis</li> </ul>   | <ul> <li>May operate other non-regulated businesses through affiliates</li> <li>Operates on a for-profit basis</li> </ul>   |
| CAPITAL ACCESS/<br>CREDIT                                     | <ul> <li>Self-funded; financed through internally-generated cash flows and taxable debt issuances</li> <li>Additional sources of financing include capital leases, leaseback obligations and VIEs</li> <li>Has not received federal appropriations since 1999</li> <li>S&amp;P credit rating of AA+; Moody's rating of Aaa</li> </ul>   | <ul> <li>Financed through internally-generated cash flows,<br/>taxable debt and shareholder equity</li> <li>Does not receive federal appropriations</li> <li>Most sector participants have investment-grade credit<br/>rating (A to BBB range for S&amp;P)</li> </ul>  | <ul> <li>Financed through internally-generated cash flows,<br/>taxable debt and shareholder equity</li> <li>Does not receive federal appropriations</li> <li>Credit ratings have historically been non-investment<br/>grade</li> </ul>  |
| APPROXIMATE<br>% OF U.S. GENERATION <sup>(c)</sup>            | ■ <1%   | ■ ~66%   | ■ ~25%  |

Source: SNL, Company filings and Company websites.

(a) The comparisons of TVA against other business models are general in nature—a more extensive/detailed discussion of differences is beyond the scope of this presentation.

(b) Regulatory supervision by NRC, FERC and other governmental authorities not addressed unless related to rate-setting/pricing matters.

(c) Based on GWh of generation. Measurement using other metrics (e.g., customers, total assets, etc.) could yield different results.

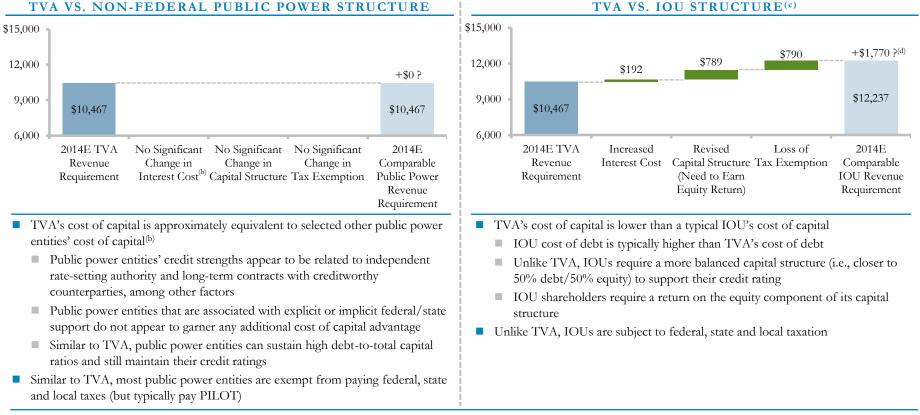


## Illustrative Rate Comparison of TVA vs. Selected Alternative Structures

#### (\$ in millions)

Accounting *only* for TVA's cost of capital, capital structure and tax differences, TVA's annual revenue requirement appears to be approximately the same as under an illustrative equivalent non-federal public power structure, but \$1.8 billion lower than an illustrative equivalent IOU structure

Note that any ultimate rate comparison is highly deficient when utilizing such a one dimensional analysis and should take into account the significant differences between how TVA operates today and how it might operate under alternative structures<sup>(a)</sup>



Source: TVA Management Plan, Regulatory Research Associates ("RRA"), Bloomberg and TVA filings.

(a) Please see next page for discussion of additional factors potentially affecting TVA rates under current and alternative structures.

(b) Based on observed yield differentials between TVA and selected public power entities. Although other public power entities appear to have modestly lower credit ratings, yields suggest that their borrowing costs as a group may be approximately equal to TVA's, supported in part by their ability to issue tax-exempt debt.

(c) Based on illustrative comparison of 2014E TVA forecasted revenue requirement relative to that of a pro forma IOU. Please see appendix for supporting calculations. Calculation of IOU interest cost assumes 70 basis point spread; calculation of IOU capital structure assumes 50% debt/50% equity capital structure and 10% ROE; calculation of inpact of loss of tax exemption assumes 35% corporate income tax rate.

(d) A change in ROE by +/- 1.0% would increase/decrease the revenue requirement by ~\$225 million; a change in equity/capitalization by +/- 10.0% would increase/decrease the revenue requirement by ~\$300 million.



# Additional Factors Impacting Rates Under TVA Structure vs. Alternative Structures

The estimation of rates under alternative structures as compared to TVA's current rates is imprecise and should take into account multiple dimensions beyond cost of capital, capital structure and taxes and should include the following, among others:

#### NON-PROFIT VS. Potential for private sector entity to operate differently, given profitability considerations FOR-PROFIT No competing power providers allowed to sell to customers in TVA service territory<sup>(a)</sup> **FENCE ISSUES** ■ Inability to serve customers outside of TVA service area<sup>(a)</sup> Advantages of integrated water management and power operations Non-power activities that might not be pursued (or pursued more efficiently) by TVA as a private sector entity **OPERATING STRUCTURE** ■ Integrated, large-scale operations of TVA Lack of integration with distribution utilities (LPCs) Cost of reporting and other government oversight Projects/contracts pursued on behalf of the Federal Government or with public policy objectives Tritium production contract with DOE ■ Separate work unit ("SWU") contract with DOE/EN/USEC/BPA **FEDERAL** "Test bed" and other energy projects for technology development GOVERNMENT RELATIONSHIP Various regulatory/labor/other exemptions (including exemption from ERISA)—however, TVA voluntarily complies with these regulations Various federal labor requirements TVA must be sued in federal court (no trial by jury) and cannot be subject to punitive damages Potential credit and cost of borrowing benefit/costs related to Federal Government ownership (i.e., implicit federal **OTHER** guarantee vs. political risk) **FINANCING** \$30 billion statutory debt ceiling resulting in use of more expensive sources of financing **ISSUES** Credit facility extended by U.S. Treasury<sup>(b)</sup>

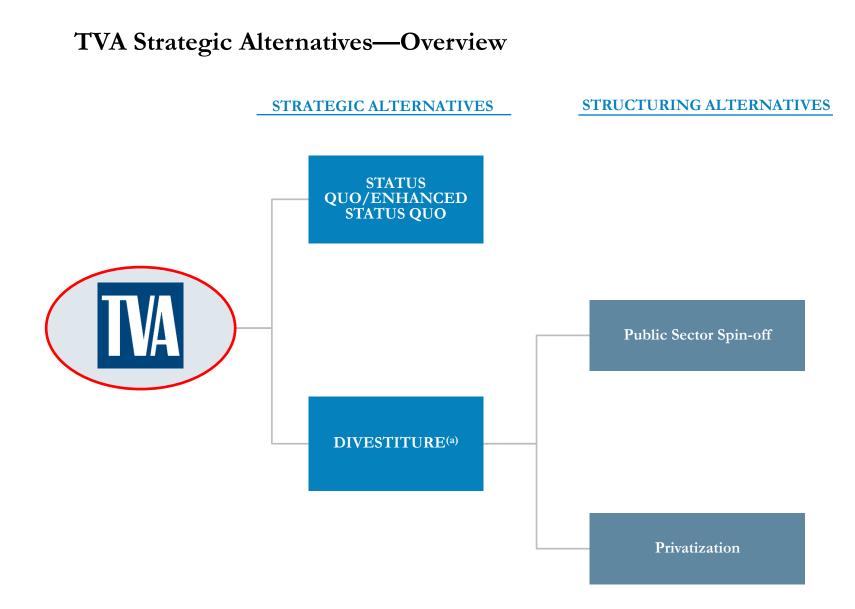
#### FACTORS OF CURRENT TVA STRUCTURE POTENTIALLY AFFECTING RATES

Source: TVA Management Plan, OMB and Treasury input.

a) Note that IOUs are typically also accorded monopoly status in their service territories per their franchise agreements, but typically have some ability to sell excess power outside of their service territory.

(b) \$150 million credit facility is considered a "secondary liquidity source" by TVA and is undrawn, whereas letters of credit are posted against TVA's \$2.5 billion syndicated revolving credit facility.

**IV** Summary Review of Strategic Alternatives



(a) TVA strategic alternatives are not mutually exclusive—full or partial divestiture, involving one or more structuring alternatives, could be pursued.

#### Illustrative Evaluative Criteria

The following criteria have been assembled to facilitate a discussion of TVA's strategic alternatives based on input from TVA and representatives of the Federal Government (Treasury, OMB, etc.). "Threshold" criteria are essential for any alternatives considered, whereas "differentiating" criteria provide a basis for comparison across alternatives

Representatives of the Federal Government have also noted that other policy objectives may need to be considered in their assessment—such criteria are outside the scope of this report

**CRITERIA** 

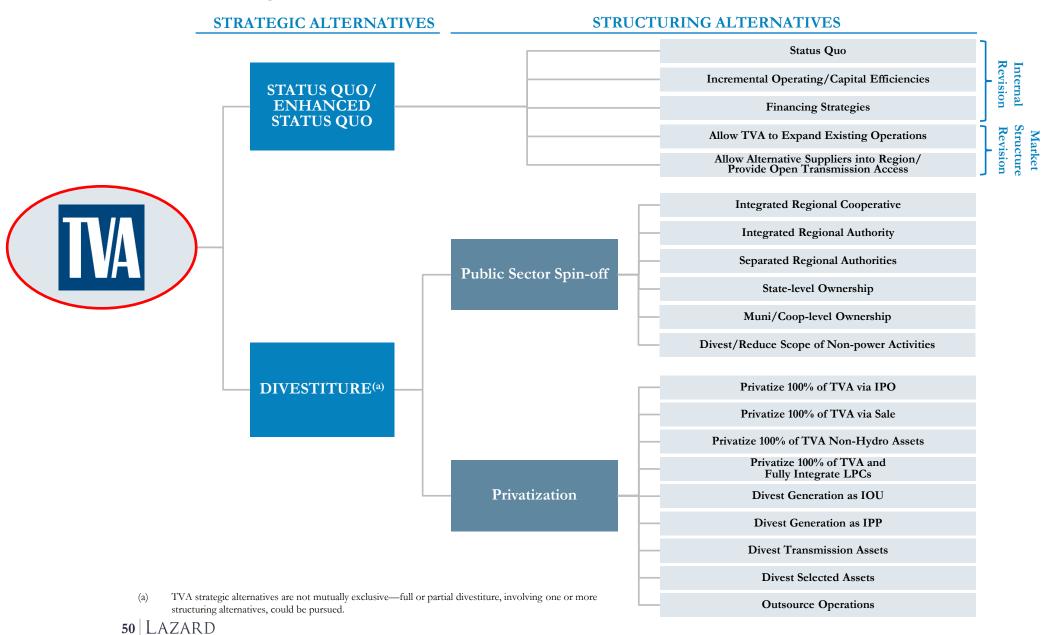
| CUSTOMER SERVICE               | <ul> <li>Reliable and available system that offers the appropriate levels of service, reliability and<br/>accountability</li> </ul>   |
|--------------------------------|---|
| OVERSIGHT                      | <ul> <li>Governance principles that align TVA's interests with its mission, foster transparency and provide<br/>for robust functioning of the regional power system</li> </ul>                    |
| FINANCING ACCESS               | Access to capital (through public sources and otherwise) and competitive cost of capital for investments in support of the TVA mission  |
| NON-POWER MISSION              | <ul> <li>Continuity and effectiveness of non-power mission serving the Tennessee Valley, whether via TVA or otherwise</li> </ul>  |
| RATES                          | Rate impact to customers of possible structures   |
| VALUE<br>REALIZATION           | Realization of value of Federal Government ownership stake in TVA   |
| RISK TO FEDERAL<br>GOVERNMENT  | <ul> <li>Potential financial risks/burdens on Federal Government, taking into account the relevant benefits<br/>provided</li> </ul>   |
| TRANSACTABILITY/<br>DISRUPTION | Feasibility of execution, including with regard to stakeholder complexity, basic transaction<br>complexity and potential level of disruption to TVA's provision of services during any transition |

TVA

"THRESHOLD" CRITERIA

"DIFFERENTIATING" CRITERIA

### **TVA Strategic Alternatives—Detailed**



TVA

# TVA Strategic Alternatives—General Observations<sup>(a)</sup>

There does not appear to be a clear impetus for a divestiture of TVA today, given the expected future rate, value and other benefits of TVA's current initiatives relative to a less certain level of benefit, a very high expected degree of implementation complexity and potential downside outcomes from divestiture strategies

| -  | STATUS QUO/<br>ENHANCED STATUS QUO <sup>(b)</sup>  | PUBLIC SECTOR SPIN-OFF <sup>(c)</sup>  | PRIVATIZATION <sup>(d)</sup>  |
|--|--|--|---|
| NON-POWER<br>MISSION                                   | <ul> <li>Integrated and continuing non-power<br/>mission within TVA</li> </ul>   | <ul> <li>Logical placement of non-power<br/>mission would need to be<br/>determined</li> </ul>   | <ul> <li>Logical placement of non-power mission<br/>would need to be determined</li> </ul>  |
| RATES  | <ul> <li>Rate path expected to improve<br/>relative to peers through efficiencies</li> </ul>   | <ul> <li>Hypothetically similar rates as<br/>compared to Status Quo/Enhanced<br/>Status Quo<sup>(e)</sup></li> </ul>   | Capital structure, cost of capital and taxatio<br>imply higher rates and/or a trade-off with<br>value, prior to taking into account other<br>upside/downside factors <sup>(e)</sup> |
| RATES<br>VALUE<br>REALIZATION<br>RISK TO<br>FED. GOVT. | NA   | <ul> <li>Level of proceeds and benefits<br/>received to be determined</li> </ul>   | Value realized by government will depend<br>significantly on structure of privatized rate<br>regulation and other factors; would increase<br>tax revenues                           |
| RISK TO<br>FED. GOVT.                                  | <ul> <li>Financial plan does not exceed debt<br/>ceiling and implies potential for<br/>deleveraging; operating risks retained<br/>by Federal Government</li> </ul>   | <ul> <li>Reduces overall financial and<br/>operating exposure, although certain<br/>liabilities may need to be retained by<br/>Federal Government</li> </ul>                     | <ul> <li>Reduces overall financial and operating<br/>exposure, although certain liabilities may<br/>need to be retained by Federal Governmen</li> </ul>                             |
| TRANSACTABILITY/<br>DISRUPTION                         | <ul> <li>Current TVA structure appears to be<br/>functioning well and 10-year financial<br/>plan does not suggest major<br/>complications with ongoing Federal<br/>Government ownership</li> </ul>                       | <ul> <li>Highly complex and time consuming<br/>to implement due to approval<br/>requirements, established<br/>stakeholder ecosystem, regulation<br/>and other factors</li> </ul> | <ul> <li>Highly complex and time consuming to<br/>implement due to approval requirements,<br/>established stakeholder ecosystem,<br/>regulation and other factors</li> </ul>        |
| SUMMARY<br>OBSERVATIONS                                | <ul> <li>Healthy financial profile and ongoing efficiency initiatives expected to generate benefits for<br/>TVA's various stakeholders; no apparent<br/>detriment to ongoing Federal Government<br/>ownership</li> </ul> | Potential to maintain existing rates and reduce<br>Federal Government's exposure to operating<br>risks at TVA, but extremely difficult to<br>implement                           | Rate impacts and value would need to be evaluated,<br>among other factors—potentially positive or negative<br>outcomes, but in all cases extremely difficult to<br>implement        |

#### STRATEGIC ALTERNATIVES

(d) Commentary describes analysis of "Privatize 100% of TVA and Fully Integrate LPCs" structural alternative.

(e) Please see discussion in "Comparison of TVA vs. Other Power Provider Models" section regarding factors impacting rates under various TVA structures.

# A Summary Assessment of Status Quo/Enhanced Status Quo Alternatives

## Summary Assessment—Status Quo

| DESCRIPTION            | Continue to execute TVA's current strategic plan, including with respect to strategic realignment, cost reduction initiatives and resource planning   |
|------------------------|---|
|                        | <ul> <li>Ongoing/uninterrupted execution of TVA's regional (power and non-power) mission</li> </ul>   |
|                        | Status quo plan appears achievable and is expected to result in improved environmental impacts, additional operating efficiencies and overall deleveraging <sup>(a)</sup>   |
| BENEFITS               | <ul> <li>Operational and capital efficiencies could be applied to reducing customer rates and/or generating other benefits for TVA stakeholders over the long term<sup>(b)</sup></li> </ul>                       |
|                        | <ul> <li>Implementation does not require change in TVA Act, other regulatory/legislative changes at the federal, state or local level, or consensus among disparate stakeholders</li> </ul>                       |
|                        | <ul> <li>Federal Government retains ongoing exposure to TVA operating risks and TVA continues to be recorded in the federal budget (unless a change<br/>is made to the TVA Act)</li> </ul>                        |
|                        | Potential for near-term negative economic effects and/or impacts on TVA culture related to possible headcount reductions  |
| CONSIDERATIONS         | Potential for efficiency initiatives to impact the provision of TVA services if not implemented carefully/appropriately   |
|                        | <ul> <li>Existing potential organizational inefficiencies may not be addressed beyond current program goals (although benchmarking analysis suggests<br/>that additional improvements may be possible)</li> </ul> |
|                        | Customer rates may still be high relative to peers when normalized for implicit rate benefits of current structure <sup>(c)</sup>   |
|                        |   |
|                        | No implementation complexities and maintains ongoing/uninterrupted execution of TVA's regional mission relative to divestiture alternatives   |
| SUMMARY<br>ASSESSMEN'T | The status quo plan is expected to lead to improvements in TVA's environmental profile and cost structure, and is not anticipated to draw<br>on the Federal Government's capital resources                        |
|                        | The status quo plan appears achievable and is generally consistent with Power & Utility Industry trends   |
|                        | However, may not realize full extent of possible operational and capital efficiencies if further initiatives are not pursued  |

- (a) Additional draw on government credit appears unlikely, except in more significant downside scenarios.
- (b) TVA industrial customer rates expected to be in top quartile nationally by 2014; retail rates expected to be in second quartile.

(c) As compared to an IOU, the costs of executing non-power activities are embedded in TVA's rate structure, making it difficult to draw comparisons to other power providers that do not have a comparable non-power mission or scope of non-power activities. Importantly, efficiency initiatives designed to improve performance are ongoing.

# Summary Assessment—Incremental Operating/Capital Efficiencies

|                       | Implement additional cost reduction and capital optimization initiatives beyond the goals established in TVA's 2014 budget  |
|-----------------------|---|
| DESCRIPTION           | <ul> <li>May also entail improved tracking of distinct power and non-power costs to more accurately benchmark operating performance relative to<br/>peers</li> </ul>  |
|                       | <ul> <li>Ongoing/uninterrupted execution of TVA's regional (power and non-power) mission</li> </ul>   |
|                       | <ul> <li>Benchmarking studies suggest opportunities to achieve operating and capital efficiencies beyond what is currently planned—realization of<br/>such efficiencies would likely take place over many years</li> </ul>  |
| BENEFITS              | <ul> <li>Additional operational and capital efficiencies could be applied to reducing customer rates and/or generating other benefits for TVA stakeholders, and may enhance the value of TVA, over the long term</li> </ul>   |
|                       | <ul> <li>Implementation does not require change in TVA Act, other regulatory/legislative changes at the federal, state or local level, or consensus<br/>among disparate stakeholders</li> </ul>   |
|                       | <ul> <li>Federal Government retains ongoing exposure to TVA operating risks and TVA continues to be recorded in the federal budget (unless a change is made to the TVA Act)</li> </ul>  |
|                       | Potential for near-term negative economic effects and/or impacts on TVA culture related to possible headcount reductions  |
| CONSIDERATIONS        | Potential for efficiency initiatives to impact the provision of TVA services if not implemented carefully/appropriately   |
|                       | <ul> <li>Legacy characteristics of TVA system (e.g., generation fleet profile, geography, lack of integration with LPCs, etc.) and non-power activities may limit potential to achieve efficiencies</li> </ul>  |
|                       |   |
|                       | No implementation complexities associated with divestiture and maintains, or improves, ongoing/uninterrupted execution of TVA's regional mission relative to divestiture alternatives   |
| SUMMARY<br>ASSESSMENT | While the status quo plan is expected to lead to improvements in TVA's environmental profile and cost structure, benchmarking analysis suggests that additional operational efficiencies may be possible; many utilities have implemented similar operational enhancement strategies successfully |
|                       | <ul> <li>Successful implementation would generate benefits to customer rates and/or other benefits to TVA stakeholders, and may<br/>enhance the value of TVA, over the long term</li> </ul>   |

### Summary Assessment—Financing Strategies

Α

|                | ENHANCED CAPITAL ALLOCATION   | LEASEBACK <sup>(a)</sup>  | JOINT VENTURE  |
|----------------|---|---|--|
| DESCRIPTION    | <ul> <li>Sell individual assets (facilities, generation and/or<br/>transmission, etc.) to raise capital for reinvestment,<br/>deleveraging or return of capital</li> </ul>  | <ul> <li>Pursue leaseback(s) of generation and/or other<br/>assets to finance future development<sup>(b)</sup></li> </ul>   | <ul> <li>Pursue joint ventures for existing assets and/or<br/>new development projects</li> </ul>  |
| BENEFITS       | <ul> <li>Creates more flexibility in TVA's balance sheet</li> <li>Proceeds from asset sales may be used to reduce leverage</li> <li>Rate impact may ultimately be positive, if TVA is able to reinvest capital into more efficient projects</li> <li>Implementation does not require change in TVA Act, other regulatory/legislative changes at the federal, state or local level, or consensus among disparate stakeholders</li> </ul>   | <ul> <li>Creates more flexibility in TVA's balance sheet</li> <li>Proceeds from leasebacks may be used to<br/>reduce leverage</li> <li>Implementation does not require change in<br/>TVA Act, other regulatory/legislative changes<br/>at the federal, state or local level, or consensus<br/>among disparate stakeholders</li> </ul> | <ul> <li>Creates more flexibility in TVA's balance sheet</li> <li>Proceeds and/or capital expenditure savings<br/>may be used to reduce leverage</li> <li>Implementation does not require change in<br/>TVA Act, other regulatory/legislative changes<br/>at the federal, state or local level, or consensus<br/>among disparate stakeholders</li> </ul> |
| CONSIDERATIONS | <ul> <li>Buyers for TVA's assets may be limited unless current "Fence" structure is modified or TVA enters into long-term contracts</li> <li>Asset sales may ultimately be more costly for overall rates due to higher private sector cost structure (e.g., related to cost of equity requirements, taxes, etc.)</li> <li>May need to source replacement capacity to serve TVA load</li> <li>Merchant generation asset prices are generally challenged in current market environment</li> </ul> | <ul> <li>Complex structuring considerations</li> <li>Leasebacks may ultimately be more costly for overall rates (e.g., credit rating of new structure's debt is typically lower than that of TVA's, implying higher overall costs vs. self-financing)</li> <li>Plant operating risks are retained by TVA</li> </ul>                   | <ul> <li>Complex structuring and governance considerations</li> <li>Partners may be limited unless current "Fence" structure is modified</li> <li>Difficult to unwind</li> <li>TVA may need to consolidate joint venture onto balance sheet if TVA continues to maintain majority operational control or voting control</li> </ul>                       |

SUMMARY ASSESSMENT

- Financing strategies would need to be evaluated on a case-by-case basis; however, strategies beyond traditional balance sheet financing are generally more complex and potentially more expensive vs. TVA's low cost of debt
- Such financing strategies make less sense in light of TVA's current (healthy) financial condition

(a) Lazard has reviewed the leaseback proposal made by Haney/Bottorff/Credit Suisse in respect of financing Bellefonte using Alternative Financing and believes that the proposal is inferior to TVA's standalone financial plan due to, among other considerations, substantially increased off-balance sheet obligations (which should nevertheless be viewed as TVA debt), unclear rate benefits without a significant increase in off-balance sheet borrowings and generally aggressive financial assumptions for capital costs and expenses.

(b) TVA appears to have a successful track record of leaseback transactions (e.g., Southaven and John Sevier, among others).

# Summary Assessment—Allow TVA to Expand Existing Operations

Α

| DESCRIPTION           | <ul> <li>Allow TVA to expand operations beyond its current mandate, including expansion outside its existing service territory and/or<br/>the pursuit of new business activities (e.g., acquire gas utilities, vertically integrate with LPCs, etc.)</li> </ul>  |
|-----------------------|--|
| BENEFITS              | <ul> <li>Potential for TVA to realize economies of scale and scope through management of additional regions/businesses</li> <li>Vertical integration with LPCs may enable TVA to achieve greater synergies in its existing supply chain</li> <li>Joint gas/electric systems under single ownership is common</li> </ul>                  |
|                       | <ul> <li>Exposure to competitive market environment may increase TVA operational efficiencies</li> <li>Additional operational and capital efficiencies could be applied to reducing customer rates and/or generating other benefits for TVA stakeholders, and may enhance the value of TVA, over the long term</li> </ul>                |
| CONSIDERATIONS        | <ul> <li>May facilitate additional opportunities for economic development in the region</li> <li>Federal Government retains ongoing exposure to TVA operating risks and TVA continues to be recorded in the federal budget (unless a change is made to the TVA Act)</li> </ul>   |
|                       | <ul> <li>Implementation would likely require change in TVA Act, other regulatory/legislative changes at the federal, state or local level, and/or consensus among disparate stakeholders</li> </ul>  |
|                       | <ul> <li>TVA's tax and cost of capital advantages may ultimately have an impact on competitive/market environment if TVA pursues<br/>non-regulated activities</li> </ul>   |
|                       | <ul> <li>Potential for expansion initiatives to impact the provision of TVA services if not implemented carefully/appropriately</li> </ul>   |
|                       | <ul> <li>Unclear if TVA competencies would be transferrable to new regions and/or lines of business</li> </ul>   |
|                       | <ul> <li>Increased TVA complexity may result in lack of focus on current efficiency opportunity</li> </ul>   |
|                       |  |
| SUMMARY<br>ASSESSMENT | May need to be evaluated on a case-by-case basis—certain opportunities (e.g., integration with LPCs) may make<br>sense, while other opportunities (e.g., acquisition of gas utility or unregulated assets) may increase risks assumed by<br>the Federal Government and existing TVA; implementation complexity should also be considered |
|                       | Unclear if potential benefits related to scale/scope and synergies could be captured by TVA  |
|                       | <ul> <li>Decisions may also need to consider overall policy objectives of such changes and impacts on competition</li> </ul>   |

# Summary Assessment—Allow Alternate Suppliers into Region/Provide Open Transmission Access

| DESCRIPTION           | <ul> <li>Allow alternate suppliers of electricity to provide power to TVA's LPCs and other wholesale customers through the provision<br/>of open transmission access throughout TVA's service territory</li> </ul>   |
|-----------------------|--|
| BENEFITS              | <ul> <li>Creates more customer choice for power in the region and may enable customers to achieve savings in power supply costs</li> <li>Exposure to competitive market environment may increase TVA operational efficiencies</li> <li>May facilitate additional opportunities for economic development in the region</li> </ul> |
| CONSIDERATIONS        | <ul> <li>Federal Government retains ongoing exposure to TVA operating risks and TVA continues to be recorded in the federal<br/>budget—competition would increase Federal Government exposure</li> </ul>   |
|                       | <ul> <li>Implementation would likely require change in TVA Act, substantial other regulatory/legislative changes at the federal, state or<br/>local level, and/or consensus among disparate stakeholders</li> </ul>  |
|                       | <ul> <li>Exposes TVA customers to additional risk, including price volatility, system instability, credit downgrades and cost of capital impacts, potentially leading to higher customer rates</li> </ul>  |
|                       | Introduces planning challenges for TVA and risk of market dysfunction, stranded assets and other potential downsides   |
|                       | <ul> <li>Introduces substantial regulatory complexities (e.g., change in relationship between TVA and LPCs, regulatory and other oversight, etc.)</li> </ul>   |
|                       | <ul> <li>Internal separation or corporate separation of transmission and generation may be necessary to avoid conflicts of interest</li> </ul>   |
|                       | <ul> <li>Non-power mission and activities may limit TVA's ability to compete effectively</li> </ul>  |
|                       | <ul> <li>Potential competitive threats/distractions may impact the provision of TVA services and impact TVA's non-power activities</li> </ul>  |
|                       |  |
| SUMMARY<br>ASSESSMENT | Unclear whether stakeholder benefits exist—potential benefits related to customer choice may not offset rate and asset risks associated with competitive markets; increased risks would be assumed by the Federal Government and existing TVA customers  |
|                       | Entails significant complexity and risks in respect of setting up regulatory/market mechanisms and transitional strategies (track record of deregulation in U.S. is mixed)   |

## **B** Summary Assessment of Public Sector Spin-off Alternatives

## Summary Assessment—Integrated Regional Cooperative

|                       | Establish a single, standalone regional public power cooperative to own and operate TVA  |
|-----------------------|--|
|                       | Cooperative would be owned and governed by member LPCs   |
|                       | Potential governing body and/or counterparty for transaction could be the Tennessee Valley Public Power Association ("TVPPA"), the representative organization for TVA's LPC customers   |
| DESCRIPTION           | <ul> <li>Would retain independent rate-setting authority over wholesale rates</li> </ul>   |
|                       | Regional cooperative examples include:   |
|                       | American Municipal Power ("AMP")   |
|                       | Associated Electric Cooperative, Inc. ("AECI")   |
|                       | Tri-State Generation and Transmission Association  |
|                       | Reduction in Federal Government exposure to TVA operating risks and no longer recorded in the federal budget   |
| DENTERTO              | • If independent rate-setting authority is retained and LPC commitments are maintained, may maintain cost of capital near current levels; potential to issue tax-exempt debt, which may lower cost of capital  |
| BENEFITS              | Minimizes overall "disruption" to TVA organization relative to other divestiture options while still divesting TVA from the Federal Government   |
|                       | Potential for better stakeholder alignment (e.g., indirect local control over TVA activities)  |
|                       | Relatively lower (or no) dis-synergies compared to non-integrated public sector spin-off scenarios   |
|                       | Implementation would likely require complex execution (e.g., change in TVA Act, regulatory/legislative changes at the federal, state and local level, common consensus between states, LPCs and disparate stakeholders, etc.)  |
| CONSIDERATIONS        | Potential for disputes over investment allocation (non-power and otherwise) across members   |
|                       | Potential loss of federal control over non-power activities <sup>(a)</sup>   |
|                       |  |
| SUMMARY<br>ASSESSMENT | Does not appear to generate stakeholder benefits or value beyond that under the existing structure, aside from reduction in Federal Government exposure to operating risk  |
|                       | Potentially less "disruptive" to TVA organization relative to other divestiture options (as organization remains integrated and controlled by its customers), including with respect to non-power activities, and with potentially modest impact on rates and cost structure |
|                       | Complex implementation challenges—stakeholder commitment would be a determining factor in the viability of the structure for TVA; there is also a lack of visibility into potential outcomes   |
|                       | (a) Loss of federal control may be minimized/mitigated by retaining direct federal oversight of non-power activities either by retaining as a separate entity or by establishing ongoing<br>governance rights or regulation over such activities.                            |
| 57   LAZAI            |  |

## Summary Assessment—Integrated Regional Authority

В

| DESCRIPTION           | <ul> <li>Establish a single, standalone regional public authority to own and operate TVA</li> <li>Authority's governance and control would span multiple states (i.e., across TVA's seven-state service territory)</li> </ul>  |
|-----------------------|--|
|                       | <ul> <li>Could be owned and governed by individual states, other stakeholders (e.g., existing regional, state or municipal entities) or a combination thereof</li> <li>Would require establishment of a new governing entity</li> <li>Governance, including level of federal involvement (if any), to be determined</li> </ul> |
|                       | <ul> <li>Would retain independent rate-setting authority over wholesale rates</li> </ul>   |
|                       | Reduction in Federal Government exposure to TVA operating risks and no longer recorded in the federal budget   |
|                       | <ul> <li>If independent rate-setting authority is retained and LPC commitments are maintained, may maintain cost of capital near current levels; potential to issue tax-exempt debt, which may lower cost of capital</li> </ul>  |
| BENEFITS              | <ul> <li>Minimizes overall "disruption" to TVA organization relative to other divestiture options while still divesting TVA from the Federal Government</li> </ul>   |
|                       | <ul> <li>Potential for better stakeholder alignment (e.g., indirect local control over TVA activities)</li> </ul>  |
|                       | <ul> <li>Relatively lower (or no) dis-synergies compared to non-integrated public sector spin-off scenarios</li> </ul>   |
|                       | <ul> <li>Implementation would likely require complex execution (e.g., change in TVA Act, regulatory/legislative changes at the federal, state and local<br/>level, common consensus between states, LPCs and disparate stakeholders, etc.)</li> </ul>  |
| CONSIDERATIONS        | <ul> <li>Potential for disputes over investment allocation (non-power and otherwise) across state/stakeholder jurisdictions</li> </ul>   |
|                       | Potential loss of federal control over non-power activities <sup>(a)</sup>   |
|                       | <ul> <li>No U.S. public power precedents exist<sup>(b)</sup>, raising potential feasibility questions</li> </ul>   |
|                       |  |
| SUMMARY<br>ASSESSMENT | Does not appear to generate stakeholder benefits or value beyond that under the existing structure, aside from reduction in Federal Government exposure to operating risk  |
|                       | Similar to integrated regional cooperative (i.e., potentially less "disruptive" to TVA organization relative to other divestiture options (as organization remains integrated), potentially modest forecasted impact on rates and cost structure)  |
|                       | Complex implementation challenges—stakeholder commitment would be a determining factor in the viability of the structure for TVA; there is also a lack of visibility into potential outcomes   |
|                       | (a) Loss of federal control may be minimized/mitigated by retaining direct federal oversight of non-power activities either by retaining as a separate entity or by establishing ongoing governance rights or regulation over such activities.   |

(b) Bi-state transportation authorities (e.g., the Port Authority of New York/New Jersey) may be the most applicable precedent organizations.



## Summary Assessment—Separated Regional Authorities

| DESCRIPTION    | <ul> <li>Separate TVA into individual regional public authorities for power generation, transmission and non-power activities (or variations thereof)</li> <li>Each authority's governance and control could span multiple states (i.e., across TVA's seven-state service territory)</li> </ul> |
|----------------|---|
|                | Each authority could be owned and governed by individual states, other stakeholders (e.g., existing regional, state or municipal entities) or a combination thereof   |
|                | Each authority could have separate ownership and/or governance structures   |
|                | Non-power activities could be reorganized under federal, state or local control   |
|                | Power generation and transmission authorities to retain independent rate-setting authority; non-power activities to be determined   |
|                | <ul> <li>Reduction in Federal Government exposure to TVA operating risks and no longer recorded in the federal budget</li> </ul>  |
| BENEFITS       | If independent rate-setting authority is retained and LPC commitments are maintained, may maintain cost of capital near current levels; potential to issue tax-exempt debt, which may lower cost of capital   |
|                | <ul> <li>Potential for better stakeholder alignment (e.g., indirect local control over TVA activities)</li> </ul>   |
|                | <ul> <li>May generate "fit and focus" benefits related to separating TVA's business lines/activities</li> </ul>   |
|                | <ul> <li>Implementation would likely require complex execution (e.g., change in TVA Act, regulatory/legislative changes at the federal, state and local level, common consensus between states, LPCs and disparate stakeholders, etc.)</li> </ul>   |
|                | Potential for disputes over investment allocation (non-power and otherwise) across state/stakeholder jurisdictions  |
| CONSIDERATIONS | No single clear owner of non-power activities; potential loss of federal control over non-power activities <sup>(a)</sup>   |
|                | <ul> <li>Potentially challenging to allocate TVA liabilities across multiple divested entities</li> </ul>   |
|                | Potential dis-synergies related to business separation  |
|                |   |
|                | Does not appear to generate stakeholder benefits or value beyond that under the existing structure, aside from reduction in Federal Government exposure to operating risk   |
| SUMMARY        | Appears less optimal relative to integrated public sector spin-off alternatives:  |
| ASSESSMENT     | Potential dis-synergies from loss of size and scale benefits (i.e., likely adverse impact on customer rates)  |
|                | <ul> <li>Complex implementation challenges—stakeholder commitment would be a determining factor in the viability of the structure for TVA; there is also a lack of visibility into potential outcomes</li> </ul>  |
|                | (a) Loss of federal control may be minimized/mitigated by retaining direct federal oversight of non-power activities either by retaining as a separate entity or by establishing ongoing governance rights or regulation over such activities.  |



## Summary Assessment—State-level Ownership

В

|                | <ul> <li>Separate TVA into seven individual state-owned authorities to own and operate TVA assets in each respective state</li> </ul>   |
|----------------|---|
|                | <ul> <li>Could be regulated by state-level PUCs or established as individual entities with independent rate-setting authority</li> </ul>  |
|                | Each authority could have separate regulatory and governance structures   |
| DESCRIPTION    | Non-power activities could be reorganized under federal, state or local control   |
| DESCRIPTION    | Examples include:   |
|                | Grand River Dam Authority ("GRDA")  |
|                | New York Power Authority ("NYPA") and Long Island Power Authority ("LIPA")  |
|                | Santee Cooper   |
|                | <ul> <li>Reduction in Federal Government exposure to TVA operating risks and no longer recorded in the federal budget</li> </ul>  |
|                | If independent rate-setting authority is retained and LPC commitments are maintained, may maintain cost of capital near current levels; potential to issue tax-exempt debt, which may lower cost of capital                   |
| BENEFITS       | <ul> <li>Potential for better stakeholder alignment (e.g., direct state-level control over TVA activities)</li> </ul>   |
|                | <ul> <li>Potential to utilize existing state-level regulatory structures (e.g., existing state PUC processes/procedures)</li> </ul>   |
|                | Precedent organizations and operational models exist  |
|                | Implementation would likely require complex execution (e.g., change in TVA Act, regulatory/legislative changes at the federal, state and local level, common consensus between states, LPCs and disparate stakeholders, etc.) |
|                | No single clear owner of non-power activities; potential loss of federal control over non-power activities <sup>(a)</sup>   |
| CONSIDERATIONS | <ul> <li>Potentially challenging to allocate TVA liabilities across multiple divested entities</li> </ul>   |
|                | <ul> <li>Potential dis-synergies related to fragmentation/geographic separation</li> </ul>  |
|                | <ul> <li>May be difficult to achieve structural/organizational agreement across all states on how to implement, likely leading to feasibility challenges</li> </ul>   |
|                |   |
|                | Does not appear to generate stakeholder benefits or value beyond that under the existing structure, aside from reduction in Federal Government exposure to operating risk   |
| SUMMARY        | Appears less optimal relative to integrated public sector spin-off alternatives:  |
| ASSESSMENT     | Potential dis-synergies from loss of size and scale benefits (i.e., likely adverse impact on customer rates)  |
|                | Complex implementation challenges—stakeholder commitment would be a determining factor in the viability of the structure for TVA; there is also a lack of visibility into potential outcomes                                  |

(a) Loss of federal control may be minimized/mitigated by retaining direct federal oversight of non-power activities either by retaining as a separate entity or by establishing ongoing governance rights or regulation over such activities.



## Summary Assessment—Muni/Coop-level Ownership

В

| DESCRIPTION           | <ul> <li>Separate TVA into individual/localized entities (or groups of entities) owned and operated by TVA's current LPCs and/or municipalities</li> <li>Could be regulated by state-level PUCs or established as individual entities with independent rate-setting authority</li> <li>Each entity could have separate regulatory and governance structures</li> <li>Non-power activities could be reorganized under federal, state or local control</li> <li>Examples include:</li> <li>Oglethorpe Power Corporation</li> <li>Seminole Electric Cooperative</li> <li>Pedernales Electric Cooperative</li> </ul>   |
|-----------------------|--|
| BENEFITS              | <ul> <li>Reduction in Federal Government exposure to TVA operating risks and no longer recorded in the federal budget</li> <li>If independent rate-setting authority is retained and LPC commitments are maintained, may maintain cost of capital near current levels; potential to issue tax-exempt debt, which may lower cost of capital</li> <li>Potential for better stakeholder alignment (e.g., direct local control over TVA activities)</li> <li>Potential to utilize existing state-level regulatory structures (e.g., existing state PUC processes/procedures)</li> <li>Precedent organizations and operational models exist</li> </ul>  |
| CONSIDERATIONS        | <ul> <li>Implementation would likely require complex execution (e.g., change in TVA Act, regulatory/legislative changes at the federal, state and local level, common consensus between LPCs, municipalities and disparate stakeholders, etc.)</li> <li>No single clear owner of non-power activities; potential loss of federal control over non-power activities<sup>(a)</sup></li> <li>Potentially challenging to allocate TVA liabilities across multiple divested entities</li> <li>Potentially substantial dis-synergies related to fragmentation/geographic separation</li> <li>May be difficult to achieve structural/organizational agreement across all LPCs/municipalities on how to implement, likely leading to substantial feasibility challenges</li> </ul> |
| SUMMARY<br>ASSESSMENT | <ul> <li>Does not appear to generate stakeholder benefits or value beyond that under the existing structure, aside from reduction in Federal Government exposure to operating risk</li> <li>Appears less optimal relative to integrated public sector spin-off alternatives: <ul> <li>Potential dis-synergies from loss of size and scale benefits (i.e., likely adverse impact on customer rates)</li> <li>Complex implementation challenges—stakeholder commitment would be a determining factor in the viability of the structure for TVA; there is also a lack of visibility into potential outcomes</li> </ul> </li> </ul>  |

(a) Loss of federal control may be minimized/mitigated by retaining direct federal oversight of non-power activities either by retaining as a separate entity or by establishing ongoing governance rights or regulation over such activities.

## Summary Assessment—Divest/Reduce Scope of Non-power Activities

| DESCRIPTION           | <ul> <li>Transfer some or all of TVA's non-power mission to another party or parties (e.g., federal, state or local agencies)</li> <li>Examples of entities which may take on all or certain non-power activities might include the U.S. Army Corps of Engineers, the U.S. Department of the Interior, the National Park Service or various state/local park, recreation and wildlife authorities for water management roles</li> </ul>  |
|-----------------------|--|
|                       | <ul> <li>Economic development and technology missions would also need to be transferred</li> </ul>   |
| BENEFITS              | <ul> <li>May generate "fit and focus" benefits related to separating or narrowing TVA's power and non-power activities (e.g., certain other agencies may be better equipped to implement TVA's non-power mission)</li> <li>Would likely lead to improved organizational tracking, including because TVA would no longer be funding non-power</li> </ul>  |
|                       | <ul><li>activities with power-related revenues</li><li>Potential to improve customer rates</li></ul>   |
| CONSIDERATIONS        | <ul> <li>Non-power activities would need to be funded through other means (i.e., may result in value transfer between TVA ratepayers and federal, state and/or local taxpayers)</li> <li>Implementation would likely require change in TVA Act, other regulatory/legislative changes at the federal, state or local level, and/or consensus among states, LPCs and disparate stakeholders</li> <li>Potential dis-synergies related to the separation of power activities and water management activities (e.g., hydro management and water resource management, etc.) may lead to higher customer rates, greater or total service costs and/or adverse economic development impacts</li> <li>Federal Government retains ongoing exposure to TVA operating risks and TVA continues to be recorded in the federal budget (unless a change is made to the TVA Act)</li> <li>Potential for near-term negative economic effects and/or impacts on TVA culture related to substantial organizational changes</li> <li>Potential for organizational changes to impact the provision of TVA services if not implemented carefully/appropriately</li> </ul> |
| SUMMARY<br>ASSESSMENT | <ul> <li>Does not appear to generate stakeholder benefits or value beyond that under the existing structure</li> <li>Unclear whether stakeholder benefits exist from non-power divestiture—may improve the tracking of TVA's non-power activities, but may cause dis-synergies related to the separation of power and non-power activities</li> <li>Complex implementation challenges, including change to TVA Act; there is also a lack of visibility into potential outcomes</li> <li>Calls into question the fundamental mission of TVA more broadly</li> </ul>   |

## **C** Summary Assessment of Privatization Alternatives

TVA

### Summary Assessment—Privatize 100% of TVA via IPO

| DESCRIPTION            | <ul> <li>Privatize TVA power operations in its entirety via an IPO</li> <li>IPO may entail selling a stake in the Federal Government's ownership of TVA to public equity investors, and subsequently selling additional stakes to fully divest its ownership</li> <li>Assumes privatized TVA would be regulated via FERC and applicable state PUCs, although other models may be considered</li> <li>Would require non-power activities to be retained by a federal (or other public sector) entity</li> </ul>   |
|------------------------|--|
| BENEFITS               | <ul> <li>Reduction in Federal Government exposure to TVA operating risks and no longer recorded in the federal budget</li> <li>Potential to generate proceeds for the Federal Government</li> <li>Privatized owner may be able to achieve cost savings beyond what is currently planned—additional operational efficiencies could improve customer rates and/or generate other benefits for TVA stakeholders, and may enhance the value of TVA over the long term; such value benefits would partially accrue to the Federal Government if it retained an equity stake in TVA</li> <li>Sector valuations at historical highs and interest rates at historical lows</li> <li>Divestiture of TVA could be accomplished in stages (through follow-on offerings after the initial IPO), with the Federal Government able to observe market valuations and allow trading values to stabilize between offerings</li> </ul>   |
| CONSIDERATIONS         | <ul> <li>Implementation would likely require complex execution (e.g., change in TVA Act, regulatory/legislative changes at the federal, state and local level (possibly including additional regulatory resources), common consensus between states, LPCs and disparate stakeholders, etc.)</li> <li>Potential dis-synergies related to the separation of power activities and non-power activities (e.g., hydro management and water resource management, etc.) may lead to higher customer rates or total costs to provide service more broadly</li> <li>Given ongoing and future TVA cost and capital efficiency initiatives, privatization may not enable Federal Government to fully realize value in TVA (i.e., Federal Government would share any post-IPO value creation with TVA's public equity investors)</li> <li>May require fundamental changes to market structure and regulatory design</li> <li>Potential for organizational changes to impact the provision of TVA services if not implemented carefully/appropriately</li> <li>Privatized capital structure would entail higher costs related to the introduction of taxes and equity return requirements absent offsetting factors</li> <li>Uncertain impact/disruption with respect to TVA's non-power mission</li> <li>IPO discount and underwriting/advisory fees reduce net value received</li> <li>Likely entails multiple offerings, which exposes Federal Government to risk of downward market movement in valuations between offerings</li> </ul> |
| SUMMARY<br>CONCLUSIONS | <ul> <li>Given ongoing and future TVA cost and capital efficiency initiatives, privatization may not enable the Federal Government to realize the full value of TVA</li> <li>IPO would typically entail lower proceeds received vs. sale, but may enable Federal Government to retain some portion of future value creation</li> <li>Customer rates and other stakeholder benefits may be negatively impacted by the new TVA structure<sup>(a)</sup></li> <li>Complex implementation challenges—privatization would likely require a fundamental change to the TVA Act, a major reorganization of non-power activities and entails substantial execution issues related to regulatory structure; there is also a lack of visibility into potential outcomes</li> </ul>   |

(a) Please see the "Divestiture Implementation Issues" section for a discussion of potential rate mitigation strategies.

# c summary assessment of privatization alternatives Summary Assessment—Privatize 100% of TVA via Sale<sup>(a)</sup>

| DESCRIPTION           | <ul> <li>Privatize TVA power operations in its entirety via a sale process</li> <li>Buyer would likely be an IOU, although other buyers are also possible (e.g., traditional private equity consortium, infrastructure investor consortium, etc.)</li> <li>Assumes privatized TVA would be regulated via FERC and applicable state PUCs, although other models may be considered</li> <li>Would require non-power activities to be retained by a federal (or other public sector) entity</li> </ul>  |
|-----------------------|--|
| BENEFITS              | <ul> <li>Reduction in Federal Government exposure to TVA operating risks and no longer recorded in the federal budget</li> <li>Potential to generate proceeds for the Federal Government</li> <li>Privatized owner may be able to achieve cost savings beyond what is currently planned—additional operational efficiencies could improve customer rates and/or generate other benefits for TVA stakeholders, and may enhance the value of TVA over the long term</li> <li>Sector valuations at historical highs and interest rates at historical lows</li> <li>Sale likely to capture a premium value relative to IPO, due to potential for buyers to value synergies in a transaction</li> </ul>   |
| CONSIDERATIONS        | <ul> <li>Implementation would likely require complex execution (e.g., change in TVA Act, regulatory/legislative changes at the federal, state and local level (possibly including additional regulatory resources), common consensus between states, LPCs and disparate stakeholders, etc.)</li> <li>Potential dis-synergies related to the separation of power activities and non-power activities (e.g., hydro management and water resource management, etc.) may lead to higher customer rates or total costs to provide service more broadly</li> <li>Given ongoing and future TVA cost and capital efficiency initiatives, privatization may not enable Federal Government to fully realize value in TVA May require fundamental changes to market structure and regulatory design</li> <li>Potential for organizational changes to impact the provision of TVA services if not implemented carefully/appropriately</li> <li>Privatized capital structure would entail higher costs related to the introduction of taxes and equity return requirements absent offsetting factors</li> <li>Uncertain impact/disruption with respect to TVA's non-power mission</li> <li>Relatively few cash buyers with sufficient scale to acquire entire TVA; may impact overall value and/or require break-up of TVA to realize full value</li> </ul> |
| SUMMARY<br>ASSESSMENT | <ul> <li>Given ongoing and future TVA cost and capital efficiency initiatives, privatization may not enable the Federal Government to realize the full value of TVA</li> <li>Sale may allow Federal Government to capture a premium value relative to IPO, but the dearth of credible buyers for 100% of TVA would need to be considered</li> <li>Customer rates and other stakeholder benefits may be negatively impacted by the new TVA structure<sup>(b)</sup></li> <li>Complex implementation challenges—privatization would likely require a fundamental change to the TVA Act, a major reorganization of non-power activities and entails substantial execution issues related to regulatory structure; there is also a lack of visibility into potential outcomes</li> </ul>  |
| alternati             | s a cash acquisition by an IOU, but other structures are possible, such as a stock merger in which the Federal Government becomes a partial owner in the combined acquiror and TVA—such<br>ves could entail significantly more complexity and would require consideration of relative value, synergy potential, governance and other factors.<br>see the "Divestiture Implementation Issues" section for a discussion of potential rate mitigation strategies.<br>ARD  |

TVA

## Summary Assessment—Privatize TVA Non-Hydro Assets

С

| DESCRIPTION           | <ul> <li>Privatize TVA power operations, except for TVA's hydro assets, under a regulated utility framework</li> <li>Federal Government would retain non-power activities along with hydro assets</li> <li>Could be effected as a sale or an IPO</li> <li>Buyer would likely be an IOU, although other buyers are also possible (e.g., traditional private equity consortium, infrastructure investor consortium, etc.)</li> <li>Hydro assets are assumed to be contracted to privatized TVA, although other structures may be possible</li> </ul>  |
|-----------------------|---|
| BENEFITS              | <ul> <li>Reduction in Federal Government exposure to TVA operating risks and no longer recorded in the federal budget</li> <li>Potential to generate proceeds for the Federal Government</li> <li>Privatized owner may be able to achieve cost savings beyond what is currently planned—additional operational efficiencies could improve customer rates and/or generate other benefits for TVA stakeholders, and may enhance the value of TVA over the long term</li> <li>Sector valuations at historical highs and interest rates at historical lows</li> <li>Potential ability to continue to fund non-power activities from revenue generated by retained hydro assets</li> </ul>   |
| CONSIDERATIONS        | <ul> <li>Implementation would likely require complex execution (e.g., change in TVA Act, regulatory/legislative changes at the federal, state and local level (possibly including additional regulatory resources), common consensus between states, LPCs and disparate stakeholders, etc.)</li> <li>Given ongoing and future TVA cost and capital efficiency initiatives, privatization may not enable Federal Government to fully realize value in TVA</li> <li>May require fundamental changes to market structure and regulatory design</li> <li>Potential for organizational changes to impact the provision of TVA services if not implemented carefully/appropriately</li> <li>Privatized capital structure would entail higher costs related to the introduction of taxes and equity return requirements absent offsetting factors</li> <li>Uncertain impact/disruption with respect to TVA's non-power mission</li> <li>Relatively few cash buyers with sufficient scale to acquire all TVA non-hydro assets; may adversely impact overall value and/or require break-up of TVA to maximize value</li> </ul> |
| SUMMARY<br>ASSESSMENT | <ul> <li>Considerations are generally similar to that of 100% privatization (via IPO or sale), but structure may reduce value as compared to full divestiture, due to reduced potential for synergies, as well as dis-synergies of the separation itself</li> <li>Appears less optimal relative to integrated privatization</li> </ul>  |

TVA

## Summary Assessment—Privatize 100% of TVA and Integrate LPCs

| DESCRIPTION           | <ul> <li>Privatize TVA power operations in its entirety, combined with the acquisition of all of TVA's LPCs to effectively replicate a traditional utility model that is vertically integrated from generation through distribution</li> <li>Would require non-power activities to be retained by a federal (or other public sector) entity</li> <li>Assumes privatized TVA would be regulated via FERC and applicable state PUCs, although other models may be considered</li> <li>Could be effected as a sale or an IPO</li> </ul>   |
|-----------------------|--|
| BENEFITS              | <ul> <li>Reduction in Federal Government exposure to TVA operating risks and no longer recorded in the federal budget</li> <li>Potential to generate proceeds for the Federal Government</li> <li>Privatized owner may be able to achieve cost savings beyond what is currently planned—additional operational efficiencies could improve customer rates and/or generate other benefits for TVA stakeholders, and may enhance the value of TVA over the long term</li> <li>Sector valuations at historical highs and interest rates at historical lows</li> <li>Integration of distribution utilities into system may generate substantial operating and capital synergies</li> </ul>  |
| CONSIDERATIONS        | <ul> <li>Implementation would likely require complex execution (e.g., change in TVA Act, regulatory/legislative changes at the federal, state and local level (possibly including additional regulatory resources), common consensus between states, LPCs and disparate stakeholders, etc.)</li> <li>Potential dis-synergies related to the separation of power activities and non-power activities (e.g., hydro management and water resource management, etc.) may lead to higher customer rates or total costs to provide service more broadly</li> <li>Given ongoing and future TVA cost and capital efficiency initiatives, privatization may not enable Federal Government to fully realize value in TVA</li> <li>May require fundamental changes to market structure and regulatory design</li> <li>Potential for organizational changes to impact the provision of TVA services if not implemented carefully/appropriately</li> <li>Privatized capital structure would entail higher costs related to the introduction of taxes and equity return requirements absent offsetting factors</li> <li>Uncertain impact/disruption with respect to TVA's non-power mission</li> <li>Relatively few cash buyers with sufficient scale to acquire all TVA assets; may adversely impact overall value and/or require break-up of TVA to maximize value</li> <li>As compared to other alternatives, likely substantially more difficult to negotiate, given number of TVA LPCs</li> </ul> |
| SUMMARY<br>ASSESSMENT | Considerations are generally similar to that of 100% privatization (via IPO or sale), except that this alternative implies increased synergy potential (through LPC integration), but significantly greater execution challenges as well (in respect of necessary stakeholder commitment to the transaction)   |

### Summary Assessment—Divest Generation as IOU

| DESCRIPTION           | <ul> <li>Privatize TVA's generation assets</li> <li>TVA would retain transmission assets and non-power activities</li> <li>Could be effected as a sale or an IPO</li> <li>Buyer would likely be an IOU, although other buyers are also possible (e.g., traditional private equity consortium, infrastructure consortium, etc.)</li> </ul>   |
|-----------------------|---|
| BENEFITS              | <ul> <li>Reduction in Federal Government exposure to TVA generation-related operating risks</li> <li>Potential to generate proceeds for the Federal Government</li> <li>Privatized owner likely able to achieve cost savings beyond what is currently planned—additional operational efficiencies could improve customer rates and/or generate other benefits for TVA stakeholders, and may enhance the value of TVA over the long term</li> <li>Sector valuations at historical highs and interest rates at historical lows</li> <li>Ability to continue to fund non-power activities from revenue generated by retained transmission assets</li> <li>May generate "fit and focus" benefits by separating TVA's business lines/activities</li> </ul>   |
| CONSIDERATIONS        | <ul> <li>Implementation would likely require complex execution (e.g., change in TVA Act, regulatory/legislative changes at the federal, state and local level (possibly including additional regulatory resources), common consensus between states, LPCs and disparate stakeholders, etc.)</li> <li>Potential dis-synergies from separation of generation and transmission operations</li> <li>Given ongoing and future TVA cost and capital efficiency initiatives, privatization may not enable Federal Government to fully realize value in TVA</li> <li>May require fundamental changes to market structure and regulatory design</li> <li>Potential for organizational changes to impact the provision of TVA services if not implemented carefully/appropriately</li> <li>Privatized capital structure would entail higher costs related to the introduction of taxes and equity return requirements absent offsetting factors</li> <li>Uncertain impact/disruption with respect to TVA's non-power mission—TVA may be less able to directly address economic development mission through electricity rates and contracts</li> </ul> |
|                       |   |
| SUMMARY<br>ASSESSMENT | <ul> <li>Given ongoing and future TVA cost and capital efficiency initiatives, privatization may not enable the Federal Government to realize the full value of TVA (generation makes up ~90% of TVA power operations)</li> <li>Customer rates and other stakeholder benefits may be negatively impacted by the new generation structure<sup>(b)</sup></li> <li>Complex implementation challenges—privatization would likely require a fundamental change to the TVA Act, a major reorganization of non-power activities, and entails substantial execution issues related to regulatory structure; there is also a lack of visibility into potential outcomes</li> <li>Appears to be suboptimal as compared to integrated privatization, including due to likely dis-synergies</li> </ul>  |

(a) Please see the "Divestiture Implementation Issues" section for a discussion of potential rate mitigation strategies.

67 | LAZARD

## Summary Assessment—Divest Generation as IPP

| DESCRIPTION     | <ul> <li>Privatize TVA's generation fleet as merchant power assets</li> <li>IPP model likely entails break-up of TVA generation in order to diffuse market power</li> <li>Would require the creation of a functioning power market in the region</li> <li>TVA would retain transmission assets and non-power activities</li> <li>Could be effected as a sale or an IPO</li> <li>Buyer would likely be an IPP and privatized assets would be lightly regulated in line with conventional merchant power markets</li> </ul>  |
|-----------------|--|
| <b>BENEFITS</b> | <ul> <li>Reduction in Federal Government exposure to TVA generation-related operating risks</li> <li>Potential to generate proceeds for the Federal Government</li> <li>Privatized owner likely able to achieve cost savings beyond what is currently planned—additional operational efficiencies could improve customer rates and/or generate other benefits for TVA stakeholders, and may enhance the value of TVA over the long term</li> <li>Ability to continue to fund non-power activities from revenue generated by retained transmission assets</li> <li>May generate "fit and focus" benefits by separating TVA's business lines/activities</li> </ul>   |
| CONSIDERATIONS  | <ul> <li>Implementation would likely require complex execution (e.g., change in TVA Act, regulatory/legislative changes at the federal, state and local level (possibly including additional regulatory resources), common consensus between states, LPCs and disparate stakeholders, etc.)</li> <li>Potential dis-synergies from separation of generation and transmission operations</li> <li>Given ongoing and future TVA cost and capital efficiency initiatives, privatization may not enable Federal Government to fully realize value in TVA</li> <li>May require the creation, or enhancement, of a regional power market, which is a complex undertaking—history of market deregulation has been mixed</li> <li>Potential for organizational changes to impact the provision of TVA services if not implemented carefully/appropriately</li> <li>Privatized capital structure would entail higher costs related to the introduction of taxes and equity return requirements absent offsetting factors</li> <li>Uncertain impact/disruption with respect to TVA's non-power mission—TVA may be less able to directly address economic development mission through electricity rates and contracts</li> <li>Relatively low current power prices may limit value realized from merchant generation asset sales, unless contracted</li> </ul> |
| SUMMARY         | <ul> <li>Given ongoing and future TVA cost and capital efficiency initiatives, privatization may not enable the Federal Government to realize the full value of TVA</li> <li>Customer rates and other stakeholder benefits may be negatively impacted by the new generation structure—track record of deregulation in U.S. is mixed and may result in rate volatility or additional increases</li> </ul>   |
| ASSESSMENT      | <ul> <li>Complex implementation challenges—privatization would likely require a fundamental change to the TVA Act, a major reorganization of non-power activities, and entails substantial execution issues related to regulatory structure; there is also a lack of visibility into potential outcomes</li> <li>Appears to be suboptimal as compared to integrated privatization, including due to likely dis-synergies</li> </ul>  |

TVA

## Summary Assessment—Divest Transmission Assets

| DESCRIPTION           | <ul> <li>Privatize TVA's transmission assets as a regulated entity</li> <li>TVA would retain generation assets and non-power activities</li> <li>Could be effected as a sale or an IPO</li> <li>Buyer would likely be an IOU, although other buyers are also possible (e.g., traditional private equity investors, infrastructure investors, etc.)</li> </ul>   |
|-----------------------|---|
| BENEFITS              | <ul> <li>Reduction in Federal Government exposure to TVA transmission-related operating risks (n.b., generation assets are inherently more "risky" and make up the majority of TVA's asset base)</li> <li>Potential to generate proceeds for the Federal Government</li> <li>Privatized owner likely able to achieve cost savings beyond what is currently planned—additional operational efficiencies could improve customer rates and/or generate other benefits for TVA stakeholders, and may enhance the value of TVA over the long term</li> <li>Sector valuations at historical highs and interest rates at historical lows</li> <li>Ability to continue to fund non-power activities from revenue generated by retained generation assets</li> <li>May generate "fit and focus" benefits by separating TVA's business lines/activities</li> <li>Potentially creates incentives to enhance regional transmission access</li> </ul>  |
| CONSIDERATIONS        | <ul> <li>Implementation would likely require complex execution (e.g., change in TVA Act, regulatory/legislative changes at the federal, state and local level (possibly including additional regulatory resources), common consensus between states, LPCs and disparate stakeholders, etc.)</li> <li>Potential dis-synergies from separation of generation and transmission operations</li> <li>Given ongoing and future TVA cost and capital efficiency initiatives, privatization may not enable Federal Government to fully realize value in TVA</li> <li>May require fundamental changes to market structure and regulatory design</li> <li>Potential for organizational changes to impact the provision of TVA services if not implemented carefully/appropriately</li> <li>Privatized capital structure would entail higher costs related to the introduction of taxes and equity return requirements absent offsetting factors</li> <li>Uncertain impact/disruption with respect to TVA's non-power mission</li> </ul> |
|                       |   |
| SUMMARY<br>ASSESSMENT | <ul> <li>Given ongoing and future TVA cost and capital efficiency initiatives, privatization may not enable the Federal Government to realize the full value of TVA</li> <li>Customer rates and other stakeholder benefits may be negatively impacted by the new structure<sup>(a)</sup>—may need to be considered in conjunction with market structure changes for generation in order to realize full benefits (track record of deregulation in U.S. is mixed and may result in rate volatility or additional increases)</li> <li>Complex implementation challenges—privatization would likely require a fundamental change to the TVA Act, a major reorganization of non-power activities, and entails substantial execution issues related to regulatory structure; there is also a lack of visibility into potential outcomes</li> <li>Appears to be suboptimal as compared to integrated privatization, including due to likely dis-synergies</li> </ul>  |

(a) Please see the "Divestiture Implementation Issues" section for a discussion of potential rate mitigation strategies.

## Summary Assessment—Divest Selected Assets

| DESCRIPTION           | <ul> <li>Privatize selected TVA transmission and generation assets</li> <li>TVA would retain selected transmission and generation assets and non-power activities</li> <li>Buyers could be a mix of IOUs, IPPs and financial sponsors</li> </ul>  |
|-----------------------|---|
| BENEFITS              | <ul> <li>Reduction in Federal Government exposure to TVA operating risks (albeit likely modest and implemented over time)</li> <li>Potential to generate proceeds for the Federal Government over time</li> <li>Selling assets or asset portfolios may improve value realization by matching assets with most logical owners</li> <li>Sector valuations at historical highs for certain assets and interest rates at historical lows</li> <li>Ability to continue to fund non-power activities from revenue generated by retained assets</li> <li>Implementation via piecemeal strategy may be more feasible than other privatization approaches and may not require similar approvals and/or changes in law</li> </ul> |
| CONSIDERATIONS        | <ul> <li>Implementation would potentially require complex execution (e.g., change in TVA Act, regulatory/legislative changes at the federal, state and local level (possibly including additional regulatory resources), common consensus between states, LPCs and disparate stakeholders, etc.)</li> <li>May require fundamental changes to market structure and regulatory design</li> <li>Privatized capital structure would entail higher costs related to the introduction of taxes and equity return requirements absent offsetting factors</li> <li>Relatively "incremental," rather than "transformational," change</li> </ul>  |
| SUMMARY<br>ASSESSMENT | <ul> <li>Sale of selected assets should be evaluated on a case-by-case basis; may be appropriate in selected/isolated cases</li> <li>Could generate dis-synergies which may impact customer rates</li> </ul>  |

## Summary Assessment—Outsource Operations

|                       | Enter into an operations and maintenance ("O&M") contract with one or more third parties to operate and manage TVA   |
|-----------------------|--|
|                       | Could encompass all of TVA's power activities or could be limited to selected aspects of TVA's operations (e.g., information technology, nuclear generation operations, etc.)  |
| DESCRIPTION           | <ul> <li>Outsourced O&amp;M examples include:</li> </ul>   |
|                       | PSEG/LIPA agreement  |
|                       | Exelon/PSEG nuclear services agreement   |
|                       | Numerous municipal water systems   |
|                       | <ul> <li>Possible reduction in Federal Government exposure to TVA operating risks (depending on contract terms)</li> </ul>   |
|                       | <ul> <li>O&amp;M provider(s) may be able to achieve cost savings beyond what is currently planned—additional operational efficiencies could improve customer rates and/or generate other benefits for TVA stakeholders, and may enhance the value of TVA over the long term</li> </ul> |
| BENEFITS              | To the extent operating efficiencies are achieved, could improve customer rates and/or increase value of TVA   |
|                       | <ul> <li>Maintains capital structure and cost of capital currently in place at TVA, with attendant rate benefits</li> </ul>  |
|                       | <ul> <li>Implementation does not require change in TVA Act, other regulatory/legislative changes at the state or local level, or<br/>consensus among disparate stakeholders</li> </ul>   |
|                       | Implementation would likely require complex execution, including related to governance/oversight requirements, bifurcation of ownership and operations, contract terms/negotiations, TVA non-power mission, etc.   |
|                       | <ul> <li>Potentially lower synergy opportunities compared to privatization via sale (due to lack of integrated systems and long-term planning functions)</li> </ul>  |
| CONSIDERATIONS        | <ul> <li>Track record of third-party operators has been mixed (e.g., LIPA), and unclear whether appropriate incentives exist in outsourced operations structure</li> </ul>   |
|                       | <ul> <li>Operating contract likely unable to anticipate and address all potential issues</li> </ul>  |
|                       | <ul> <li>Uncertain impact/disruption with respect to TVA's non-power mission</li> </ul>  |
|                       |  |
| SUMMARY<br>ASSESSMENT | <ul> <li>Unclear if benefits would be superior to other forms of privatization or the status quo/enhanced status quo</li> </ul>  |

С

71 | LAZARD

## **V** Divestiture Implementation Issues

### **Illustrative Strategic Implementation Issues**

Prior to committing to any form of TVA divestiture (via public sector spin-off or privatization), the key strategic objectives of the Federal Government must be carefully evaluated along with, among other things, the role and desired structure of TVA's non-power mission

#### **ILLUSTRATIVE ISSUES**

| EVALUATIVE<br>CRITERIA | <ul> <li>What would be the Federal Government's primary objectives for divestiture (e.g., achieve specific public policy goals, maximize transaction proceed transfer risk/liabilities, etc.)?</li> <li>What is the Federal Government's philosophy with regard to ownership of entities such as TVA?</li> <li>How would the evaluative criteria be further refined and prioritized?</li> <li>How would potentially conflicting objectives (e.g., maximize proceeds and minimize customer rate impacts) be resolved?</li> <li>What would be the specific customer rate goals and/or requirements for the Federal Government (e.g., would a rate freeze be required)?</li> <li>Once evaluative criteria are further refined and prioritized, which structure(s) might best achieve the primary objectives<sup>(a)</sup>?</li> <li>How would "value" to the Federal Government be defined under a public sector spin-off scenario?</li> <li>Would the Federal Government realize any proceeds from a transfer to another public sector entity, or would a public sector spin-off imply a direct transfer of assets and liabilities?</li> <li>Under a privatization scenario, how would the Federal Government value future potential tax revenues?</li> </ul> |  |
|------------------------|---|--|
| NON-POWER<br>MISSION   | <ul> <li>TVA's non-power mission faces a number of key issues and questions under most divestiture scenarios, including the following:</li> <li>Does it make sense for TVA to continue to retain its non-power mission under structures being considered?</li> <li>What other entities (e.g., existing government entity or entities, newly-formed entity or entities) might assume TVA's non-power activities?</li> <li>How would non-power activities be funded?</li> <li>Federal appropriations</li> <li>State tax revenues/appropriations</li> <li>User fees (e.g., for recreational activities)</li> </ul>   |  |

Note: Lazard's analysis was performed without the assistance of legal, tax, regulatory or other advisors, and Lazard would recommend that further analysis would warrant the use of such additional advisors.

72 | LAZARD

<sup>(</sup>a) Divestiture structure and execution would likely have a material impact on TVA value.

### Illustrative Stakeholder Implementation Issues

The highly complex and well-established stakeholder ecosystem in which TVA operates is likely to present a daunting challenge for divestiture in respect of the numerous entities with varying interests in TVA which must cooperate to make a divestiture successful

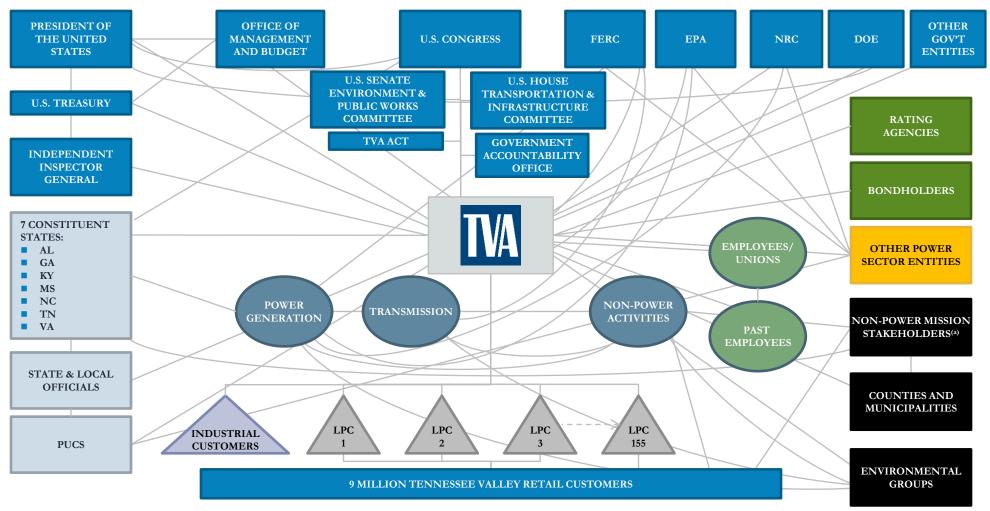
#### **ILLUSTRATIVE ISSUES**

| LEGISLATIVE<br>CHANGES/<br>OTHER<br>APPROVALS | <ul> <li>Given TVA's unique organizational structure and its myriad of stakeholders at the federal, state and local levels, approvals and legislative requirements would likely be complex—the following questions would need to be answered, among others:</li> <li>Under what scenarios would changes to the TVA Act or other legislation <i>not</i> be required?</li> <li>To what extent is there political support in Congress for a modification to the TVA Act or other associated legislation?</li> <li>What other federal, state and local approvals (legislative or otherwise) would be required under the various scenarios?</li> <li>To what extent does political support exist for granting the required approvals?</li> </ul>  |
|---|--|
| OTHER KEY<br>STAKEHOLDERS                     | <ul> <li>The continuity of TVA's contractual arrangements with its LPC customers will be an important aspect of any divestiture, with significant implications for TVA's credit profile, carnings and for valuation</li> <li>What are the key termination provisions of LPC contracts in a divestiture, change in TVA's authority to set rates or other scenarios?</li> <li>Would TVA's LPC customers be willing to sign replacement contracts for TVA's power supply, and at what prices and terms?</li> <li>Will LPCs seek third-party power arrangements (within the boundaries of any Fence or other post-divestiture constructs)?</li> <li>Do LPCs have any incentives to merge with TVA, whether under the current structure or under a new structure?</li> <li>What are the stakeholder impacts and the various stakeholder perspectives with respect to divestiture alternatives?</li> <li>State and local politicians</li> <li>Employees (current and historical)</li> <li>Labor unions</li> <li>Wholesale industrial customers</li> <li>Bondholders</li> <li>Environmental groups</li> <li>Regional utilities</li> <li>Regulatory agencies</li> <li>Community stakeholders</li> <li>Other</li> </ul> |

Note: Lazard's analysis was performed without the assistance of legal, tax, regulatory or other advisors, and Lazard would recommend that further analysis would warrant the use of such additional advisors.

### The TVA Ecosystem

Over its 80-year history, TVA has developed into a complicated "ecosystem" that is intertwined within its seven-state service territory—any effort to substantially reorganize the TVA would be an extraordinarily complex political, economic, regulatory, and financial undertaking



Note: Representation is illustrative only and is not comprehensive in its assessment of relationships between TVA and its various stakeholders. (a) Includes various stakeholders related to water and land stewardship, economic development and other activities.

TVA

74 | LAZARD

### **Illustrative Regulatory Implementation Issues**

Under any privatization scenario (and potentially under certain public sector spin-off scenarios), the structure of TVA regulation will have a significant impact on key outcomes (e.g., rates, value realization, risk allocation, etc.)

#### **ILLUSTRATIVE ISSUES**

- Most privatization structures and certain public sector spin-off structures would likely require all or a portion of TVA's assets/activities to be placed under existing regulatory authorities, or, potentially, require the creation of new regulatory entities and/or frameworks (e.g., deregulation)
  - What role would existing federal regulatory structures/entities have (e.g., FERC)?
  - What role would existing state-level regulatory structures/entities have (e.g., PUCs)?
  - Under what scenarios would additional regulatory resources be required?
  - Which scenarios would require a power market redesign?
  - What incremental costs would be incurred with respect to implementing the above?
- Under privatization scenarios, the following regulatory determinations, among others, would need to be considered (each of these items would likely have an impact on the overall value that a buyer or investor would be able to pay, and on the credit profile and cost of capital of the pro forma TVA)<sup>(a)</sup>:
  - What TVA assets qualify as ratebase? What is the ratebase value of these assets?
  - What is the allowed return on equity and authorized equity-to-total capitalization ratio?
  - What is the rate-setting process (e.g., formulaic rate-setting, multi-year rate case cycles, etc.)?
  - What regulatory restrictions or protections exist which might provide certainty or cause uncertainty for the privatized TVA regarding its rate recovery and investments (e.g., rate cap, forward test years, tracking mechanisms, expense pass-throughs, weather normalization, etc.)?
  - To what extent would achieved synergies be shared with ratepayers?
- How would the possible rollback of independent rate-setting authority (e.g., via a transition to state PUC regulation) impact the new entity or entities' credit rating and cost of capital?
- Under public sector spin-off scenarios, which statutory elements of TVA would be retained and which would need to be revised?
- How would the Fence be treated in all scenarios?

Note: Lazard's analysis was performed without the assistance of legal, tax, regulatory or other advisors, and Lazard would recommend that further analysis would warrant the use of such additional advisors.

(a) The illustrative issues assume TVA is privatized as an IOU.

#### 75 LAZARD

TVA

#### REGULATORY MATTERS

### **Illustrative Execution-related Implementation Issues**

Considering the multitude of implementation issues, a divestiture of TVA would likely to require many years to implement and will require TVA to assemble a detailed transition plan, likely with the assistance of numerous legal, financial, regulatory, tax and other advisors

#### **ILLUSTRATIVE ISSUES**

TVA would need to engage legal, financial, regulatory, tax and other advisors in order to assess the requirements for executing a potential divestiture and to develop a detailed implementation plan Under public sector spin-off scenarios, the Federal Government would need to answer the following transaction-related questions, among others: Once a structure is determined, how would it be pursued (e.g., creation of a federal task force, bi-lateral or multi-party negotiations with potential counterparties, stakeholder outreach process, etc.) and what would be the process transparency requirements? Under privatization scenarios, the Federal Government would need to answer the following transaction-related questions, among others: How would a privatization process be structured (e.g., IPO, auction process, bilateral or multi-party negotiations with logical potential buyers, etc.)? EXECUTION PROCESS How might these requirements change depending on the scope of the privatization (e.g., 100% of TVA, less than 100% of TVA, generation or transmission only, selected assets, etc.)? How might the limited number of qualified buyers in some scenarios influence a potential privatization process? ■ What is the market capacity for a TVA IPO? How would the Federal Government determine how much of its ownership stake to "sell down" in an IPO and what additional amounts would it divest in the future? What level of disruption to TVA's operations should be expected during any divestiture implementation period? What is the effect of any prolonged uncertainty regarding divestiture on TVA's ability to operate effectively?

Note: Lazard's analysis was performed without the assistance of legal, tax, regulatory or other advisors, and Lazard would recommend that further analysis would warrant the use of such additional advisors. 76 | LAZARD

## Illustrative Execution-related Implementation Issues (cont'd)

#### **ILLUSTRATIVE ISSUES**

| DEBT AND<br>OTHER<br>LIABILITIES | <ul> <li>All divestiture scenarios will require a careful examination of strategies and tactics for addressing TVA's existing debt</li> <li>What are the legal requirements of TVA with regard to its outstanding debt (per bond resolution, indentures and other documents)?</li> <li>How do different transaction structures (e.g., privatize 100% of TVA, privatize less than 100% of TVA, generation or transmission only, selected assets, IPO vs. sale, etc.) impact requirements to address existing debt?</li> <li>What are the estimated costs to redeem and/or defease TVA's existing debt?</li> <li>Are there transitional structures (e.g., securitization) that bondholders might consent to that would reduce these debt breakage costs?</li> <li>What other feasibility issues might be encountered in the event that some or all of TVA's existing debt needs to be redeemed or defeased?</li> <li>Under what structures/scenarios might tax-exempt financing be able to be used?</li> </ul>  |
|----------------------------------|---|
|                                  | <ul> <li>What is required to achieve tax-exempt status (e.g., change in TVA Act, IRS ruling, etc.)?</li> <li>In addition, all divestiture scenarios will require a careful examination of strategies and tactics for addressing TVA's existing/legacy liabilities, including the following: <ul> <li>Underfunded pension liabilities</li> <li>Underfunded OPEBs</li> <li>Identified and contingent environmental, asset retirement and other liabilities</li> <li>Other</li> </ul> </li> </ul>  |
|                                  | <ul> <li>The allocation of liabilities would also need to be considered if TVA were separated; this process may be complex under scenarios where multiple new entities would acquire TVA assets</li> <li>Numerous of the above issues would require significantly deeper analysis of legal interpretations and market assessments than is within the scope of this assignment</li> </ul>  |
| RATE<br>MITIGATION               | <ul> <li>In the context of a privatization, various strategies may be considered to reduce or otherwise mitigate prospective increases in customer rates, including the following:</li> <li>Synergies: savings related to synergies and other privatization-related efficiencies that might be passed through to customers</li> <li>Debt securitization: creating a pass-through security supported directly by customer rates, enabling the privatized TVA to maintain a lower overall cost of capital</li> <li>Other debt strategies: may include providing transitional federal credit support, keeping certain bonds outstanding during the transition period and/or enabling higher overall leverage (e.g., greater than 50/50 debt/equity ratio) to lower the overall cost of capital</li> <li>Tax strategies: providing temporary or permanent tax relief, directly or indirectly (e.g., via basis step-up or accelerated depreciation), for the privatized TVA to minimize pressure on customer rates</li> <li>Accepting a lower price: reducing the initial equity component of the privatized TVA would theoretically reduce return requirements</li> </ul> |
| Note:                            | Lazard's analysis was performed without the assistance of legal, tax, regulatory or other advisors, and Lazard would recommend that further analysis would warrant the use of such additional advisors.   |

VI Illustrative Valuation Analysis

### Lazard

## Summary Parameters for Illustrative Analysis of Value Realized in

### Privatization

TVA

The analyses herein present several illustrative scenarios for a privatization of substantially all of TVA as an IOU

| OVERVIEW           | <ul> <li>The analysis presented herein is based on financial forecasts provided by TVA, which have been adjusted to reflect taxation, capital structure and financing assumptions similar to those of a typical IOU, including the following:</li> <li>TVA pays federal taxes at a 35% tax rate, and continues to pay state and local taxes at approximately its PILOT rate</li> <li>TVA is capitalized at a 50% equity/50% debt capital structure</li> <li>TVA's cost of debt is approximately 70 basis points above that of TVA status quo</li> <li>TVA pays out an annual dividend of 65% of its net income</li> <li>Both an IPO and a sale of TVA have been considered, as follows:</li> <li>IPO: Assumes the Federal Government pursues an IPO of 33% of its ownership stake in TVA<sup>(a)</sup></li> <li>Sale: Assumes the Federal Government sells TVA in its entirety to a third-party acquiror for a premium <ul> <li>Sale scenarios assume synergies (i.e., financial benefits related to the combining of similar companies) are reflected in this premium value</li> </ul> </li> <li>The analysis otherwise does not assume any changes in the operating profile of TVA post-privatization, although there are likely significant changes which would be implemented<sup>(b)</sup></li> </ul> |
|--------------------|--|
| CASES<br>ONSIDERED | <ul> <li>In order to illustrate the broad range of values that could be achieved depending on the regulatory construct in place post-privatization, the following cases have been considered:</li> <li>No Change in Rate Path Case: Assumes that the privatized TVA would follow the same customer rate path that is currently forecasted by TVA over the 2014 – 2023 period, based on the base revenue forecast provided by TVA (prior to the realization of any synergies)<sup>(c)</sup></li> <li>Rate Mitigation Case: Assumes that the privatized TVA would forgo deleveraging in order to mitigate customer rate increases over the 2019 – 2023 period, based on an alternative revenue forecast provided by TVA (prior to the realization of any synergies)<sup>(c)(d)</sup></li> <li>IOU Returns Rate Path Case: Assumes that the privatized TVA is allowed to raise customer rates to a level that would generate a 10.0% ROE on TVA's estimated current ratebase, which implies a 13% increase in customer rates in year one (prior to any realization of synergies)<sup>(c)</sup></li> </ul>   |
| ANALYSIS           | <ul> <li>For the IPO, value is derived based on:</li> <li>Comparable Companies Multiples (in line with publicly-traded utility peers)</li> <li>Discounted Cash Flow ("DCF") analysis</li> <li>For the sale, value is derived based on:</li> <li>Comparable Companies Multiples (applied to TVA forecasts that incorporate financial adjustments for potential synergies)</li> <li>Precedent Transactions Multiples (which are assumed to reflect potential synergies in the "control premium")</li> <li>DCF analysis (applied to TVA forecasts that incorporate financial adjustments for potential synergies)</li> </ul>  |

Note: Illustrative valuation based on publicly-traded comparables as of November 14, 2013, applied as if TVA were valued on September 30, 2013 (reflecting TVA's fiscal year end). Privatization would likely require years to accomplish in reality.

(a) Assumes an illustrative 3.5% underwriting fee and 7.5% IPO discount on a secondary offering of shares. Historically realized fees and pricing have varied significantly and could differ materially from example parameters provided. Following the IPO, the Federal Government could subsequently sell down additional ownership stakes in its remaining 67% holdings in TVA (which would also incur additional discounts and fees not accounted for here).

(b) Assumes that pro forma TVA operates as an IOU under typical utility rate regulation. Notably, any non-power mission activities which may not belong in a private sector entity would be assumed to be separated from the privatized TVA, but no explicit financial impacts of such action have been modeled herein. Other operating changes are likely as well.

(c) Synergy assumptions could meaningfully impact value and/or the ability to mitigate customer rate increases that might otherwise occur.

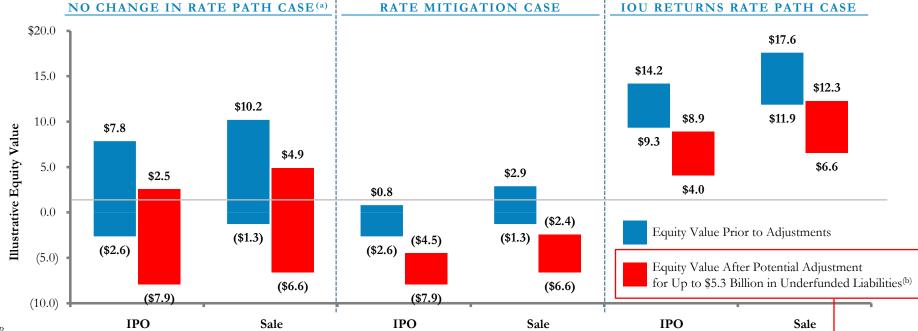
(d) This rate scenario would result in a 8.0% lower total customer rate in 2023 vs. the No Change in Rate Path Case. TVA has expressed that this is a plausible alternative to their current financial plan.

### Illustrative Range of Equity Values Potentially Realized by Federal Government—Base Financial Plan

#### (\$ in billions)

The Federal Government appears likely to realize minimal, if any, value in a divestiture without a significant value transfer from ratepayers in the form of higher rates (as reflected in the form of regulatory construct afforded to a privatized TVA)—in addition, the net equity value received must take into account costs potentially borne by the Federal Government, including underfunded liabilities, debt breakage costs, transaction costs (other than the IPO costs illustrated) and various other costs

• The analysis herein does not consider tax revenues generated by a privatized TVA, which the Federal Government may consider an additional source of "value"



Source: TVA FY14 LRFP.

79 LAZARD

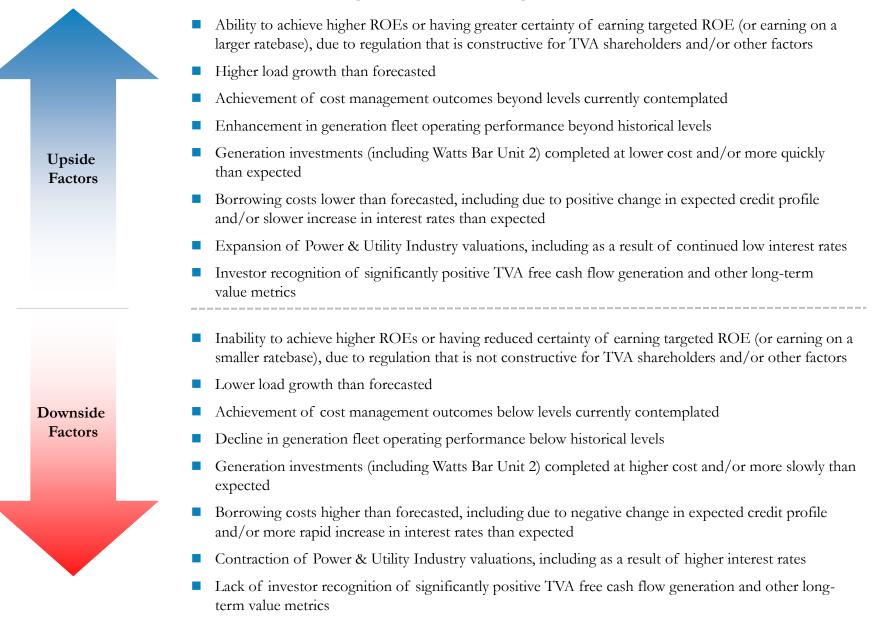
Note: Illustrative valuation based on publicly-traded comparables as of November 14, 2013, applied as if TVA were valued on September 30, 2013 (reflecting TVA's fiscal year end). IPO values have been adjusted for illustrative 3.5% underwriting fee and 7.5% IPO discount on a secondary offering of 33% of TVA shares. Historically realized fees and pricing have varied significantly and could differ materially from example parameters provided. Following the IPO, the Federal Government could subsequently sell down its remaining 67% equity interest in TVA (which would also incur additional discounts and fees not accounted for here). Sale values assume synergies of 10% of TVA non-fuel O&M (shared 50% with customers) are valued by buyers in TVA's purchase price in the Comparable Companies Multiples and Discounted Cash Flow analyses, and that buyers accord historical transaction multiples to TVA in the Precedent Transactions Multiples analysis. Synergies are incremental to TVA's current target of ~15% reduction in non-fuel O&M by 2015.

(a) The wide range in values reflects low value attribution for TVA based on near-term financial projections as compared to high value attribution for TVA based on its long-term projections, which generate high free cash flow and increasing earnings. The ultimate value realization may depend on the level of regulatory certainty afforded to a buyer or investor in achieving the 10-year rate path. Without such protections, the value range may be more similar to the Rate Mitigation Case.

(b) Equity value after potential adjustment (red bars) assume full \$5.3 billion in underfunded liabilities deducted (planned funding through rates would significantly decrease this amount and implies a "net" underfunding of \$2.4 billion; in addition, changes in yield assumptions may significantly lower this amount). Underfunded liabilities may be ignored by investors/buyers if they believe rate recovery for such liabilities is reasonably likely.

Notably, the illustrative adjusted equity values presented *do not* account for any potential debt breakage costs, transaction costs other than IPO discount/fees, or other adjustments

### Illustrative Factors Enhancing and Reducing TVA's Illustrative Value



## **VII Conclusions**

### **Summary Conclusions**

TVA

Based on information received, current financial market conditions and analyses performed, and considering the criteria provided, Lazard recommends that TVA focus on long-term internal strategies to fully realize the benefits of cost and capital efficiencies accessible to the organization, and believes that its various stakeholders (including the Federal Government) would likely benefit from fostering a supportive environment for TVA's transformation

- TVA appears to be evolving toward a more "business-like" approach to its organization that should create benefits for all TVA stakeholders for years to come; specific improvements Lazard believes TVA should focus on include:
  - Continuing focus on driving cost efficiencies
  - Ongoing scrutiny of all capital allocation decisions
  - New approaches to long-term resource planning
  - Highlighting, and making more evident, the non-power activities of TVA
- While Lazard has recommended for privatization in other situations in the U.S. Power & Utility Industry, the following factors have led Lazard to recommend against pursuing a divestiture of TVA:
  - TVA's current strong financial position, ability to self-fund its construction program and anticipated improvements in cost structure, environmental profile and asset mix, and other benefits, as a result of ongoing long-term initiatives suggests there is no impetus for the Federal Government to change course—TVA's initiatives should generate benefits to stakeholders and enhance the value of TVA over time
  - Although changes in TVA's debt appear as part of the federal budget, TVA's financing does not appear to be a true draw on the government balance sheet, as TVA receives no current appropriations and its debt is not guaranteed by the Federal Government; in addition, TVA is not expected to exceed its \$30 billion statutory debt limit by 2023, and deleveraging contemplated by TVA's financial forecast would appear to *help* the federal budget over the next decade
  - The high level of implementation complexity associated with a potential TVA divesture would likely lead to a costly, multi-year process to execute any such strategy, during which time TVA would experience organization disruption and which would result in an unclear outcome; uncertainty regarding a prolonged strategic review process may also impact TVA's ability to operate effectively
  - The complex network of TVA stakeholders would further make it difficult to divest TVA in a manner that creates value for all parties numerous TVA stakeholders (e.g., the Administration, Congress, TVA's LPC and wholesale customers, state and local governments, beneficiaries of TVA's non-power mission, etc.) would need to be broadly aligned in order to effectively implement a divestiture
  - The Federal Government appears likely to realize minimal, if any, value in a divestiture without a significant value transfer from ratepayers in the form of higher rates, even prior to taking into account underfunded liabilities, debt breakage costs, transaction costs and other potential divestiture costs (which may significantly detract from value)
  - It is unclear how TVA's non-power mission and activities would logically fit within a divested TVA structure—any reductions in the scope of the non-power mission and activities could potentially have a negative impact on the region

81 | LAZARD

## Appendix

## A Illustrative Valuation Analysis—Supporting Materials

TVA

### **Key Financial Model Assumptions**

| CAPITAL STRUCTURE            | ■ 50% equity/capitalization ratio   |
|------------------------------|---|
| REGULATORY<br>CAPITALIZATION | <ul> <li>50% authorized equity/capitalization ratio</li> <li>Starting ratebase equal to current TVA net PP&amp;E of ~\$29 billion</li> </ul>  |
| RATES/RETURN ON<br>EQUITY    | <ul> <li>In the No Change in Rate Path Case, TVA's current rate path is assumed</li> <li>In the Rate Mitigation Case, TVA's rates are 8.0% lower by 2023 vs. the No Change in Rate Path Case</li> <li>In the IOU Returns Rate Path Case, the allowed regulatory ROE is 10.0%</li> </ul>   |
| COST OF DEBT                 | ■ 70 basis point spread <sup>(a)</sup> above existing TVA rates   |
| TAX RATE                     | <ul> <li>35% federal income tax rate</li> <li>State taxes at current PILOT rates</li> </ul>   |
| DIVIDEND POLICY              | ■ 65% dividend payout ratio throughout the forecast period  |
| SHARE REPURCHASES            | <ul> <li>In No Change in Rate Path Case, \$1.5 billion in share repurchases are assumed over the forecast period<sup>(b)</sup></li> <li>In Rate Mitigation Case, \$1.5 billion in share repurchases are assumed over the forecast period<sup>(b)</sup></li> <li>In IOU Returns Rate Path Case, \$4.5 billion in share repurchases are assumed over the forecast period<sup>(b)</sup></li> </ul>   |
| SYNERGIES                    | <ul> <li>In sale scenarios<sup>(c)</sup>, assumes that synergies are equivalent to 10% of TVA's 2013 non-fuel O&amp;M assumes 50% of synergies are retained and 50% flow to ratepayers, and that half of synergies are achieved in the first year following a transaction and full synergies are achieved in subsequent years</li> <li>Synergies are incremental to TVA's current target of ~15% reduction in non-fuel O&amp;M by 2015</li> </ul> |
| COSTS TO ACHIEVE             | In sale scenarios <sup>(c)</sup> , assumes that cash costs to achieve synergies are equal to 5% of 2013 TVA's non-fuel O&M and are incurred in 2014   |
| ADJUSTMENTS                  | <ul> <li>D&amp;A is adjusted to remove amortization for regulatory assets, capital leases, ARO accretion, reacquisition costs, and<br/>Kingston ash remediation for purposes of EV/EBITDA Comparable Companies Multiples analysis and Discounted Cash<br/>Flow analysis</li> </ul>  |

(a) For illustrative purposes; the incremental interest rate is the spread between traded TVA bonds and IOU bonds of comparable terms and duration.

(b) Share repurchases are assumed in order to maintain the target capital structure at approximately the 50% equity/50% debt.

(c) Excludes precedent transactions multiples analyses, in which historical premiums are believed to already reflect anticipated transaction synergies.



#### \$50.0 The DCF analyses are significantly higher than the Comparable Companies Multiples analyses because they capture the long-term projections (including cash flow growth driven by the completion of Watts Bar Unit 2 and forecasted rate increases) that are not reflected in the Comparable Companies Multiples methodology 40.0 \$35.8 \$33.4 Enterprise Value \$33.7 \$31.5 30.0 \$26.2 \$25.9 **TVA 2013YE** \$24.4 Net Debt: \$25.6 billion \$24.8 \$24.3 \$23.0 20.0Sale values reflect an approximately \$1 - \$2 billion The Comparable Companies Multiples methodology "premium" to the equivalent IPO value, reflecting value (which only captures near-term financial projections) that is attributed to potential synergies that would implies a value range below the level of TVA's existing improve earnings and cash flow and the absence of an debt, which suggests negative equity value for the IPO discount and fees Federal Government's ownership stake in TVA 10.0 Implied 2015E $P/E^{(a)}$ : 12.7x - 14.9x25.8x - 28.8x14.2x - 16.5x14.9x - 17.1x28.1x - 31.2xImplied 2015E Dividend Yield<sup>(b)</sup>: 4.4% - 5.1% 2.3% - 2.5%4.6% - 5.3% 4.4% - 5.1%2.4% - 2.7%**Comparable Companies** Discounted **Comparable Companies** Precedent Transaction Discounted Multiples Cash Flow Multiples Multiples Cash Flow Sale IPO

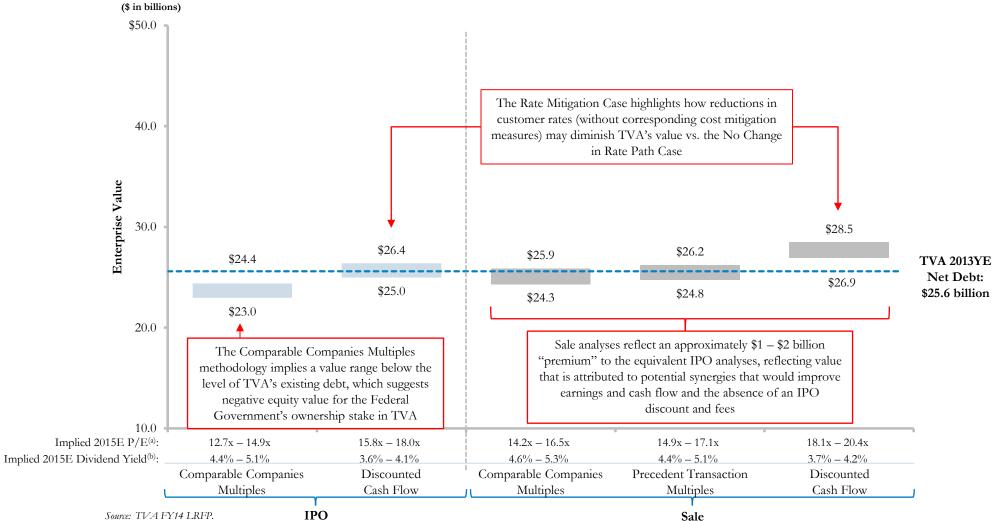
### Illustrative TVA Valuation Analysis—No Change in Rate Path Case (\$ in billions)

Source: TVA FY14 LRFP.

Note: Illustrative valuation based on publicly-traded comparables as of November 14, 2013, applied as if TVA were valued on September 30, 2013 (reflecting TVA's fiscal year end). IPO analyses have been adjusted for illustrative 3.5% underwriting fee and 7.5% IPO discount on a secondary offering of 33% of TVA shares. Historically realized fees and pricing have varied significantly and could differ materially from example parameters provided. Following the IPO, the Federal Government could subsequently sell down its remaining 67% equity interest in TVA (which would also incur additional discounts and fees not accounted for here). Sale analyses assume synergies of 10% of TVA non-fuel O&M (shared 50% with customers) are valued by buyers in TVA's purchase price in the Comparable Companies Multiples and Discounted Cash Flow analysis, and that buyers accord historical transaction multiples to TVA in the Precedent Transactions Multiples analysis. Synergies are incremental to TVA's current target of ~15% reduction in non-fuel O&M by 2015.

Based on financial forecast prior to adjustment for synergies and IPO discount/fees. (a)

Based on financial forecast including adjustment for synergies but prior to IPO discount/fees. (b)



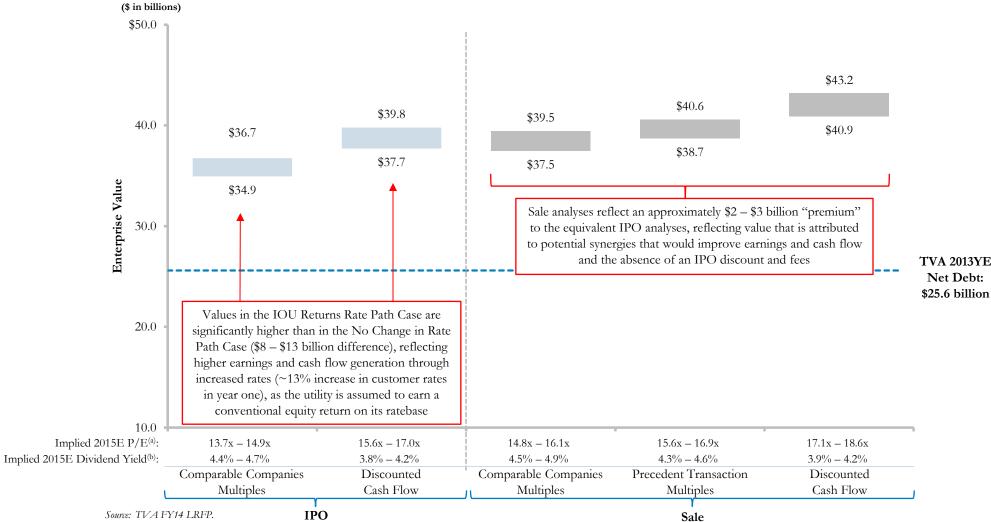
## Illustrative TVA Valuation Analysis—Rate Mitigation Case

IPO Source: TVA FY14 LRFP.

Note: Illustrative valuation based on publicly-traded comparables as of November 14, 2013, applied as if TVA were valued on September 30, 2013 (reflecting TVA's fiscal year end). IPO analyses have been adjusted for illustrative 3.5% underwriting fee and 7.5% IPO discount on a secondary offering of 33% of TVA shares. Historically realized fees and pricing have varied significantly and could differ materially from example parameters provided. Following the IPO, the Federal Government could subsequently sell down its remaining 67% equity interest in TVA (which would also incur additional discounts and fees not accounted for here). Sale analyses assume synergies of 10% of TVA non-fuel O&M (shared 50% with customers) are valued by buyers in TVA's purchase price in the Comparable Companies Multiples and Discounted Cash Flow analysis, and that buyers accord historical transaction multiples to TVA in the Precedent Transactions Multiples analysis. Synergies are incremental to TVA's current target of ~15% reduction in non-fuel O&M by 2015.

Based on financial forecast prior to adjustment for synergies and IPO discount/fees. (a)

Based on financial forecast including adjustment for synergies but prior to IPO discount/fees. (b)



## Illustrative TVA Valuation Analysis—IOU Returns Rate Path Case

Note: Illustrative valuation based on publicly-traded comparables as of November 14, 2013, applied as if TVA were valued on September 30, 2013 (reflecting TVA's fiscal year end). IPO analyses have been adjusted for illustrative 3.5% underwriting fee and 7.5% IPO discount on a secondary offering of 33% of TVA shares. Historically realized fees and pricing have varied significantly and could differ materially from example parameters provided. Following the IPO, the Federal Government could subsequently sell down its remaining 67% equity interest in TVA (which would also incur additional discounts and fees not accounted for here). Sale analyses assume synergies of 10% of TVA non-fuel O&M (shared 50% with customers) are valued by buyers in TVA's purchase price in the Comparable Companies Multiples and Discounted Cash Flow analyses, and that buyers accord historical transaction multiples to TVA in the Precedent Transactions Multiples analysis. Synergies are incremental to TVA's current target of ~15% reduction in non-fuel O&M by 2015.

(a) Based on financial forecast prior to adjustment for synergies and IPO discount/fees.

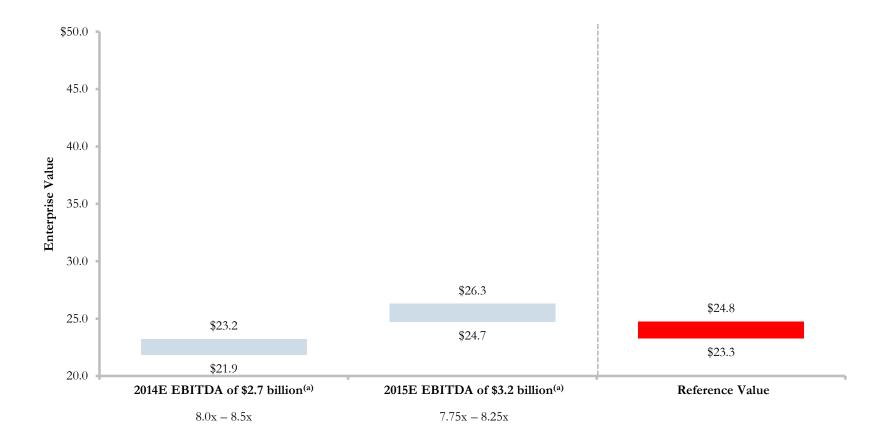
(b) Based on financial forecast including adjustment for synergies but prior to IPO discount/fees.

1 No Change in Rate Path Case

TVA

# Comparable Companies Multiples Analysis—No Change in Rate Path Case (IPO Scenario)

(\$ in billions)



Source: TVA FY14 LRFP.

Note: Illustrative valuation based on publicly-traded comparables as of November 14, 2013, applied as if TVA were valued on September 30, 2013 (reflecting TVA's fiscal year end). Values have not been adjusted for underwriting fee or IPO discount.

(a) EBITDA adjusted to remove amortization for regulatory assets, capital leases, ARO accretion and debt reacquisition costs.

### Discounted Cash Flow Analysis—No Change in Rate Path Case (IPO Scenario)

| (\$ in millions)                               |         |         |         |         | Fiscal Year | Ending Sep. | tember 30th, |         |         |         |         |      |
|--|---------|---------|---------|---------|-------------|-------------|--------------|---------|---------|---------|---------|------|
| (+   | 2013A   | 2014E   | 2015E   | 2016E   | 2017E       | 2018E       | 2019E        | 2020E   | 2021E   | 2022E   | 2023E   | 1    |
| EBITDA   | \$3,055 | \$3,061 | \$3,511 | \$3,744 | \$3,843     | \$4,114     | \$4,325      | \$4,494 | \$4,642 | \$4,935 | \$5,249 | \$5, |
| Less: Depredation & Amortization               | (1,710) | (1,791) | (1,749) | (1,903) | (1,956)     | (2,014)     | (2,087)      | (2,098) | (2,146) | (2,097) | (2,060) |      |
| EBIT   | \$1,345 | \$1,270 | \$1,762 | \$1,840 | \$1,887     | \$2,100     | \$2,238      | \$2,395 | \$2,496 | \$2,838 | \$3,189 |      |
| Less: Income Taxes @ 35.0%                     | (471)   | (444)   | (617)   | (644)   | (660)       | (735)       | (783)        | (838)   | (874)   | (993)   | (1,116) |      |
| EBIT (after tax)                               | \$874   | \$825   | \$1,145 | \$1,196 | \$1,227     | \$1,365     | \$1,455      | \$1,557 | \$1,622 | \$1,845 | \$2,073 |      |
| Plus: Depredation & Amortization               | 2,085   | 2,187   | 2,178   | 2,398   | 2,482       | 2,594       | 2,728        | 2,769   | 2,834   | 2,809   | 2,780   |      |
| Less: Capital Expenditures & Other Investments | (2,655) | (3,281) | (3,161) | (2,441) | (2,081)     | (2,276)     | (2,532)      | (2,685) | (3,080) | (3,277) | (3,020) |      |
| Plus/(Minus): Working Capital                  | (165)   | (152)   | (236)   | (235)   | (153)       | (196)       | (186)        | (193)   | (192)   | (181)   | (259)   |      |
| Plus/(Minus): Other Items                      | 501     | 193     | 236     | 262     | 226         | 219         | 249          | 234     | 262     | 279     | 306     |      |
| Unlevered Free Cash Flow                       | \$640   | (\$227) | \$161   | \$1,180 | \$1,700     | \$1,705     | \$1,714      | \$1,682 | \$1,446 | \$1,474 | \$1,879 |      |

Discounted Cash Flow Valuation of TVA Using Public Market Terminal Year EBITDA Multiple

| Discount | PV<br>of FCF | + | - • •-   | PV of Terminal Value at<br>TY EBITDA Multiple |          |  |          | terprise Val<br>EBITDA Mu |          | 1      | ed Growth H<br>EBITDA Mu |        |
|----------|--------------|---|----------|---|----------|--|----------|---------------------------|----------|--------|--------------------------|--------|
| Rate     | '14 - '23    |   | 8.125x   | 8.250x  | 8.375x   |  | 8.125x   | 8.250x                    | 8.375x   | 8.125x | 8.250x                   | 8.375x |
| 5.00%    | \$9,469      |   | \$26,835 | \$27,248                                      | \$27,661 |  | \$36,304 | \$36,717                  | \$37,130 | 0.7%   | 0.7%                     | 0.8%   |
| 5.25%    | 9,337        |   | 26,204   | 26,608  | 27,011   |  | 35,541   | 35,944                    | 36,347   | 0.9%   | 1.0%                     | 1.0%   |
| 5.50%    | 9,207        |   | 25,590   | 25,984  | 26,377   |  | 34,797   | 35,190                    | 35,584   | 1.2%   | 1.2%                     | 1.3%   |
| 5.75%    | 9,079        |   | 24,991   | 25,376  | 25,760   |  | 34,070   | 34,455                    | 34,839   | 1.4%   | 1.5%                     | 1.5%   |
| 6.00%    | 8,954        |   | 24,408   | 24,784  | 25,159   |  | 33,362   | 33,737                    | 34,113   | 1.6%   | 1.7%                     | 1.8%   |

Discounted Cash Flow Valuation of TVA Using Public Market Terminal Year P/E Multiple

| Discount |           |  |          |          |          | = |          | erprise Valu<br>7 P/E Multi |          | 1      | ed Growth F<br>Z P/E Multi |        |
|----------|-----------|--|----------|----------|----------|---|----------|-----------------------------|----------|--------|----------------------------|--------|
| Rate     | '14 - '23 |  | 14.75x   | 15.00x   | 15.25x   |   | 14.75x   | 15.00x                      | 15.25x   | 14.75x | 15.00x                     | 15.25x |
| 5.00%    | \$9,469   |  | \$22,716 | \$22,946 | \$23,175 |   | \$32,185 | \$32,414                    | \$32,644 | -0.1%  | 0.0%                       | 0.0%   |
| 5.25%    | 9,337     |  | 22,183   | 22,406   | 22,630   |   | 31,519   | 31,743                      | 31,967   | 0.2%   | 0.2%                       | 0.3%   |
| 5.50%    | 9,207     |  | 21,662   | 21,881   | 22,099   |   | 30,869   | 31,088                      | 31,306   | 0.4%   | 0.5%                       | 0.5%   |
| 5.75%    | 9,079     |  | 21,156   | 21,369   | 21,583   |   | 30,235   | 30,448                      | 30,662   | 0.6%   | 0.7%                       | 0.7%   |
| 6.00%    | 8,954     |  | 20,662   | 20,870   | 21,079   |   | 29,616   | 29,824                      | 30,033   | 0.9%   | 0.9%                       | 1.0%   |

Source: TVA FY14 LRFP.

Note: Illustrative valuation based on publicly-traded comparables as of November 14, 2013, applied as if TVA were valued on September 30, 2013 (reflecting TVA's fiscal year end). Values have not been adjusted for underwriting fee or IPO discount.

### Summary Financial Projections—No Change in Rate Path Case (IPO Scenario)

| (\$ in millions)                  |           |           |           | For the   | Fiscal Year E | nded Septembe | r 30,     |           |           |           | '14 - '23 |
|-----------------------------------|-----------|-----------|-----------|-----------|---------------|---------------|-----------|-----------|-----------|-----------|-----------|
|                                   | 2014E     | 2015E     | 2016E     | 2017E     | 2018E         | 2019E         | 2020E     | 2021E     | 2022E     | 2023E     | CAGR      |
| GWh Sales                         | 153,638   | 154,390   | 155,015   | 155,526   | 156,270       | 156,997       | 158,007   | 158,358   | 159,047   | 159,831   | 0.4%      |
| % Growth                          | (4.1%)    | 0.5%      | 0.4%      | 0.3%      | 0.5%          | 0.5%          | 0.6%      | 0.2%      | 0.4%      | 0.5%      |           |
| Gross Revenue                     | \$10,468  | \$10,766  | \$10,870  | \$11,185  | \$11,589      | \$12,019      | \$12,398  | \$12,805  | \$13,282  | \$13,914  | 3.2%      |
| % Growth                          | (4.7%)    | 2.8%      | 1.0%      | 2.9%      | 3.6%          | 3.7%          | 3.2%      | 3.3%      | 3.7%      | 4.8%      |           |
| Less: Fuel Cost                   | (3,498)   | (3,595)   | (3,481)   | (3,583)   | (3,728)       | (3,847)       | (3,996)   | (4,148)   | (4,267)   | (4,451)   |           |
| Net Revenues                      | \$6,970   | \$7,171   | \$7,389   | \$7,602   | \$7,861       | \$8,172       | \$8,402   | \$8,657   | \$9,015   | \$9,463   | 3.5%      |
| % Growth                          | (1.8%)    | 2.9%      | 3.0%      | 2.9%      | 3.4%          | 4.0%          | 2.8%      | 3.0%      | 4.1%      | 5.0%      |           |
| Less: Non-fuel O&M                | (\$3,437) | (\$3,184) | (\$3,164) | (\$3,257) | (\$3,226)     | (\$3,309)     | (\$3,352) | (\$3,438) | (\$3,479) | (\$3,584) | 0.5%      |
| Less: Other Taxes                 | (513)     | (513)     | (518)     | (537)     | (557)         | (574)         | (594)     | (615)     | (637)     | (668)     |           |
| Plus: Other Income                | 41        | 36        | 36        | 36        | 36            | 36            | 38        | 39        | 36        | 38        |           |
| EBITDA                            | \$3,061   | \$3,511   | \$3,744   | \$3,843   | \$4,114       | \$4,325       | \$4,494   | \$4,642   | \$4,935   | \$5,249   | 6.2%      |
| % Margin                          | 43.9%     | 49.0%     | 50.7%     | 50.6%     | 52.3%         | 52.9%         | 53.5%     | 53.6%     | 54.7%     | 55.5%     |           |
| Less: D&A                         | (1,791)   | (1,749)   | (1,903)   | (1,956)   | (2,014)       | (2,087)       | (2,098)   | (2,146)   | (2,097)   | (2,060)   |           |
| EBIT                              | \$1,270   | \$1,762   | \$1,840   | \$1,887   | \$2,100       | \$2,238       | \$2,395   | \$2,496   | \$2,838   | \$3,189   | 10.8%     |
| Less: Net Interest Expense        | (723)     | (722)     | (866)     | (930)     | (925)         | (923)         | (934)     | (918)     | (915)     | (948)     |           |
| Net Income                        | \$355     | \$675     | \$633     | \$622     | \$764         | \$855         | \$950     | \$1,026   | \$1,250   | \$1,457   | 17.0%     |
| Total Debt                        | \$16,834  | \$17,552  | \$17,367  | \$16,696  | \$16,609      | \$16,570      | \$16,766  | \$16,467  | \$16,418  | \$17,041  |           |
| Common Equity                     | 16,435    | 16,671    | 16,893    | 17,110    | 16,878        | 16,677        | 17,009    | 16,868    | 17,306    | 17,816    |           |
| Total Capitalization              | \$33,269  | \$34,223  | \$34,259  | \$33,806  | \$33,486      | \$33,247      | \$33,776  | \$33,335  | \$33,724  | \$34,856  |           |
| Cash Flow from Operations         | \$2,584   | \$2,853   | \$3,058   | \$3,177   | \$3,380       | \$3,646       | \$3,760   | \$3,929   | \$4,157   | \$4,283   | '14 – '23 |
| Capital Expenditures & Other      | (3,281)   | (3,161)   | (2,441)   | (2,081)   | (2,276)       | (2,532)       | (2,685)   | (3,080)   | (3,277)   | (3,020)   | Total     |
| Cash Flow from Operations - Capex | (697)     | (308)     | 617       | 1,096     | 1,104         | 1,114         | 1,075     | 850       | 879       | 1,262     | \$6,991   |
| Net PP&E                          | \$30,633  | \$31,813  | \$30,666  | \$30,676  | \$30,665      | \$30,853      | \$31,081  | \$31,512  | \$32,207  | \$32,500  |           |
| Return on Ratebase Equity         | 2.4%      | 4.4%      | 4.1%      | 4.0%      | 5.0%          | 5.6%          | 6.3%      | 6.8%      | 8.2%      | 9.5%      |           |

Source: TVA FY14 LRFP.

1

### Summary Cash Flow and Credit Profile—No Change in Rate Path Case (IPO Scenario)

(\$ in millions)

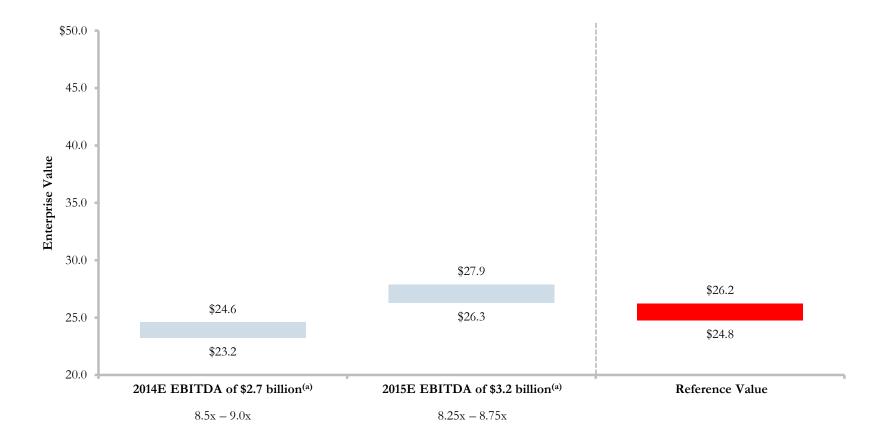
|                                     |          |          |          | For      | the Fiscal Year | r Ended Septer | nber 30, |          |          |          | '14 - '23  |           |                                    |
|-------------------------------------|----------|----------|----------|----------|-----------------|----------------|----------|----------|----------|----------|------------|-----------|------------------------------------|
| CASH FLOW PROFILE                   | 2014E    | 2015E    | 2016E    | 2017E    | 2018E           | 2019E          | 2020E    | 2021E    | 2022E    | 2023E    | Total      |           |                                    |
| Net Income                          | \$355    | \$675    | \$633    | \$622    | \$764           | \$855          | \$950    | \$1,026  | \$1,250  | \$1,457  | \$8,587    | -         |                                    |
| Depredation & Amortization          | 2,187    | 2,178    | 2,398    | 2,482    | 2,594           | 2,728          | 2,769    | 2,834    | 2,809    | 2,780    | 25,757     |           |                                    |
| Working Capital and Other           | 41       | 0        | 27       | 73       | 23              | 64             | 41       | 70       | 98       | 47       | 483        | _         |                                    |
| Cash Flow from Operations           | \$2,584  | \$2,853  | \$3,058  | \$3,177  | \$3,380         | \$3,646        | \$3,760  | \$3,929  | \$4,157  | \$4,283  | \$34,827   |           |                                    |
| Base Capital Expenditures           | (946)    | (1,027)  | (1,032)  | (1,106)  | (1,037)         | (1,026)        | (1,042)  | (1,206)  | (1,290)  | (1,091)  | (\$10,803) |           |                                    |
| Incremental Capital Expenditures    | (1,905)  | (1,667)  | (1,015)  | (625)    | (730)           | (1,014)        | (1,049)  | (1,135)  | (1,393)  | (1,262)  | (11,796)   |           |                                    |
| Nudear Fuel & Other                 | (431)    | (468)    | (395)    | (350)    | (508)           | (492)          | (594)    | (738)    | (594)    | (668)    | (5,237)    | _         |                                    |
| Free Cash Flow                      | (\$697)  | (\$308)  | \$617    | \$1,096  | \$1,104         | \$1,114        | \$1,075  | \$850    | \$879    | \$1,262  | \$6,991    | -         |                                    |
| Dividends                           | (231)    | (439)    | (412)    | (404)    | (496)           | (556)          | (618)    | (667)    | (812)    | (947)    | (\$5,581)  |           |                                    |
| Common Equity Issuanæ/ (Repurchase) | 0        | 0        | 0        | 0        | (500)           | (500)          | 0        | (500)    | 0        | 0        | (1,500)    | _         |                                    |
| Net External Financing Requirements | \$928    | \$747    | (\$205)  | (\$691)  | (\$108)         | (\$58)         | (\$457)  | \$317    | (\$67)   | (\$316)  | \$90       | -         |                                    |
|                                     |          |          |          |          |                 |                |          |          |          |          |            |           |                                    |
|                                     |          |          |          |          |                 |                |          |          |          |          |            |           |                                    |
| CREDIT PROFILE                      |          |          |          |          |                 |                |          |          |          |          |            |           |                                    |
| Cash & Cash Equivalents             | \$1,187  | \$1,137  | \$1,137  | \$1,137  | \$1,137         | \$1,137        | \$1,772  | \$1,137  | \$1,137  | \$2,060  |            | Credit    | Rating/Outlook                     |
| Total Debt                          | 16,834   | 17,552   | 17,367   | 16,696   | 16,609          | 16,570         | 16,766   | 16,467   | 16,418   | 17,041   |            | S&P       | BBB+/Stable                        |
| Common Equity                       | 16,435   | 16,671   | 16,893   | 17,110   | 16,878          | 16,677         | 17,009   | 16,868   | 17,306   | 17,816   |            | Moody's   | Baa1/Stable                        |
| Total Capitalization                | \$33,269 | \$34,223 | \$34,259 | \$33,806 | \$33,486        | \$33,247       | \$33,776 | \$33,335 | \$33,724 | \$34,856 |            |           |                                    |
|                                     |          |          |          |          |                 |                |          |          |          |          |            | Indicativ | e Credit Statistics <sup>(a)</sup> |
|                                     |          |          |          |          |                 |                |          |          |          |          |            | Si        | gnificant                          |
| FFO/Interest                        | 4.8x     | 5.3x     | 4.8x     | 4.6x     | 4.9x            | 5.2x           | 5.2x     | 5.5x     | 5.7x     | 5.8x     |            | 3.0x      | - 3.5x                             |
| FFO/Total Debt                      | 16.3%    | 17.6%    | 19.0%    | 19.9%    | 21.5%           | 23.1%          | 23.6%    | 25.0%    | 26.4%    | 26.7%    |            | 20.0%     | - 30.0%                            |
| Total Debt/EBITDA                   | 5.5x     | 5.0x     | 4.6x     | 4.3x     | 4.0x            | 3.8x           | 3.7x     | 3.5x     | 3.3x     | 3.2x     |            | 4.0x      | - 3.0x                             |
| Total Debt/Total Capitalization     | 50.6%    | 51.3%    | 50.7%    | 49.4%    | 49.6%           | 49.8%          | 49.6%    | 49.4%    | 48.7%    | 48.9%    |            | 50.0%     | - 45.0%                            |

#### Source: TVA FY14 LRFP.

Credit metric ranges implied for a company with a business risk profile of "Strong" and a financial risk profile of "Significant," for which the expected credit ratings under S&P methodology would be (a) BBB.

# Precedent Transaction Multiples Analysis—No Change in Rate Path Case (Sale Scenario)

(\$ in billions)



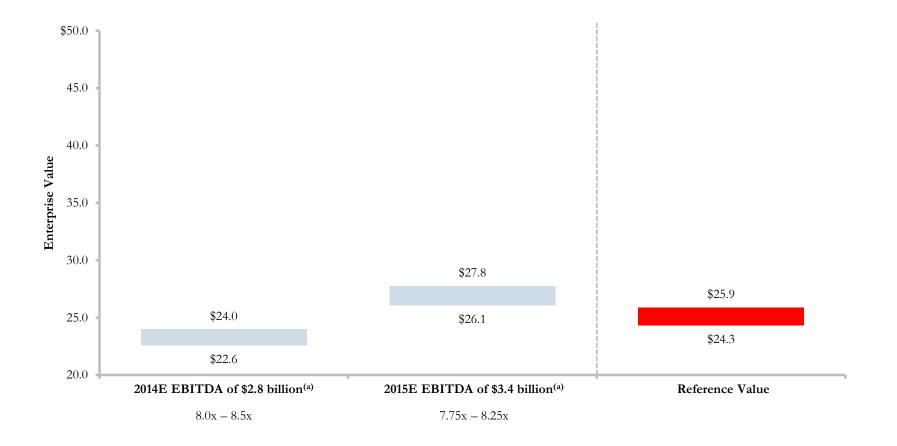
Source: TVA FY14 LRFP.

Note: Illustrative valuation based on publicly-traded comparables as of November 14, 2013, applied as if TVA were valued on September 30, 2013 (reflecting TVA's fiscal year end).

(a) EBITDA adjusted to remove amortization for regulatory assets, capital leases, ARO accretion and debt reacquisition costs.

# Comparable Company Multiples Analysis—No Change in Rate Path Case (Sale Scenario)

(\$ in billions)



Source: TVA FY14 LRFP.

Note: Illustrative valuation based on publicly-traded comparables as of November 14, 2013, applied as if TVA were valued on September 30, 2013 (reflecting TVA's fiscal year end).

(a) EBITDA adjusted to remove amortization for regulatory assets, capital leases, ARO accretion and debt reacquisition costs.

# Discounted Cash Flow Analysis—No Change in Rate Path Case (Sale Scenario)

| (\$ in millions)                               |         |         |         |         | Fiscal Year | Ending Sept | tember 30th, |         |         |         |         |         |
|--|---------|---------|---------|---------|-------------|-------------|--------------|---------|---------|---------|---------|---------|
|  | 2013A   | 2014E   | 2015E   | 2016E   | 2017E       | 2018E       | 2019E        | 2020E   | 2021E   | 2022E   | 2023E   | TY      |
| EBITDA   | \$3,055 | \$3,149 | \$3,688 | \$3,921 | \$4,020     | \$4,291     | \$4,502      | \$4,671 | \$4,819 | \$5,112 | \$5,426 | \$5,561 |
| Less: Depredation & Amortization               | (1,710) | (1,791) | (1,749) | (1,903) | (1,956)     | (2,014)     | (2,087)      | (2,098) | (2,146) | (2,097) | (2,060) |         |
| EBIT   | \$1,345 | \$1,358 | \$1,939 | \$2,017 | \$2,064     | \$2,277     | \$2,415      | \$2,572 | \$2,673 | \$3,015 | \$3,366 |         |
| Less: Income Taxes @ 35.0%                     | (471)   | (475)   | (678)   | (706)   | (722)       | (797)       | (845)        | (900)   | (935)   | (1,055) | (1,178) |         |
| EBIT (after tax)                               | \$874   | \$883   | \$1,260 | \$1,311 | \$1,342     | \$1,480     | \$1,570      | \$1,672 | \$1,737 | \$1,960 | \$2,188 |         |
| Plus: Depredation & Amortization               | 2,085   | 2,187   | 2,178   | 2,398   | 2,482       | 2,594       | 2,728        | 2,769   | 2,834   | 2,809   | 2,780   |         |
| Less: Capital Expenditures & Other Investments | (2,655) | (3,281) | (3,161) | (2,441) | (2,081)     | (2,276)     | (2,532)      | (2,685) | (3,080) | (3,277) | (3,020) |         |
| Plus/(Minus): Working Capital                  | (165)   | (152)   | (236)   | (235)   | (153)       | (196)       | (186)        | (193)   | (192)   | (181)   | (259)   |         |
| Plus/(Minus): Other Items                      | 501     | 16      | 236     | 262     | 226         | 219         | 249          | 234     | 262     | 279     | 306     |         |
| Unlevered Free Cash Flow                       | \$640   | (\$347) | \$276   | \$1,295 | \$1,815     | \$1,821     | \$1,829      | \$1,797 | \$1,561 | \$1,589 | \$1,994 |         |

Discounted Cash Flow Valuation of TVA Using Public Market Terminal Year EBITDA Multiple

| Discount |           |  |          |          |          | = |          | erprise Valu<br>EBITDA Mu |          | 1      | ed Growth H<br>EBITDA Mu |        |
|----------|-----------|--|----------|----------|----------|---|----------|---------------------------|----------|--------|--------------------------|--------|
| Rate     | '14 - '23 |  | 8.125x   | 8.250x   | 8.375x   |   | 8.125x   | 8.250x                    | 8.375x   | 8.125x | 8.250x                   | 8.375x |
| 5.00%    | \$10,150  |  | \$27,740 | \$28,167 | \$28,594 |   | \$37,891 | \$38,317                  | \$38,744 | 0.6%   | 0.6%                     | 0.7%   |
| 5.25%    | 10,008    |  | 27,088   | 27,505   | 27,922   |   | 37,097   | 37,513                    | 37,930   | 0.8%   | 0.9%                     | 0.9%   |
| 5.50%    | 9,869     |  | 26,453   | 26,860   | 27,267   |   | 36,322   | 36,729                    | 37,136   | 1.0%   | 1.1%                     | 1.2%   |
| 5.75%    | 9,732     |  | 25,834   | 26,232   | 26,629   |   | 35,567   | 35,964                    | 36,361   | 1.3%   | 1.3%                     | 1.4%   |
| 6.00%    | 9,598     |  | 25,231   | 25,620   | 26,008   |   | 34,829   | 35,217                    | 35,606   | 1.5%   | 1.6%                     | 1.6%   |

Discounted Cash Flow Valuation of TVA Using Public Market Terminal Year P/E Multiple

| Discount |           |  |          |          |          | = |          | erprise Valu<br>7 P/E Multi |          | -      | ed Growth F<br>7 P/E Multi |        |
|----------|-----------|--|----------|----------|----------|---|----------|-----------------------------|----------|--------|----------------------------|--------|
| Rate     | '14 - '23 |  | 14.75x   | 15.00x   | 15.25x   |   | 14.75x   | 15.00x                      | 15.25x   | 14.75x | 15.00x                     | 15.25x |
| 5.00%    | \$10,150  |  | \$23,723 | \$23,972 | \$24,220 |   | \$33,874 | \$34,122                    | \$34,370 | -0.2%  | -0.1%                      | -0.1%  |
| 5.25%    | 10,008    |  | 23,166   | 23,408   | 23,651   |   | 33,174   | 33,417                      | 33,659   | 0.1%   | 0.1%                       | 0.2%   |
| 5.50%    | 9,869     |  | 22,623   | 22,859   | 23,096   |   | 32,492   | 32,729                      | 32,965   | 0.3%   | 0.4%                       | 0.4%   |
| 5.75%    | 9,732     |  | 22,093   | 22,325   | 22,556   |   | 31,826   | 32,057                      | 32,288   | 0.6%   | 0.6%                       | 0.7%   |
| 6.00%    | 9,598     |  | 21,578   | 21,804   | 22,030   |   | 31,176   | 31,402                      | 31,627   | 0.8%   | 0.9%                       | 0.9%   |

Source: TVA FY14 LRFP.

Note: Illustrative valuation based on publicly-traded comparables as of November 14, 2013, applied as if TVA were valued on September 30, 2013 (reflecting TVA's fiscal year end).

### Summary Financial Projections—No Change in Rate Path Case (Sale Scenario)

(\$ in millions)

| (\$ in millions)                  |               |           |           | For the   | Fiscal Year E | nded Septembe | r 30,     |           |           |           | '14 - '23 |
|-----------------------------------|---------------|-----------|-----------|-----------|---------------|---------------|-----------|-----------|-----------|-----------|-----------|
|                                   | <b>2014</b> E | 2015E     | 2016E     | 2017E     | 2018E         | 2019E         | 2020E     | 2021E     | 2022E     | 2023E     | CAGR      |
| GWh Sales                         | 153,638       | 154,390   | 155,015   | 155,526   | 156,270       | 156,997       | 158,007   | 158,358   | 159,047   | 159,831   | 0.4%      |
| % Growth                          | (4.1%)        | 0.5%      | 0.4%      | 0.3%      | 0.5%          | 0.5%          | 0.6%      | 0.2%      | 0.4%      | 0.5%      |           |
| Gross Revenue                     | \$10,380      | \$10,589  | \$10,693  | \$11,008  | \$11,412      | \$11,842      | \$12,221  | \$12,628  | \$13,105  | \$13,737  | 3.2%      |
| % Growth                          | (5.5%)        | 2.0%      | 1.0%      | 2.9%      | 3.7%          | 3.8%          | 3.2%      | 3.3%      | 3.8%      | 4.8%      |           |
| Less: Fuel Cost                   | (3,498)       | (3,595)   | (3,481)   | (3,583)   | (3,728)       | (3,847)       | (3,996)   | (4,148)   | (4,267)   | (4,451)   |           |
| Net Revenues                      | \$6,882       | \$6,994   | \$7,212   | \$7,425   | \$7,684       | \$7,995       | \$8,225   | \$8,480   | \$8,838   | \$9,285   | 3.4%      |
| % Gronth                          | (3.1%)        | 1.6%      | 3.1%      | 2.9%      | 3.5%          | 4.0%          | 2.9%      | 3.1%      | 4.2%      | 5.1%      |           |
| Less: Non-fuel O&M                | (\$3,260)     | (\$2,830) | (\$2,810) | (\$2,903) | (\$2,872)     | (\$2,955)     | (\$2,998) | (\$3,084) | (\$3,125) | (\$3,230) | (0.1%)    |
| Less: Other Taxes                 | (513)         | (513)     | (518)     | (537)     | (557)         | (574)         | (594)     | (615)     | (637)     | (668)     |           |
| Plus: Other Income                | 41            | 36        | 36        | 36        | 36            | 36            | 38        | 39        | 36        | 38        |           |
| EBITDA                            | \$3,149       | \$3,688   | \$3,921   | \$4,020   | \$4,291       | \$4,502       | \$4,671   | \$4,819   | \$5,112   | \$5,426   | 6.2%      |
| % Margin                          | 45.8%         | 52.7%     | 54.4%     | 54.2%     | 55.8%         | 56.3%         | 56.8%     | 56.8%     | 57.8%     | 58.4%     |           |
| Less: D&A                         | (1,791)       | (1,749)   | (1,903)   | (1,956)   | (2,014)       | (2,087)       | (2,098)   | (2,146)   | (2,097)   | (2,060)   |           |
| EBIT                              | \$1,358       | \$1,939   | \$2,017   | \$2,064   | \$2,277       | \$2,415       | \$2,572   | \$2,673   | \$3,015   | \$3,366   | 10.6%     |
| Less: Net Interest Expense        | (732)         | (729)     | (870)     | (932)     | (925)         | (921)         | (929)     | (911)     | (906)     | (937)     |           |
| Net Income                        | \$407         | \$786     | \$745     | \$736     | \$879         | \$971         | \$1,068   | \$1,145   | \$1,371   | \$1,579   | 16.2%     |
| Total Debt                        | \$16,993      | \$17,672  | \$17,447  | \$16,737  | \$16,609      | \$16,530      | \$16,685  | \$16,343  | \$16,253  | \$16,832  |           |
| Common Equity                     | 16,453        | 16,728    | 16,989    | 17,246    | 17,054        | 16,894        | 17,268    | 17,168    | 17,648    | 18,201    |           |
| Total Capitalization              | \$33,446      | \$34,400  | \$34,436  | \$33,983  | \$33,663      | \$33,424      | \$33,953  | \$33,512  | \$33,901  | \$35,033  |           |
| Cash Flow from Operations         | \$2,459       | \$2,964   | \$3,170   | \$3,290   | \$3,495       | \$3,763       | \$3,878   | \$4,049   | \$4,277   | \$4,405   | '14 – '23 |
| Capital Expenditures & Other      | (3,281)       | (3,161)   | (2,441)   | (2,081)   | (2,276)       | (2,532)       | (2,685)   | (3,080)   | (3,277)   | (3,020)   | Total     |
| Cash Flow from Operations - Capex | (822)         | (197)     | 729       | 1,209     | 1,219         | 1,230         | 1,193     | 969       | 1,000     | 1,385     | \$7,915   |
| Net PP&E                          | \$30,633      | \$31,813  | \$30,666  | \$30,676  | \$30,665      | \$30,853      | \$31,081  | \$31,512  | \$32,207  | \$32,500  |           |
| Return on Ratebase Equity         | 2.7%          | 5.1%      | 4.8%      | 4.8%      | 5.7%          | 6.4%          | 7.1%      | 7.6%      | 9.0%      | 10.2%     |           |

Source: TVA FY14 LRFP. 93 | LAZARD

1

### Summary Cash Flow and Credit Profile—No Change in Rate Path Case (Sale Scenario)

(\$ in millions)

|                                     |          |          |          | For      | the Fiscal Year | r Ended Septer | nber 30, |          |          |          | '14 - '23  |            |                     |
|-------------------------------------|----------|----------|----------|----------|-----------------|----------------|----------|----------|----------|----------|------------|------------|---------------------|
| CASH FLOW PROFILE                   | 2014E    | 2015E    | 2016E    | 2017E    | 2018E           | 2019E          | 2020E    | 2021E    | 2022E    | 2023E    | Total      |            |                     |
| Net Income                          | \$407    | \$786    | \$745    | \$736    | \$879           | \$971          | \$1,068  | \$1,145  | \$1,371  | \$1,579  | \$9,687    | -          |                     |
| Depreciation & Amortization         | 2,187    | 2,178    | 2,398    | 2,482    | 2,594           | 2,728          | 2,769    | 2,834    | 2,809    | 2,780    | 25,757     |            |                     |
| Working Capital and Other           | (136)    | 0        | 27       | 73       | 23              | 64             | 41       | 70       | 98       | 47       | 306        | _          |                     |
| Cash Flow from Operations           | \$2,459  | \$2,964  | \$3,170  | \$3,290  | \$3,495         | \$3,763        | \$3,878  | \$4,049  | \$4,277  | \$4,405  | \$35,751   | -          |                     |
| Base Capital Expenditures           | (946)    | (1,027)  | (1,032)  | (1,106)  | (1,037)         | (1,026)        | (1,042)  | (1,206)  | (1,290)  | (1,091)  | (\$10,803) |            |                     |
| Incremental Capital Expenditures    | (1,905)  | (1,667)  | (1,015)  | (625)    | (730)           | (1,014)        | (1,049)  | (1,135)  | (1,393)  | (1,262)  | (11,796)   |            |                     |
| Nudear Fuel & Other                 | (431)    | (468)    | (395)    | (350)    | (508)           | (492)          | (594)    | (738)    | (594)    | (668)    | (5,237)    | _          |                     |
| Free Cash Flow                      | (\$822)  | (\$197)  | \$729    | \$1,209  | \$1,219         | \$1,230        | \$1,193  | \$969    | \$1,000  | \$1,385  | \$7,915    | -          |                     |
| Dividends                           | (265)    | (511)    | (485)    | (478)    | (571)           | (631)          | (694)    | (744)    | (891)    | (1,026)  | (\$6,297)  |            |                     |
| Common Equity Issuanæ/(Repurchase)  | 0        | 0        | 0        | 0        | (500)           | (500)          | 0        | (500)    | 0        | 0        | (1,500)    | _          |                     |
| Net External Financing Requirements | \$1,087  | \$708    | (\$245)  | (\$731)  | (\$148)         | (\$99)         | (\$498)  | \$275    | (\$109)  | (\$358)  | (\$118)    |            |                     |
|                                     |          |          |          |          |                 |                |          |          |          |          |            |            |                     |
|                                     |          |          |          |          |                 |                |          |          |          |          |            |            |                     |
| CREDIT PROFILE                      |          |          |          |          |                 |                |          |          |          |          |            |            |                     |
| Cash & Cash Equivalents             | \$1,187  | \$1,137  | \$1,137  | \$1,137  | \$1,137         | \$1,137        | \$1,772  | \$1,137  | \$1,137  | \$2,060  |            | Credit F   | Rating/Outlook      |
| Total Debt                          | 16,993   | 17,672   | 17,447   | 16,737   | 16,609          | 16,530         | 16,685   | 16,343   | 16,253   | 16,832   |            | S&P        | BBB+/Stab           |
| Common Equity                       | 16,453   | 16,728   | 16,989   | 17,246   | 17,054          | 16,894         | 17,268   | 17,168   | 17,648   | 18,201   |            | Moody's    | Baa1/Stabl          |
| Total Capitalization                | \$33,446 | \$34,400 | \$34,436 | \$33,983 | \$33,663        | \$33,424       | \$33,953 | \$33,512 | \$33,901 | \$35,033 |            |            |                     |
|                                     |          |          |          |          |                 |                |          |          |          |          |            | Indicative | e Credit Statistics |
|                                     |          |          |          |          |                 |                |          |          |          |          |            | Sig        | gnificant           |
| FFO/Interest                        | 4.6x     | 5.4x     | 4.9x     | 4.7x     | 5.0x            | 5.3x           | 5.4x     | 5.7x     | 5.9x     | 6.0x     |            | 3.0x       | - 3.5x              |
| FFO/Total Debt                      | 15.4%    | 18.1%    | 19.5%    | 20.6%    | 22.2%           | 23.9%          | 24.4%    | 25.9%    | 27.4%    | 27.7%    |            | 20.0%      | - 30.0%             |
| Total Debt/EBITDA                   | 5.4x     | 4.8x     | 4.5x     | 4.2x     | 3.9x            | 3.7x           | 3.6x     | 3.4x     | 3.2x     | 3.1x     |            | 4.0x       | - 3.0x              |
| Total Debt/Total Capitalization     | 50.8%    | 51.4%    | 50.7%    | 49.3%    | 49.3%           | 49.5%          | 49.1%    | 48.8%    | 47.9%    | 48.0%    |            | 50.0%      | - 45.0%             |

Credit metric ranges implied for a company with a business risk profile of "Strong" and a financial risk profile of "Significant," for which the expected credit ratings under S&P methodology would be (a) BBB.

### 2 Rate Mitigation Case

#### Discounted Cash Flow Analysis—Rate Mitigation Case (IPO Scenario)

(\$ in millions)

|  |         |         |         |         | Fiscal Year | Ending Sept | tember 30th, |         |         |         |         |  |
|--|---------|---------|---------|---------|-------------|-------------|--------------|---------|---------|---------|---------|--|
|  | 2013A   | 2014E   | 2015E   | 2016E   | 2017E       | 2018E       | 2019E        | 2020E   | 2021E   | 2022E   | 2023E   |  |
| EBITDA   | \$3,055 | \$3,061 | \$3,511 | \$3,744 | \$3,843     | \$4,154     | \$4,177      | \$4,144 | \$4,169 | \$4,113 | \$4,100 |  |
| Less: Depredation & Amortization               | (1,710) | (1,791) | (1,749) | (1,903) | (1,956)     | (2,014)     | (2,087)      | (2,098) | (2,146) | (2,097) | (2,060) |  |
| EBIT   | \$1,345 | \$1,270 | \$1,762 | \$1,840 | \$1,887     | \$2,140     | \$2,090      | \$2,046 | \$2,023 | \$2,017 | \$2,041 |  |
| Less: Income Taxes @ 35.0%                     | (471)   | (444)   | (617)   | (644)   | (660)       | (749)       | (731)        | (716)   | (708)   | (706)   | (714)   |  |
| EBIT (after tax)                               | \$874   | \$825   | \$1,145 | \$1,196 | \$1,227     | \$1,391     | \$1,358      | \$1,330 | \$1,315 | \$1,311 | \$1,326 |  |
| Plus: Depredation & Amortization               | 2,085   | 2,187   | 2,178   | 2,398   | 2,482       | 2,594       | 2,728        | 2,769   | 2,834   | 2,809   | 2,780   |  |
| Less: Capital Expenditures & Other Investments | (2,655) | (3,281) | (3,161) | (2,441) | (2,081)     | (2,276)     | (2,532)      | (2,685) | (3,080) | (3,277) | (3,020) |  |
| Plus/(Minus): Working Capital                  | (165)   | (152)   | (236)   | (235)   | (153)       | (164)       | (152)        | (157)   | (145)   | (138)   | (220)   |  |
| Plus/(Minus): Other Items                      | 501     | 193     | 236     | 262     | 226         | 219         | 249          | 234     | 262     | 279     | 306     |  |
| Unlevered Free Cash Flow                       | \$640   | (\$227) | \$161   | \$1,180 | \$1,700     | \$1,764     | \$1,651      | \$1,490 | \$1,186 | \$984   | \$1,172 |  |

Discounted Cash Flow Valuation of TVA Using Public Market Terminal Year EBITDA Multiple

| Discount | PV<br>of FCF | + | PV of Terminal Value at<br>TY EBITDA Multiple |          |          |  |          | erprise Valu<br>EBITDA Mu |          | 1      | ed Growth H<br>BITDA Mu |        |
|----------|--------------|---|---|----------|----------|--|----------|---------------------------|----------|--------|-------------------------|--------|
| Rate     | '14 - '23    |   | 8.125x  | 8.250x   | 8.375x   |  | 8.125x   | 8.250x                    | 8.375x   | 8.125x | 8.250x                  | 8.375x |
| 5.00%    | \$8,379      |   | \$20,964                                      | \$21,286 | \$21,609 |  | \$29,343 | \$29,666                  | \$29,988 | 1.5%   | 1.6%                    | 1.6%   |
| 5.25%    | 8,269        |   | 20,471  | 20,786   | 21,101   |  | 28,740   | 29,055                    | 29,370   | 1.8%   | 1.8%                    | 1.9%   |
| 5.50%    | 8,160        |   | 19,991  | 20,299   | 20,606   |  | 28,152   | 28,459                    | 28,767   | 2.0%   | 2.1%                    | 2.1%   |
| 5.75%    | 8,054        |   | 19,524  | 19,824   | 20,124   |  | 27,577   | 27,878                    | 28,178   | 2.2%   | 2.3%                    | 2.3%   |
| 6.00%    | 7,949        |   | 19,068  | 19,361   | 19,655   |  | 27,017   | 27,310                    | 27,604   | 2.5%   | 2.5%                    | 2.6%   |

Discounted Cash Flow Valuation of TVA Using Public Market Terminal Year P/E Multiple

| Discount | PV<br>of FCF | + | - • •-   | Terminal V<br>7 P/E Multi |          | = |          | terprise Val<br>7 P/E Mult |          | 1      | ed Growth F<br>Z P/E Multi |        |
|----------|--------------|---|----------|---------------------------|----------|---|----------|----------------------------|----------|--------|----------------------------|--------|
| Rate     | '14 - '23    |   | 14.75x   | 15.00x                    | 15.25x   |   | 14.75x   | 15.00x                     | 15.25x   | 14.75x | 15.00x                     | 15.25x |
| 5.00%    | \$8,379      |   | \$16,207 | \$16,322                  | \$16,436 |   | \$24,586 | \$24,701                   | \$24,815 | 0.5%   | 0.6%                       | 0.6%   |
| 5.25%    | 8,269        |   | 15,826   | 15,938                    | 16,050   |   | 24,095   | 24,207                     | 24,319   | 0.8%   | 0.8%                       | 0.8%   |
| 5.50%    | 8,160        |   | 15,455   | 15,564                    | 15,673   |   | 23,615   | 23,725                     | 23,834   | 1.0%   | 1.0%                       | 1.1%   |
| 5.75%    | 8,054        |   | 15,094   | 15,200                    | 15,307   |   | 23,147   | 23,254                     | 23,360   | 1.3%   | 1.3%                       | 1.3%   |
| 6.00%    | 7,949        |   | 14,741   | 14,846                    | 14,950   |   | 22,690   | 22,794                     | 22,898   | 1.5%   | 1.5%                       | 1.6%   |

Source: TVA FY14 LRFP as adjusted by TVA.

Note: Illustrative valuation based on publicly-traded comparables as of November 14, 2013, applied as if TVA were valued on September 30, 2013 (reflecting TVA's fiscal year end). Values have not been 95 | LAZARD

### Summary Financial Projections—Rate Mitigation Case (IPO Scenario)

(\$ in millions)

|   |                                       |                                       |                                       | For the                               | Fiscal Year E                         | nded Septembe                         | r 30,                                 |                                       |                                       |                                       | '14 - '23        |
|---|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|------------------|
|   | 2014E                                 | 2015E                                 | 2016E                                 | 2017E                                 | 2018E                                 | 2019E                                 | 2020E                                 | 2021E                                 | 2022E                                 | 2023E                                 | CAGR             |
| GWh Sales<br>% Growth   | 153,638<br><i>(4.1%)</i>              | 154,390<br><i>0.5%</i>                | 155,015<br><i>0.4%</i>                | 155,526<br><i>0.3%</i>                | 156,270<br><i>0.5%</i>                | 156,997<br><i>0.5%</i>                | 158,007<br><i>0.6%</i>                | 158,358<br>0.2%                       | 159,047<br><i>0.4%</i>                | 159,831<br><i>0.5%</i>                | 0.4%             |
| Gross Revenue<br>% Growth   | \$10,468<br><i>(4.7%)</i>             | \$10,766<br><i>2.8%</i>               | \$10,870<br><i>1.0%</i>               | \$11,185<br><i>2.9%</i>               | \$11,629<br><i>4.0%</i>               | \$11,873<br><i>2.1%</i>               | \$12,043<br><i>1.4%</i>               | \$12,316<br><i>2.3%</i>               | \$12,437<br>1.0%                      | \$12,726<br><i>2.3%</i>               | 2.2%             |
| Less: Fuel Cost   | (3,498)                               | (3,595)                               | (3,481)                               | (3,583)                               | (3,728)                               | (3,847)                               | (3,996)                               | (4,148)                               | (4,267)                               | (4,451)                               |                  |
| Net Revenues<br>% Growth  | \$6,970<br><i>(1.8%)</i>              | \$7,171<br><i>2.9%</i>                | \$7,389<br><i>3.0%</i>                | \$7,602<br><i>2.9%</i>                | \$7,901<br><i>3.9%</i>                | \$8,025<br>1.6%                       | \$8,047<br><i>0.3%</i>                | \$8,168<br><i>1.5%</i>                | \$8,170<br><i>0.0%</i>                | \$8,275<br>1. <i>3%</i>               | 1.9%             |
| Less: Non-fuel O&M<br>Less: Other Taxes<br>Plus: Other Income     | (\$3,437)<br>(513)<br>41              | (\$3,184)<br>(513)<br>36              | (\$3,164)<br>(518)<br>36              | (\$3,257)<br>(537)<br>36              | (\$3,226)<br>(557)<br>36              | (\$3,309)<br>(576)<br>36              | (\$3,352)<br>(587)<br>36              | (\$3,438)<br>(598)<br>37              | (\$3,479)<br>(614)<br>36              | (\$3,584)<br>(626)<br>36              | 0.5%             |
| EBITDA<br>% Margin  | \$3,061<br><i>43.9%</i>               | \$3,511<br><i>49.0%</i>               | \$3,744<br><i>50.7%</i>               | \$3,843<br><i>50.6%</i>               | \$4,154<br><i>52.6%</i>               | \$4,177<br><i>52.0%</i>               | \$4,144<br><i>51.5%</i>               | \$4,169<br><i>51.0%</i>               | \$4,113<br><i>50.3%</i>               | \$4,100<br><i>49.6%</i>               | 3.3%             |
| Less: D&A   | (1,791)                               | (1,749)                               | (1,903)                               | (1,956)                               | (2,014)                               | (2,087)                               | (2,098)                               | (2,146)                               | (2,097)                               | (2,060)                               |                  |
| EBIT  | \$1,270                               | \$1,762                               | \$1,840                               | \$1,887                               | \$2,140                               | \$2,090                               | \$2,046                               | \$2,023                               | \$2,017                               | \$2,041                               | 5.4%             |
| Less: Net Interest Expense  | (723)                                 | (722)                                 | (866)                                 | (930)                                 | (923)                                 | (921)                                 | (915)                                 | (921)                                 | (926)                                 | (921)                                 |                  |
| Net Inœme   | \$355                                 | \$675                                 | \$633                                 | \$622                                 | \$791                                 | \$760                                 | \$735                                 | \$716                                 | \$709                                 | \$728                                 | 8.3%             |
| Total Debt<br>Common Equity<br><b>Total Capitalization</b>        | \$16,834<br>16,435<br><b>\$33,269</b> | \$17,552<br>16,671<br><b>\$34,223</b> | \$17,367<br>16,893<br><b>\$34,259</b> | \$16,696<br>17,110<br><b>\$33,806</b> | \$16,567<br>16,887<br><b>\$33,454</b> | \$16,527<br>16,653<br><b>\$33,180</b> | \$16,408<br>16,911<br><b>\$33,319</b> | \$16,525<br>16,661<br><b>\$33,186</b> | \$16,623<br>16,909<br><b>\$33,532</b> | \$16,537<br>17,164<br><b>\$33,701</b> |                  |
| Cash Flow from Operations   | \$2,584                               | \$2,853                               | \$3,058                               | \$3,177                               | \$3,440                               | \$3,585                               | \$3,580                               | \$3,667                               | \$3,659                               | \$3,594                               | '14 – '23        |
| Capital Expenditures & Other<br>Cash Flow from Operations - Capex | (3 <b>,</b> 281)<br>(697)             | (3,161)<br>(308)                      | (2,441)<br>617                        | (2,081)<br>1,096                      | (2,276)<br>1,164                      | (2,532)<br>1,053                      | (2,685)<br>895                        | (3,080)<br>587                        | (3,277)<br>382                        | (3,020)<br>573                        | Total<br>\$5,361 |
| Net PP&E  | \$30,633                              | \$31,813                              | \$30,666                              | \$30,676                              | \$30,665                              | \$30,853                              | \$31,081                              | \$31,512                              | \$32,207                              | \$32,500                              |                  |
| Return on Ratebase Equity   | 2.4%                                  | 4.4%                                  | 4.1%                                  | 4.0%                                  | 5.2%                                  | 5.0%                                  | 4.9%                                  | 4.7%                                  | 4.7%                                  | 4.7%                                  |                  |

Source: TVA FY14 LRFP as adjusted by TVA.

2

### Summary Cash Flow and Credit Profile—Rate Mitigation Case (IPO Scenario)

(\$ in millions)

|                                     |          |          |          | For      | the Fiscal Year | • Ended Septer | nber 30, |          |          |          | '14 - '23  |              |                                 |
|-------------------------------------|----------|----------|----------|----------|-----------------|----------------|----------|----------|----------|----------|------------|--------------|---------------------------------|
| CASH FLOW PROFILE                   | 2014E    | 2015E    | 2016E    | 2017E    | 2018E           | 2019E          | 2020E    | 2021E    | 2022E    | 2023E    | Total      |              |                                 |
| Net Income                          | \$355    | \$675    | \$633    | \$622    | \$791           | <b>\$</b> 760  | \$735    | \$716    | \$709    | \$728    | \$6,725    | -            |                                 |
| Depreciation & Amortization         | 2,187    | 2,178    | 2,398    | 2,482    | 2,594           | 2,728          | 2,769    | 2,834    | 2,809    | 2,780    | 25,757     |              |                                 |
| Working Capital and Other           | 41       | 0        | 27       | 73       | 55              | 97             | 76       | 117      | 141      | 87       | 715        |              |                                 |
| Cash Flow from Operations           | \$2,584  | \$2,853  | \$3,058  | \$3,177  | \$3,440         | \$3,585        | \$3,580  | \$3,667  | \$3,659  | \$3,594  | \$33,197   | -            |                                 |
| Base Capital Expenditures           | (946)    | (1,027)  | (1,032)  | (1,106)  | (1,037)         | (1,026)        | (1,042)  | (1,206)  | (1,290)  | (1,091)  | (\$10,803) |              |                                 |
| Incremental Capital Expenditures    | (1,905)  | (1,667)  | (1,015)  | (625)    | (730)           | (1,014)        | (1,049)  | (1,135)  | (1,393)  | (1,262)  | (11,796)   |              |                                 |
| Nudear Fuel & Other                 | (431)    | (468)    | (395)    | (350)    | (508)           | (492)          | (594)    | (738)    | (594)    | (668)    | (5,237)    | _            |                                 |
| Free Cash Flow                      | (\$697)  | (\$308)  | \$617    | \$1,096  | \$1,164         | \$1,053        | \$895    | \$587    | \$382    | \$573    | \$5,361    | -            |                                 |
| Dividends                           | (231)    | (439)    | (412)    | (404)    | (514)           | (494)          | (478)    | (466)    | (461)    | (473)    | (\$4,371)  |              |                                 |
| Common Equity Issuance/(Repurchase) | 0        | 0        | 0        | 0        | (500)           | (500)          | 0        | (500)    | 0        | 0        | (1,500)    | _            |                                 |
| Net External Financing Requirements | \$928    | \$747    | (\$205)  | (\$691)  | (\$150)         | (\$59)         | (\$417)  | \$378    | \$79     | (\$100)  | \$510      | -            |                                 |
|                                     |          |          |          |          |                 |                |          |          |          |          |            |              |                                 |
|                                     |          |          |          |          |                 |                |          |          |          |          |            |              |                                 |
| CREDIT PROFILE                      |          |          |          |          |                 |                |          |          |          |          |            |              |                                 |
| Cash & Cash Equivalents             | \$1,187  | \$1,137  | \$1,137  | \$1,137  | \$1,137         | \$1,137        | \$1,417  | \$1,137  | \$1,137  | \$1,137  |            | Credit Rati  | ing/Outlook                     |
| Total Debt                          | 16,834   | 17,552   | 17,367   | 16,696   | 16,567          | 16,527         | 16,408   | 16,525   | 16,623   | 16,537   |            | S&P          | BBB+/Stable                     |
| Common Equity                       | 16,435   | 16,671   | 16,893   | 17,110   | 16,887          | 16,653         | 16,911   | 16,661   | 16,909   | 17,164   |            | Moody's      | Baa1/Stable                     |
| Total Capitalization                | \$33,269 | \$34,223 | \$34,259 | \$33,806 | \$33,454        | \$33,180       | \$33,319 | \$33,186 | \$33,532 | \$33,701 |            |              | _                               |
|                                     |          |          |          |          |                 |                |          |          |          |          |            | Indicative C | redit Statistics <sup>(a)</sup> |
|                                     |          |          |          |          |                 |                |          |          |          |          |            | Signi        | ficant                          |
| FFO/Interest                        | 4.8x     | 5.3x     | 4.8x     | 4.6x     | 4.9x            | 5.1x           | 5.1x     | 5.1x     | 5.1x     | 5.1x     |            | 3.0x         | - 3.5x                          |
| FFO/Total Debt                      | 16.3%    | 17.6%    | 19.0%    | 19.9%    | 21.8%           | 22.6%          | 22.8%    | 23.1%    | 22.8%    | 23.1%    |            | 20.0%        | - 30.0%                         |
| Total Debt/EBITDA                   | 5.5x     | 5.0x     | 4.6x     | 4.3x     | 4.0x            | 4.0x           | 4.0x     | 4.0x     | 4.0x     | 4.0x     |            | 4.0x         | - 3.0x                          |
| Total Debt/Total Capitalization     | 50.6%    | 51.3%    | 50.7%    | 49.4%    | 49.5%           | 49.8%          | 49.2%    | 49.8%    | 49.6%    | 49.1%    |            | 50.0%        | - 45.0%                         |

Source: TVA FY14 LRFP as adjusted by TVA.

Credit metric ranges implied for a company with a business risk profile of "Strong" and a financial risk profile of "Significant," for which the expected credit ratings under S&P methodology would be (a) BBB.



#### Discounted Cash Flow Analysis—Rate Mitigation Case (Sale Scenario)

(\$ in millions)

|  | Fiscal Year Ending September 30th, |         |         |         |         |         |         |         |         |         |         |  |  |
|--|------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|--|
|  | 2013A                              | 2014E   | 2015E   | 2016E   | 2017E   | 2018E   | 2019E   | 2020E   | 2021E   | 2022E   | 2023E   |  |  |
| EBITDA   | \$3,055                            | \$3,149 | \$3,688 | \$3,921 | \$4,020 | \$4,331 | \$4,354 | \$4,321 | \$4,346 | \$4,290 | \$4,277 |  |  |
| Less: Depredation & Amortization               | (1,710)                            | (1,791) | (1,749) | (1,903) | (1,956) | (2,014) | (2,087) | (2,098) | (2,146) | (2,097) | (2,060) |  |  |
| EBIT   | \$1,345                            | \$1,358 | \$1,939 | \$2,017 | \$2,064 | \$2,317 | \$2,267 | \$2,223 | \$2,200 | \$2,194 | \$2,218 |  |  |
| Less: Income Taxes @ 35.0%                     | (471)                              | (475)   | (678)   | (706)   | (722)   | (811)   | (793)   | (778)   | (770)   | (768)   | (776)   |  |  |
| EBIT (after tax)                               | \$874                              | \$883   | \$1,260 | \$1,311 | \$1,342 | \$1,506 | \$1,474 | \$1,445 | \$1,430 | \$1,426 | \$1,442 |  |  |
| Plus: Depredation & Amortization               | 2,085                              | 2,187   | 2,178   | 2,398   | 2,482   | 2,594   | 2,728   | 2,769   | 2,834   | 2,809   | 2,780   |  |  |
| Less: Capital Expenditures & Other Investments | (2,655)                            | (3,281) | (3,161) | (2,441) | (2,081) | (2,276) | (2,532) | (2,685) | (3,080) | (3,277) | (3,020) |  |  |
| Plus/(Minus): Working Capital                  | (165)                              | (152)   | (236)   | (235)   | (153)   | (164)   | (152)   | (157)   | (145)   | (138)   | (220)   |  |  |
| Plus/(Minus): Other Items                      | 501                                | 16      | 236     | 262     | 226     | 219     | 249     | 234     | 262     | 279     | 306     |  |  |
| Unlevered Free Cash Flow                       | \$640                              | (\$347) | \$276   | \$1,295 | \$1,815 | \$1,879 | \$1,766 | \$1,605 | \$1,301 | \$1,099 | \$1,287 |  |  |

Discounted Cash Flow Valuation of TVA Using Public Market Terminal Year EBITDA Multiple

| Discount | PV<br>of FCF | + | - · •-   | Terminal V<br>EBITDA Mu |          | = |          | terprise Valu<br>EBITDA Mu |          | 1      | ed Growth F<br>EBITDA Mu |        |
|----------|--------------|---|----------|-------------------------|----------|---|----------|----------------------------|----------|--------|--------------------------|--------|
| Rate     | '14 - '23    |   | 8.125x   | 8.250x                  | 8.375x   |   | 8.125x   | 8.250x                     | 8.375x   | 8.125x | 8.250x                   | 8.375x |
| 5.00%    | \$9,061      |   | \$21,869 | \$22,206                | \$22,542 |   | \$30,930 | \$31,266                   | \$31,603 | 1.3%   | 1.4%                     | 1.4%   |
| 5.25%    | 8,941        |   | 21,355   | 21,684                  | 22,012   |   | 30,296   | 30,624                     | 30,953   | 1.6%   | 1.6%                     | 1.7%   |
| 5.50%    | 8,823        |   | 20,854   | 21,175                  | 21,496   |   | 29,677   | 29,998                     | 30,319   | 1.8%   | 1.9%                     | 1.9%   |
| 5.75%    | 8,707        |   | 20,367   | 20,680                  | 20,993   |   | 29,073   | 29,387                     | 29,700   | 2.1%   | 2.1%                     | 2.2%   |
| 6.00%    | 8,593        |   | 19,891   | 20,197                  | 20,503   |   | 28,484   | 28,790                     | 29,096   | 2.3%   | 2.4%                     | 2.4%   |

Discounted Cash Flow Valuation of TVA Using Public Market Terminal Year P/E Multiple

| Discount | PV<br>of FCF | + | - • •-   | Terminal V<br>7 P/E Multi |          | = |          | erprise Valu<br>7 P/E Multi |          | -      | ed Growth F<br>Z P/E Multi |        |
|----------|--------------|---|----------|---------------------------|----------|---|----------|-----------------------------|----------|--------|----------------------------|--------|
| Rate     | '14 - '23    |   | 14.75x   | 15.00x                    | 15.25x   |   | 14.75x   | 15.00x                      | 15.25x   | 14.75x | 15.00x                     | 15.25x |
| 5.00%    | \$9,061      |   | \$17,214 | \$17,348                  | \$17,481 |   | \$26,275 | \$26,408                    | \$26,542 | 0.4%   | 0.4%                       | 0.5%   |
| 5.25%    | 8,941        |   | 16,809   | 16,940                    | 17,070   |   | 25,750   | 25,881                      | 26,011   | 0.6%   | 0.7%                       | 0.7%   |
| 5.50%    | 8,823        |   | 16,415   | 16,543                    | 16,670   |   | 25,238   | 25,366                      | 25,493   | 0.9%   | 0.9%                       | 0.9%   |
| 5.75%    | 8,707        |   | 16,031   | 16,156                    | 16,280   |   | 24,738   | 24,863                      | 24,987   | 1.1%   | 1.1%                       | 1.2%   |
| 6.00%    | 8,593        |   | 15,657   | 15,779                    | 15,900   |   | 24,250   | 24,372                      | 24,493   | 1.3%   | 1.4%                       | 1.4%   |

Source: TVA FY14 LRFP as adjusted by TVA.

Note: Illustrative valuation based on publicly-traded comparables as of November 14, 2013, applied as if TVA were valued on September 30, 2013 (reflecting TVA's fiscal year end).

### Summary Financial Projections—Rate Mitigation Case (Sale Scenario)

(\$ in millions)

|  |                             |                             |                           | For the                     | Fiscal Year E               | nded Septembe               | r 30,                       |                           |                           |                           | '14 - '23                     |
|--|-----------------------------|-----------------------------|---------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|---------------------------|---------------------------|---------------------------|-------------------------------|
|  | <b>2014</b> E               | 2015E                       | 2016E                     | 2017E                       | 2018E                       | 2019E                       | 2020E                       | 2021E                     | 2022E                     | 2023E                     | CAGR                          |
| GWh Sales<br>% Growth  | 153,638<br><i>(4.1%)</i>    | 154,390<br><i>0.5%</i>      | 155,015<br><i>0.4%</i>    | 155,526<br><i>0.3%</i>      | 156,270<br><i>0.5%</i>      | 156,997<br><i>0.5%</i>      | 158,007<br><i>0.6%</i>      | 158,358<br>0.2%           | 159,047<br><i>0.4%</i>    | 159,831<br><i>0.5%</i>    | 0.4%                          |
| Gross Revenue<br>% Growth  | \$10,380<br><i>(5.5%)</i>   | \$10,589<br><i>2.0%</i>     | \$10,693<br><i>1.0%</i>   | \$11,008<br><i>2.9%</i>     | \$11,452<br><i>4.0%</i>     | \$11,696<br><i>2.1%</i>     | \$11,866<br><i>1.5%</i>     | \$12,139<br><i>2.3%</i>   | \$12,260<br>1.0%          | \$12,549<br><i>2.4%</i>   | 2.1%                          |
| Less: Fuel Cost  | (3,498)                     | (3,595)                     | (3,481)                   | (3,583)                     | (3,728)                     | (3,847)                     | (3,996)                     | (4,148)                   | (4,267)                   | (4,451)                   |                               |
| Net Revenues<br>% Growth   | \$6,882<br><i>(3.1%)</i>    | \$6,994<br><i>1.6%</i>      | \$7,212<br><i>3.1%</i>    | \$7,425<br><i>2.9%</i>      | \$7,724<br><i>4.0%</i>      | \$7,848<br><i>1.6%</i>      | \$7,870<br>0.3%             | \$7,991<br><i>1.5%</i>    | \$7,993<br>0.0%           | \$8,098<br>1.3%           | 1.8%                          |
| Less: Non-fuel O&M<br>Less: Other Taxes<br>Plus: Other Income                                  | (\$3,260)<br>(513)<br>41    | (\$2,830)<br>(513)<br>36    | (\$2,810)<br>(518)<br>36  | (\$2,903)<br>(537)<br>36    | (\$2,872)<br>(557)<br>36    | (\$2,955)<br>(576)<br>36    | (\$2,998)<br>(587)<br>36    | (\$3,084)<br>(598)<br>37  | (\$3,125)<br>(614)<br>36  | (\$3,230)<br>(626)<br>36  | (0.1%)                        |
| EBITDA<br>% Margin   | \$3,149<br><i>45.8%</i>     | \$3,688<br><i>52.7%</i>     | \$3,921<br>54.4%          | \$4,020<br><i>54.2%</i>     | \$4,331<br>56.1%            | \$4,354<br><i>55.5%</i>     | \$4,321<br><i>54.9%</i>     | \$4,346<br><i>54.4%</i>   | \$4,290<br><i>53.7%</i>   | \$4,277<br><i>52.8%</i>   | 3.5%                          |
| Less: D&A  | (1,791)                     | (1,749)                     | (1,903)                   | (1,956)                     | (2,014)                     | (2,087)                     | (2,098)                     | (2,146)                   | (2,097)                   | (2,060)                   |                               |
| EBIT   | \$1,358                     | \$1,939                     | \$2,017                   | \$2,064                     | \$2,317                     | \$2,267                     | \$2,223                     | \$2,200                   | \$2,194                   | \$2,218                   | 5.6%                          |
| Less: Net Interest Expense   | (732)                       | (729)                       | (870)                     | (932)                       | (923)                       | (919)                       | (910)                       | (914)                     | (917)                     | (910)                     |                               |
| Net Income   | \$407                       | \$786                       | \$745                     | \$736                       | \$906                       | \$876                       | \$853                       | \$835                     | \$830                     | \$850                     | 8.5%                          |
| Total Debt<br>Common Equity  | \$16,993<br>16,453          | \$17,672<br>16,728          | \$17,447<br>16,989        | \$16,737<br>17,246          | \$16,567<br>17,064          | \$16,487<br>16,870          | \$16,327<br>17,169          | \$16,402<br>16,961        | \$16,457<br>17,252        | \$16,329<br>17,549        |                               |
| Total Capitalization   | \$33,446                    | \$34,400                    | \$34,436                  | \$33,983                    | \$33,631                    | \$33,357                    | \$33,496                    | \$33,363                  | \$33,709                  | \$33,878                  |                               |
| Cash Flow from Operations<br>Capital Expenditures & Other<br>Cash Flow from Operations - Capex | \$2,459<br>(3,281)<br>(822) | \$2,964<br>(3,161)<br>(197) | \$3,170<br>(2,441)<br>729 | \$3,290<br>(2,081)<br>1,209 | \$3,555<br>(2,276)<br>1,279 | \$3,701<br>(2,532)<br>1,169 | \$3,698<br>(2,685)<br>1,013 | \$3,786<br>(3,080)<br>707 | \$3,780<br>(3,277)<br>502 | \$3,716<br>(3,020)<br>695 | '14 – '23<br>Total<br>\$6,285 |
| Net PP&E   | \$30,633                    | \$31,813                    | \$30,666                  | \$30,676                    | \$30,665                    | \$30,853                    | \$31,081                    | \$31,512                  | \$32,207                  | \$32,500                  |                               |
| Return on Ratebase Equity  | 2.7%                        | 5.1%                        | 4.8%                      | 4.8%                        | 5.9%                        | 5.8%                        | 5.6%                        | 5.5%                      | 5.4%                      | 5.5%                      |                               |

Source: TVA FY14 LRFP as adjusted by TVA.

2

### Summary Cash Flow and Credit Profile—Rate Mitigation Case (Sale Scenario)

(\$ in millions)

TVA

|                                     |          |          |          | For      | the Fiscal Year | r Ended Septer | nber 30, |          |          |          | '14 - '23  |          |                                    |
|-------------------------------------|----------|----------|----------|----------|-----------------|----------------|----------|----------|----------|----------|------------|----------|------------------------------------|
| CASH FLOW PROFILE                   | 2014E    | 2015E    | 2016E    | 2017E    | 2018E           | 2019E          | 2020E    | 2021E    | 2022E    | 2023E    | Total      |          |                                    |
| Net Income                          | \$407    | \$786    | \$745    | \$736    | \$906           | \$876          | \$853    | \$835    | \$830    | \$850    | \$7,825    |          |                                    |
| Depreciation & Amortization         | 2,187    | 2,178    | 2,398    | 2,482    | 2,594           | 2,728          | 2,769    | 2,834    | 2,809    | 2,780    | 25,757     |          |                                    |
| Working Capital and Other           | (136)    | 0        | 27       | 73       | 55              | 97             | 76       | 117      | 141      | 87       | 538        |          |                                    |
| Cash Flow from Operations           | \$2,459  | \$2,964  | \$3,170  | \$3,290  | \$3,555         | \$3,701        | \$3,698  | \$3,786  | \$3,780  | \$3,716  | \$34,121   |          |                                    |
| Base Capital Expenditures           | (946)    | (1,027)  | (1,032)  | (1,106)  | (1,037)         | (1,026)        | (1,042)  | (1,206)  | (1,290)  | (1,091)  | (\$10,803) |          |                                    |
| Incremental Capital Expenditures    | (1,905)  | (1,667)  | (1,015)  | (625)    | (730)           | (1,014)        | (1,049)  | (1,135)  | (1,393)  | (1,262)  | (11,796)   |          |                                    |
| Nudear Fuel & Other                 | (431)    | (468)    | (395)    | (350)    | (508)           | (492)          | (594)    | (738)    | (594)    | (668)    | (5,237)    |          |                                    |
| Free Cash Flow                      | (\$822)  | (\$197)  | \$729    | \$1,209  | \$1,279         | \$1,169        | \$1,013  | \$707    | \$502    | \$695    | \$6,285    |          |                                    |
| Dividends                           | (265)    | (511)    | (485)    | (478)    | (589)           | (570)          | (555)    | (543)    | (539)    | (552)    | (\$5,087)  |          |                                    |
| Common Equity Issuanæ/ (Repurchase) | 0        | 0        | 0        | 0        | (500)           | (500)          | 0        | (500)    | 0        | 0        | (1,500)    |          |                                    |
| Net External Financing Requirements | \$1,087  | \$708    | (\$245)  | (\$731)  | (\$190)         | (\$99)         | (\$459)  | \$336    | \$37     | (\$143)  | \$302      |          |                                    |
|                                     |          |          |          |          |                 |                |          |          |          |          |            |          |                                    |
| CREDIT PROFILE                      |          |          |          |          |                 |                |          |          |          |          |            |          |                                    |
| Cash & Cash Equivalents             | \$1,187  | \$1,137  | \$1,137  | \$1,137  | \$1,137         | \$1,137        | \$1,417  | \$1,137  | \$1,137  | \$1,137  |            | Credit I | Rating/Outlook                     |
| Total Debt                          | 16,993   | 17,672   | 17,447   | 16,737   | 16,567          | 16,487         | 16,327   | 16,402   | 16,457   | 16,329   |            | S&P      | BBB+/Stable                        |
| Common Equity                       | 16,453   | 16,728   | 16,989   | 17,246   | 17,064          | 16,870         | 17,169   | 16,961   | 17,252   | 17,549   |            | Moody's  | Baa1/Stable                        |
| Total Capitalization                | \$33,446 | \$34,400 | \$34,436 | \$33,983 | \$33,631        | \$33,357       | \$33,496 | \$33,363 | \$33,709 | \$33,878 |            |          |                                    |
|                                     |          |          |          |          |                 |                |          |          |          |          |            |          | e Credit Statistics <sup>(a)</sup> |
|                                     |          |          |          |          |                 |                |          |          |          |          |            | Si       | gnificant                          |
| FFO/Interest                        | 4.6x     | 5.4x     | 4.9x     | 4.7x     | 5.0x            | 5.2x           | 5.2x     | 5.3x     | 5.3x     | 5.3x     |            | 3.0x     | - 3.5x                             |
| FFO/Total Debt                      | 15.4%    | 18.1%    | 19.5%    | 20.6%    | 22.4%           | 23.4%          | 23.6%    | 24.0%    | 23.8%    | 24.1%    |            | 20.0%    | - 30.0%                            |
| Total Debt/EBITDA                   | 5.4x     | 4.8x     | 4.5x     | 4.2x     | 3.8x            | 3.8x           | 3.8x     | 3.8x     | 3.8x     | 3.8x     |            | 4.0x     | - 3.0x                             |
| Total Debt/Total Capitalization     | 50.8%    | 51.4%    | 50.7%    | 49.3%    | 49.3%           | 49.4%          | 48.7%    | 49.2%    | 48.8%    | 48.2%    |            | 50.0%    | - 45.0%                            |

Source: TVA FY14 LRFP as adjusted by TVA.

Credit metric ranges implied for a company with a business risk profile of "Strong" and a financial risk profile of "Significant," for which the expected credit ratings under S&P methodology would be (a) BBB.



#### **3** IOU Returns Rate Path Case

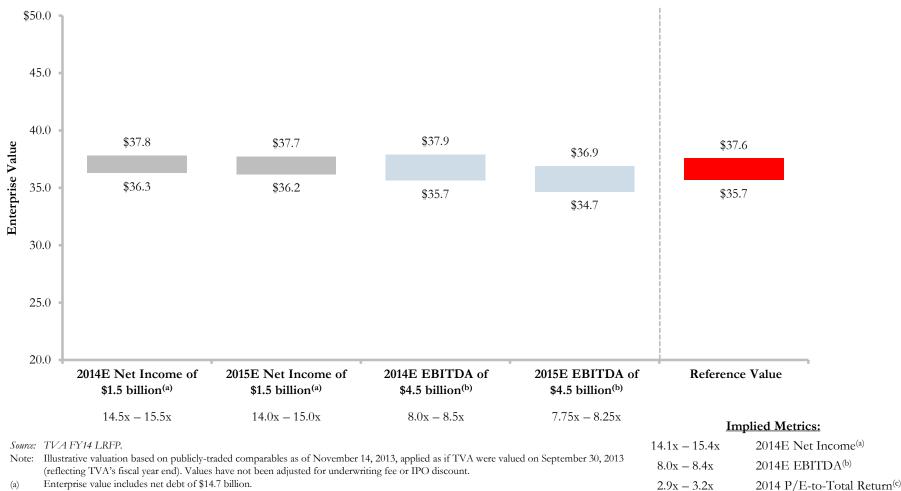
4.4%

Dividend Yield<sup>(d)</sup>

3

# Comparable Companies Multiples Analysis—IOU Returns Rate Path Case (IPO Scenario)

(\$ in billions)



(b) EBITDA adjusted to remove amortization for regulatory assets, capital leases, ARO accretion and debt reacquisition costs.

(c) Based on long-term earnings growth rate of 0.4% and dividend yield of 4.4%.

(d) Based on 2014E dividend of \$969 million and 2014E equity of \$21.9 billion.

### Discounted Cash Flow Analysis—IOU Returns Rate Path Case (IPO Scenario)

| (\$ in millions)                               |         |         |         |         | Fiscal Year | Ending Sepi | tember 30th, |         |         |         |         |         |
|--|---------|---------|---------|---------|-------------|-------------|--------------|---------|---------|---------|---------|---------|
| (*   | 2013A   | 2014E   | 2015E   | 2016E   | 2017E       | 2018E       | 2019E        | 2020E   | 2021E   | 2022E   | 2023E   | TY      |
| EBITDA   | \$3,055 | \$4,787 | \$4,796 | \$5,163 | \$5,277     | \$5,316     | \$5,354      | \$5,355 | \$5,403 | \$5,367 | \$5,413 | \$5,548 |
| Less: Depredation & Amortization               | (1,710) | (1,791) | (1,749) | (1,903) | (1,956)     | (2,014)     | (2,087)      | (2,098) | (2,146) | (2,097) | (2,060) |         |
| EBIT   | \$1,345 | \$2,996 | \$3,047 | \$3,260 | \$3,321     | \$3,302     | \$3,267      | \$3,256 | \$3,257 | \$3,270 | \$3,353 |         |
| Less: Income Taxes @ 35.0%                     | (471)   | (1,048) | (1,066) | (1,141) | (1,162)     | (1,156)     | (1,144)      | (1,140) | (1,140) | (1,145) | (1,174) |         |
| EBIT (after tax)                               | \$874   | \$1,947 | \$1,981 | \$2,119 | \$2,159     | \$2,146     | \$2,124      | \$2,117 | \$2,117 | \$2,126 | \$2,180 |         |
| Plus: Depredation & Amortization               | 2,085   | 2,187   | 2,178   | 2,398   | 2,482       | 2,594       | 2,728        | 2,769   | 2,834   | 2,809   | 2,780   |         |
| Less: Capital Expenditures & Other Investments | (2,655) | (3,281) | (3,161) | (2,441) | (2,081)     | (2,276)     | (2,532)      | (2,685) | (3,080) | (3,277) | (3,020) |         |
| Plus/(Minus): Working Capital                  | (165)   | (152)   | (236)   | (235)   | (153)       | (196)       | (186)        | (193)   | (192)   | (181)   | (259)   |         |
| Plus/(Minus): Other Items                      | 501     | 193     | 236     | 262     | 226         | 219         | 249          | 234     | 262     | 279     | 306     |         |
| Unlevered Free Cash Flow                       | \$640   | \$895   | \$997   | \$2,102 | \$2,632     | \$2,486     | \$2,383      | \$2,241 | \$1,941 | \$1,755 | \$1,986 |         |

Discounted Cash Flow Valuation of TVA Using Public Market Terminal Year EBITDA Multiple

| Discount | PV<br>of FCF | + | - · •-   | Terminal V<br>EBITDA Mu |          | = |          | terprise Val<br>EBITDA Mu |          | 1      | ed Growth H<br>EBITDA Mu |        |
|----------|--------------|---|----------|-------------------------|----------|---|----------|---------------------------|----------|--------|--------------------------|--------|
| Rate     | '14 - '23    |   | 8.125x   | 8.250x                  | 8.375x   |   | 8.125x   | 8.250x                    | 8.375x   | 8.125x | 8.250x                   | 8.375x |
| 5.00%    | \$15,084     |   | \$27,676 | \$28,101                | \$28,527 |   | \$42,760 | \$43,186                  | \$43,611 | 0.6%   | 0.6%                     | 0.7%   |
| 5.25%    | 14,906       |   | 27,025   | 27,441                  | 27,857   |   | 41,931   | 42,347                    | 42,762   | 0.8%   | 0.9%                     | 0.9%   |
| 5.50%    | 14,730       |   | 26,391   | 26,798                  | 27,204   |   | 41,122   | 41,528                    | 41,934   | 1.0%   | 1.1%                     | 1.2%   |
| 5.75%    | 14,558       |   | 25,774   | 26,171                  | 26,567   |   | 40,332   | 40,728                    | 41,125   | 1.3%   | 1.4%                     | 1.4%   |
| 6.00%    | 14,388       |   | 25,173   | 25,560                  | 25,947   |   | 39,561   | 39,948                    | 40,335   | 1.5%   | 1.6%                     | 1.7%   |

Discounted Cash Flow Valuation of TVA Using Public Market Terminal Year P/E Multiple

| Discount | PV<br>of FCF | + |          | Terminal V<br>7 P/E Multi |          | = |          | erprise Valu<br>7 P/E Multi |          | 1      | ed Growth F<br>Z P/E Multi |        |
|----------|--------------|---|----------|---------------------------|----------|---|----------|-----------------------------|----------|--------|----------------------------|--------|
| Rate     | '14 - '23    |   | 14.75x   | 15.00x                    | 15.25x   |   | 14.75x   | 15.00x                      | 15.25x   | 14.75x | 15.00x                     | 15.25x |
| 5.00%    | \$15,084     |   | \$23,903 | \$24,145                  | \$24,388 |   | \$38,987 | \$39,230                    | \$39,472 | -0.1%  | 0.0%                       | 0.0%   |
| 5.25%    | 14,906       |   | 23,341   | 23,578                    | 23,814   |   | 38,247   | 38,484                      | 38,720   | 0.1%   | 0.2%                       | 0.2%   |
| 5.50%    | 14,730       |   | 22,794   | 23,025                    | 23,256   |   | 37,524   | 37,755                      | 37,986   | 0.4%   | 0.4%                       | 0.5%   |
| 5.75%    | 14,558       |   | 22,261   | 22,486                    | 22,712   |   | 36,818   | 37,044                      | 37,270   | 0.6%   | 0.7%                       | 0.7%   |
| 6.00%    | 14,388       |   | 21,741   | 21,962                    | 22,182   |   | 36,129   | 36,350                      | 36,570   | 0.9%   | 0.9%                       | 1.0%   |

Source: TVA FY14 LRFP.

Note: Illustrative valuation based on publicly-traded comparables as of November 14, 2013, applied as if TVA were valued on September 30, 2013 (reflecting TVA's fiscal year end). Values have not been \_\_\_\_\_\_ adjusted for underwriting fee or IPO discount.

### Summary IPO Financial Projections—IOU Returns Rate Path Case (IPO Scenario)

(\$ in millions)

| (\$ in millions)                  |           |           |           | For the   | Fiscal Year E | nded Septembe | r 30,     |           |           |           | '14 - '23 |
|-----------------------------------|-----------|-----------|-----------|-----------|---------------|---------------|-----------|-----------|-----------|-----------|-----------|
|                                   | 2014E     | 2015E     | 2016E     | 2017E     | 2018E         | 2019E         | 2020E     | 2021E     | 2022E     | 2023E     | CAGR      |
| GWh Sales                         | 153,638   | 154,390   | 155,015   | 155,526   | 156,270       | 156,997       | 158,007   | 158,358   | 159,047   | 159,831   | 0.4%      |
| % Growth                          | (4.1%)    | 0.5%      | 0.4%      | 0.3%      | 0.5%          | 0.5%          | 0.6%      | 0.2%      | 0.4%      | 0.5%      |           |
| Gross Revenue                     | \$12,194  | \$12,051  | \$12,289  | \$12,619  | \$12,790      | \$13,048      | \$13,259  | \$13,566  | \$13,715  | \$14,078  | 1.6%      |
| % Growth                          | 11.0%     | (1.2%)    | 2.0%      | 2.7%      | 1.4%          | 2.0%          | 1.6%      | 2.3%      | 1.1%      | 2.6%      |           |
| Less: Fuel Cost                   | (3,498)   | (3,595)   | (3,481)   | (3,583)   | (3,728)       | (3,847)       | (3,996)   | (4,148)   | (4,267)   | (4,451)   |           |
| Net Revenues                      | \$8,696   | \$8,457   | \$8,809   | \$9,035   | \$9,062       | \$9,201       | \$9,263   | \$9,418   | \$9,447   | \$9,627   | 1.1%      |
| % Growth                          | 22.5%     | (2.8%)    | 4.2%      | 2.6%      | 0.3%          | 1.5%          | 0.7%      | 1.7%      | 0.3%      | 1.9%      |           |
| Less: Non-fuel O&M                | (\$3,437) | (\$3,184) | (\$3,164) | (\$3,257) | (\$3,226)     | (\$3,309)     | (\$3,352) | (\$3,438) | (\$3,479) | (\$3,584) | 0.5%      |
| Less: Other Taxes                 | (513)     | (513)     | (518)     | (537)     | (557)         | (574)         | (594)     | (615)     | (637)     | (668)     |           |
| Plus: Other Income                | 41        | 36        | 36        | 36        | 36            | 36            | 38        | 39        | 36        | 38        |           |
| EBITDA                            | \$4,787   | \$4,796   | \$5,163   | \$5,277   | \$5,316       | \$5,354       | \$5,355   | \$5,403   | \$5,367   | \$5,413   | 1.4%      |
| % Margin                          | 55.0%     | 56.7%     | 58.6%     | 58.4%     | 58.7%         | 58.2%         | 57.8%     | 57.4%     | 56.8%     | 56.2%     |           |
| Less: D&A                         | (1,791)   | (1,749)   | (1,903)   | (1,956)   | (2,014)       | (2,087)       | (2,098)   | (2,146)   | (2,097)   | (2,060)   |           |
| EBIT                              | \$2,996   | \$3,047   | \$3,260   | \$3,321   | \$3,302       | \$3,267       | \$3,256   | \$3,257   | \$3,270   | \$3,353   | 1.3%      |
| Less: Net Interest Expense        | (702)     | (685)     | (865)     | (938)     | (946)         | (931)         | (931)     | (933)     | (925)     | (983)     |           |
| Net Income                        | \$1,491   | \$1,535   | \$1,557   | \$1,549   | \$1,531       | \$1,518       | \$1,511   | \$1,510   | \$1,524   | \$1,541   | 0.4%      |
| Total Debt                        | \$16,437  | \$16,853  | \$17,345  | \$16,850  | \$16,994      | \$16,723      | \$16,723  | \$16,754  | \$16,610  | \$17,702  |           |
| Common Equity                     | 16,832    | 17,369    | 16,914    | 16,956    | 16,492        | 16,523        | 17,052    | 16,581    | 17,115    | 17,154    |           |
| Total Capitalization              | \$33,269  | \$34,223  | \$34,259  | \$33,806  | \$33,486      | \$33,247      | \$33,776  | \$33,335  | \$33,724  | \$34,856  |           |
| Cash Flow from Operations         | \$3,719   | \$3,713   | \$3,981   | \$4,103   | \$4,148       | \$4,310       | \$4,321   | \$4,414   | \$4,431   | \$4,367   | '14 – '23 |
| Capital Expenditures & Other      | (3,281)   | (3,161)   | (2,441)   | (2,081)   | (2,276)       | (2,532)       | (2,685)   | (3,080)   | (3,277)   | (3,020)   | Total     |
| Cash Flow from Operations - Capex | 438       | 551       | 1,540     | 2,022     | 1,872         | 1,777         | 1,636     | 1,334     | 1,154     | 1,347     | \$13,672  |
| Net PP&E                          | \$30,633  | \$31,813  | \$30,666  | \$30,676  | \$30,665      | \$30,853      | \$31,081  | \$31,512  | \$32,207  | \$32,500  |           |
| Return on Ratebase Equity         | 10.0%     | 10.0%     | 10.0%     | 10.0%     | 10.0%         | 10.0%         | 10.0%     | 10.0%     | 10.0%     | 10.0%     |           |

Source: TVA FY14 LRFP.

3

### Summary Cash Flow and Credit Profile—IOU Returns Rate Path Case (IPO Scenario)

(\$ in millions)

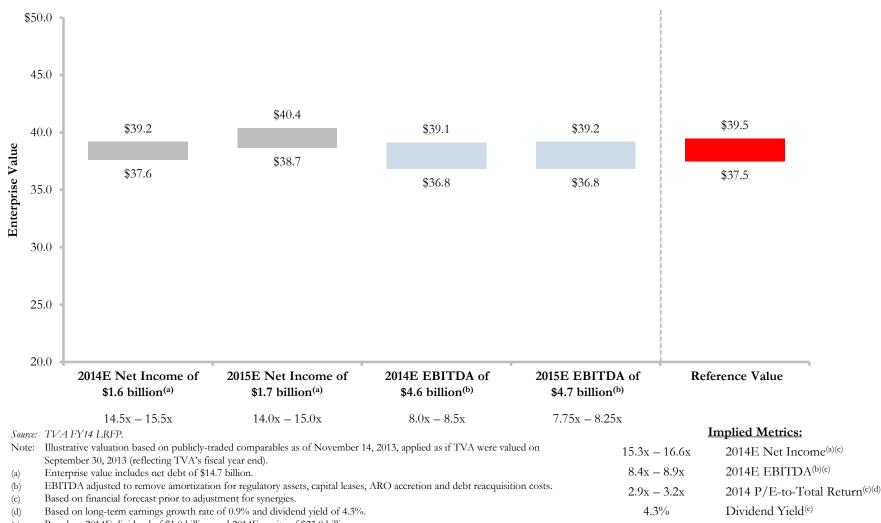
|                                     |          |          |          | For      | the Fiscal Year | r Ended Septer | nber 30, |          |          |          | '14 - '23  |   |
|-------------------------------------|----------|----------|----------|----------|-----------------|----------------|----------|----------|----------|----------|------------|---|
| CASH FLOW PROFILE                   | 2014E    | 2015E    | 2016E    | 2017E    | 2018E           | 2019E          | 2020E    | 2021E    | 2022E    | 2023E    | Total      |   |
| Net Income                          | \$1,491  | \$1,535  | \$1,557  | \$1,549  | \$1,531         | \$1,518        | \$1,511  | \$1,510  | \$1,524  | \$1,541  | \$15,267   | -   |
| Depredation & Amortization          | 2,187    | 2,178    | 2,398    | 2,482    | 2,594           | 2,728          | 2,769    | 2,834    | 2,809    | 2,780    | 25,757     |   |
| Working Capital and Other           | 41       | 0        | 27       | 73       | 23              | 64             | 41       | 70       | 98       | 47       | 483        | _   |
| Cash Flow from Operations           | \$3,719  | \$3,713  | \$3,981  | \$4,103  | \$4,148         | \$4,310        | \$4,321  | \$4,414  | \$4,431  | \$4,367  | \$41,508   | _   |
| Base Capital Expenditures           | (946)    | (1,027)  | (1,032)  | (1,106)  | (1,037)         | (1,026)        | (1,042)  | (1,206)  | (1,290)  | (1,091)  | (\$10,803) |   |
| Incremental Capital Expenditures    | (1,905)  | (1,667)  | (1,015)  | (625)    | (730)           | (1,014)        | (1,049)  | (1,135)  | (1,393)  | (1,262)  | (11,796)   |   |
| Nudear Fuel & Other                 | (431)    | (468)    | (395)    | (350)    | (508)           | (492)          | (594)    | (738)    | (594)    | (668)    | (5,237)    | _   |
| Free Cash Flow                      | \$438    | \$551    | \$1,540  | \$2,022  | \$1,872         | \$1,777        | \$1,636  | \$1,334  | \$1,154  | \$1,347  | \$13,672   | -   |
| Dividends                           | (969)    | (998)    | (1,012)  | (1,007)  | (995)           | (987)          | (982)    | (982)    | (991)    | (1,001)  | (\$9,924)  |   |
| Common Equity Issuance/(Repurchase) | 0        | 0        | (1,000)  | (500)    | (1,000)         | (500)          | 0        | (1,000)  | 0        | (500)    | (4,500)    | _   |
| Net External Financing Requirements | \$531    | \$446    | \$472    | (\$516)  | \$124           | (\$290)        | (\$654)  | \$647    | (\$163)  | \$155    | \$752      | -   |
|                                     |          |          |          |          |                 |                |          |          |          |          |            |   |
|                                     |          |          |          |          |                 |                |          |          |          |          |            |   |
| CREDIT PROFILE                      |          |          |          |          |                 |                |          |          |          |          |            |   |
| Cash & Cash Equivalents             | \$1,187  | \$1,137  | \$1,137  | \$1,137  | \$1,137         | \$1,137        | \$1,772  | \$1,137  | \$1,137  | \$2,060  |            | Credit Rating/Outlook                       |
| Total Debt                          | 16,437   | 16,853   | 17,345   | 16,850   | 16,994          | 16,723         | 16,723   | 16,754   | 16,610   | 17,702   |            | S&P BBB+/Stable                             |
| Common Equity                       | 16,832   | 17,369   | 16,914   | 16,956   | 16,492          | 16,523         | 17,052   | 16,581   | 17,115   | 17,154   |            | Moody's Baa1/Stable                         |
| Total Capitalization                | \$33,269 | \$34,223 | \$34,259 | \$33,806 | \$33,486        | \$33,247       | \$33,776 | \$33,335 | \$33,724 | \$34,856 |            |   |
|                                     |          |          |          |          |                 |                |          |          |          |          |            | Indicative Credit Statistics <sup>(a)</sup> |
|                                     |          |          |          |          |                 |                |          |          |          |          |            | Significant                                 |
| FFO/Interest                        | 6.5x     | 6.8x     | 5.9x     | 5.5x     | 5.6x            | 5.8x           | 5.8x     | 5.9x     | 6.0x     | 5.7x     |            | 3.0x - 3.5x                                 |
| FFO/Total Debt                      | 23.6%    | 23.4%    | 24.3%    | 25.3%    | 25.6%           | 26.9%          | 27.0%    | 27.5%    | 27.8%    | 26.1%    |            | 20.0% - 30.0%                               |
| Total Debt/EBITDA                   | 3.4x     | 3.5x     | 3.4x     | 3.2x     | 3.2x            | 3.1x           | 3.1x     | 3.1x     | 3.1x     | 3.3x     |            | 4.0x - 3.0x                                 |
| Total Debt/Total Capitalization     | 49.4%    | 49.2%    | 50.6%    | 49.8%    | 50.7%           | 50.3%          | 49.5%    | 50.3%    | 49.3%    | 50.8%    |            | 50.0% - 45.0%                               |

Source: TVA FY14 LRFP. Values have not been adjusted for underwriting fee or IPO discount.

Credit metric ranges implied for a company with a business risk profile of "Strong" and a financial risk profile of "Significant," for which the expected credit ratings under S&P methodology would be (a) BBB.

# Comparable Company Multiples Analysis—IOU Returns Rate Path Case (Sale Scenario)

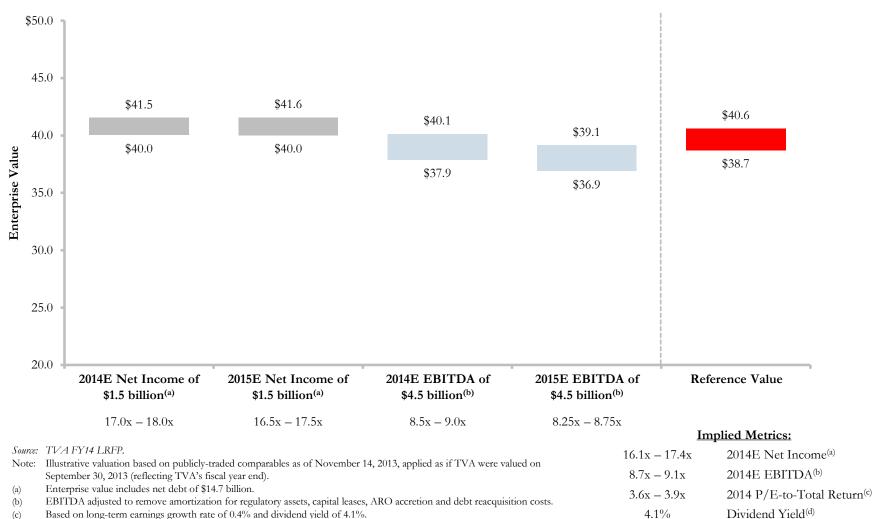
(\$ in billions)



(e) Based on 2014E dividend of \$1.0 billion and 2014E equity of \$23.8 billion.

# Precedent Transaction Multiples Analysis—IOU Returns Rate Path Case (Sale Scenario)

(\$ in billions)



(d) Based on 2014E dividend of \$1.0 billion and 2014E equity of \$25.0 billion.

### Discounted Cash Flow Analysis—IOU Returns Rate Path Case (Sale Scenario)

| e e e e marrie)                                |         |         |         |         | Fiscal Year | • Ending Sep. | tember 30th, |         |         |         |         |   |
|--|---------|---------|---------|---------|-------------|---------------|--------------|---------|---------|---------|---------|---|
| (\$ in millions)                               | 2013A   | 2014E   | 2015E   | 2016E   | 2017E       | 2018E         | 2019E        | 2020E   | 2021E   | 2022E   | 2023E   |   |
| EBITDA   | \$3,055 | \$4,931 | \$5,073 | \$5,437 | \$5,547     | \$5,583       | \$5,618      | \$5,615 | \$5,660 | \$5,621 | \$5,664 | - |
| Less: Depredation & Amortization               | (1,710) | (1,791) | (1,749) | (1,903) | (1,956)     | (2,014)       | (2,087)      | (2,098) | (2,146) | (2,097) | (2,060) |   |
| EBIT   | \$1,345 | \$3,139 | \$3,324 | \$3,533 | \$3,591     | \$3,569       | \$3,531      | \$3,517 | \$3,514 | \$3,524 | \$3,604 |   |
| Less: Income Taxes @ 35.0%                     | (471)   | (1,099) | (1,163) | (1,237) | (1,257)     | (1,249)       | (1,236)      | (1,231) | (1,230) | (1,233) | (1,261) |   |
| EBIT (after tax)                               | \$874   | \$2,041 | \$2,160 | \$2,296 | \$2,334     | \$2,320       | \$2,295      | \$2,286 | \$2,284 | \$2,291 | \$2,343 |   |
| Plus: Depredation & Amortization               | 2,085   | 2,187   | 2,178   | 2,398   | 2,482       | 2,594         | 2,728        | 2,769   | 2,834   | 2,809   | 2,780   |   |
| Less: Capital Expenditures & Other Investments | (2,655) | (3,281) | (3,161) | (2,441) | (2,081)     | (2,276)       | (2,532)      | (2,685) | (3,080) | (3,277) | (3,020) |   |
| Plus/(Minus): Working Capital                  | (165)   | (152)   | (236)   | (235)   | (153)       | (196)         | (186)        | (193)   | (192)   | (181)   | (259)   |   |
| Plus/(Minus): Other Items                      | 501     | 16      | 236     | 262     | 226         | 219           | 249          | 234     | 262     | 279     | 306     |   |
| Unlevered Free Cash Flow                       | \$640   | \$811   | \$1,177 | \$2,280 | \$2,808     | \$2,660       | \$2,554      | \$2,411 | \$2,108 | \$1,920 | \$2,148 |   |
|  |         | -       | -       |         |             | -             |              | -       |         |         |         |   |

Discounted Cash Flow Valuation of TVA Using Public Market Terminal Year EBITDA Multiple

| Discount | PV<br>of FCF | + | - • •-   | Terminal V<br>EBITDA Mu |          | = |          | erprise Valu<br>EBITDA Mu |          | 1      | ed Growth I<br>EBITDA M |        |
|----------|--------------|---|----------|-------------------------|----------|---|----------|---------------------------|----------|--------|-------------------------|--------|
| Rate     | '14 - '23    |   | 8.125x   | 8.250x                  | 8.375x   |   | 8.125x   | 8.250x                    | 8.375x   | 8.125x | 8.250x                  | 8.375x |
| 5.00%    | \$16,197     |   | \$28,956 | \$29,402                | \$29,847 |   | \$45,153 | \$45,599                  | \$46,044 | 0.4%   | 0.5%                    | 0.6%   |
| 5.25%    | 16,004       |   | 28,276   | 28,711                  | 29,146   |   | 44,280   | 44,715                    | 45,150   | 0.7%   | 0.7%                    | 0.8%   |
| 5.50%    | 15,814       |   | 27,613   | 28,038                  | 28,463   |   | 43,427   | 43,852                    | 44,277   | 0.9%   | 1.0%                    | 1.0%   |
| 5.75%    | 15,628       |   | 26,967   | 27,382                  | 27,797   |   | 42,595   | 43,010                    | 43,425   | 1.1%   | 1.2%                    | 1.3%   |
| 6.00%    | 15,445       |   | 26,338   | 26,743                  | 27,148   |   | 41,783   | 42,188                    | 42,593   | 1.4%   | 1.4%                    | 1.5%   |

Discounted Cash Flow Valuation of TVA Using Public Market Terminal Year P/E Multiple

| Discount | PV<br>of FCF | + | - • •-   | Terminal V<br>7 P/E Multi |          | = |          | erprise Valu<br>7 P/E Multi |          | 1      | ed Growth F<br>Z P/E Multi |        |
|----------|--------------|---|----------|---------------------------|----------|---|----------|-----------------------------|----------|--------|----------------------------|--------|
| Rate     | '14 - '23    |   | 14.75x   | 15.00x                    | 15.25x   |   | 14.75x   | 15.00x                      | 15.25x   | 14.75x | 15.00x                     | 15.25x |
| 5.00%    | \$16,197     |   | \$25,293 | \$25,564                  | \$25,834 |   | \$41,490 | \$41,760                    | \$42,030 | -0.2%  | -0.2%                      | -0.1%  |
| 5.25%    | 16,004       |   | 24,699   | 24,963                    | 25,227   |   | 40,703   | 40,966                      | 41,230   | 0.0%   | 0.1%                       | 0.1%   |
| 5.50%    | 15,814       |   | 24,120   | 24,377                    | 24,635   |   | 39,934   | 40,192                      | 40,449   | 0.3%   | 0.3%                       | 0.4%   |
| 5.75%    | 15,628       |   | 23,556   | 23,807                    | 24,059   |   | 39,183   | 39,435                      | 39,687   | 0.5%   | 0.6%                       | 0.6%   |
| 6.00%    | 15,445       |   | 23,006   | 23,252                    | 23,497   |   | 38,451   | 38,696                      | 38,942   | 0.7%   | 0.8%                       | 0.9%   |

Source: TVA FY14 LRFP.

Note: Illustrative valuation based on publicly-traded comparables as of November 14, 2013, applied as if TVA were valued on September 30, 2013 (reflecting TVA's fiscal year end).

### Summary Financial Projections—IOU Returns Rate Path Case (Sale Scenario)

(\$ in millions)

| (\$ in millions)                  |               |           |           | For the   | Fiscal Year E | nded Septembe | r 30,     |           |           |           | '14 - '23 |
|-----------------------------------|---------------|-----------|-----------|-----------|---------------|---------------|-----------|-----------|-----------|-----------|-----------|
|                                   | <b>2014</b> E | 2015E     | 2016E     | 2017E     | 2018E         | 2019E         | 2020E     | 2021E     | 2022E     | 2023E     | CAGR      |
| GWh Sales                         | 153,638       | 154,390   | 155,015   | 155,526   | 156,270       | 156,997       | 158,007   | 158,358   | 159,047   | 159,831   | 0.4%      |
| % Growth                          | (4.1%)        | 0.5%      | 0.4%      | 0.3%      | 0.5%          | 0.5%          | 0.6%      | 0.2%      | 0.4%      | 0.5%      |           |
| Gross Revenue                     | \$12,161      | \$11,974  | \$12,209  | \$12,535  | \$12,703      | \$12,957      | \$13,165  | \$13,469  | \$13,615  | \$13,975  | 1.6%      |
| % Growth                          | 10.7%         | (1.5%)    | 2.0%      | 2.7%      | 1.3%          | 2.0%          | 1.6%      | 2.3%      | 1.1%      | 2.6%      |           |
| Less: Fuel Cost                   | (3,498)       | (3,595)   | (3,481)   | (3,583)   | (3,728)       | (3,847)       | (3,996)   | (4,148)   | (4,267)   | (4,451)   |           |
| Net Revenues                      | \$8,663       | \$8,379   | \$8,728   | \$8,952   | \$8,975       | \$9,110       | \$9,169   | \$9,321   | \$9,347   | \$9,523   | 1.1%      |
| % Growth                          | 22.0%         | (3.3%)    | 4.2%      | 2.6%      | 0.3%          | 1.5%          | 0.6%      | 1.7%      | 0.3%      | 1.9%      |           |
| Less: Non-fuel O&M                | (\$3,260)     | (\$2,830) | (\$2,810) | (\$2,903) | (\$2,872)     | (\$2,955)     | (\$2,998) | (\$3,084) | (\$3,125) | (\$3,230) | (0.1%)    |
| Less: Other Taxes                 | (513)         | (513)     | (518)     | (537)     | (557)         | (574)         | (594)     | (615)     | (637)     | (668)     |           |
| Plus: Other Income                | 41            | 36        | 36        | 36        | 36            | 36            | 38        | 39        | 36        | 38        |           |
| EBITDA                            | \$4,931       | \$5,073   | \$5,437   | \$5,547   | \$5,583       | \$5,618       | \$5,615   | \$5,660   | \$5,621   | \$5,664   | 1.6%      |
| % Margin                          | 56.9%         | 60.5%     | 62.3%     | 62.0%     | 62.2%         | 61.7%         | 61.2%     | 60.7%     | 60.1%     | 59.5%     |           |
| Less: D&A                         | (1,791)       | (1,749)   | (1,903)   | (1,956)   | (2,014)       | (2,087)       | (2,098)   | (2,146)   | (2,097)   | (2,060)   |           |
| EBIT                              | \$3,139       | \$3,324   | \$3,533   | \$3,591   | \$3,569       | \$3,531       | \$3,517   | \$3,514   | \$3,524   | \$3,604   | 1.5%      |
| Less: Net Interest Expense        | (710)         | (690)     | (866)     | (936)     | (940)         | (923)         | (919)     | (918)     | (907)     | (961)     |           |
| Net Income                        | \$1,579       | \$1,712   | \$1,734   | \$1,726   | \$1,708       | \$1,695       | \$1,688   | \$1,687   | \$1,701   | \$1,718   | 0.9%      |
| Total Debt                        | \$16,583      | \$16,937  | \$17,367  | \$16,810  | \$16,892      | \$16,559      | \$16,497  | \$16,466  | \$16,260  | \$17,291  |           |
| Common Equity                     | 16,863        | 17,462    | 17,069    | 17,173    | 16,771        | 16,864        | 17,455    | 17,046    | 17,641    | 17,742    |           |
| Total Capitalization              | \$33,446      | \$34,400  | \$34,436  | \$33,983  | \$33,663      | \$33,424      | \$33,953  | \$33,512  | \$33,901  | \$35,033  |           |
| Cash Flow from Operations         | \$3,631       | \$3,890   | \$4,158   | \$4,280   | \$4,325       | \$4,487       | \$4,498   | \$4,591   | \$4,608   | \$4,544   | '14 – '23 |
| Capital Expenditures & Other      | (3,281)       | (3,161)   | (2,441)   | (2,081)   | (2,276)       | (2,532)       | (2,685)   | (3,080)   | (3,277)   | (3,020)   | Total     |
| Cash Flow from Operations - Capex | 350           | 728       | 1,717     | 2,199     | 2,049         | 1,954         | 1,813     | 1,511     | 1,331     | 1,524     | \$15,176  |
| Net PP&E                          | \$30,633      | \$31,813  | \$30,666  | \$30,676  | \$30,665      | \$30,853      | \$31,081  | \$31,512  | \$32,207  | \$32,500  |           |
| Return on Ratebase Equity         | 10.6%         | 11.2%     | 11.1%     | 11.1%     | 11.2%         | 11.2%         | 11.2%     | 11.2%     | 11.2%     | 11.1%     |           |

Source: TVA FY14 LRFP. 108 LAZARD

3

### Summary Cash Flow and Credit Profile—IOU Returns Rate Path Case (Sale Scenario)

(\$ in millions)

TVA

|                                     |          |          |          | For      | the Fiscal Year | r Ended Septer | nber 30, |          |          |          | '14 - '23  |   |
|-------------------------------------|----------|----------|----------|----------|-----------------|----------------|----------|----------|----------|----------|------------|---|
| CASH FLOW PROFILE                   | 2014E    | 2015E    | 2016E    | 2017E    | 2018E           | 2019E          | 2020E    | 2021E    | 2022E    | 2023E    | Total      |   |
| Net Income                          | \$1,579  | \$1,712  | \$1,734  | \$1,726  | \$1,708         | \$1,695        | \$1,688  | \$1,687  | \$1,701  | \$1,718  | \$16,949   | -   |
| Depreciation & Amortization         | 2,187    | 2,178    | 2,398    | 2,482    | 2,594           | 2,728          | 2,769    | 2,834    | 2,809    | 2,780    | 25,757     |   |
| Working Capital and Other           | (136)    | 0        | 27       | 73       | 23              | 64             | 41       | 70       | 98       | 47       | 306        |   |
| Cash Flow from Operations           | \$3,631  | \$3,890  | \$4,158  | \$4,280  | \$4,325         | \$4,487        | \$4,498  | \$4,591  | \$4,608  | \$4,544  | \$43,012   | -   |
| Base Capital Expenditures           | (946)    | (1,027)  | (1,032)  | (1,106)  | (1,037)         | (1,026)        | (1,042)  | (1,206)  | (1,290)  | (1,091)  | (\$10,803) |   |
| Incremental Capital Expenditures    | (1,905)  | (1,667)  | (1,015)  | (625)    | (730)           | (1,014)        | (1,049)  | (1,135)  | (1,393)  | (1,262)  | (11,796)   |   |
| Nudear Fuel & Other                 | (431)    | (468)    | (395)    | (350)    | (508)           | (492)          | (594)    | (738)    | (594)    | (668)    | (5,237)    | _   |
| Free Cash Flow                      | \$350    | \$728    | \$1,717  | \$2,199  | \$2,049         | \$1,954        | \$1,813  | \$1,511  | \$1,331  | \$1,524  | \$15,176   | -   |
| Dividends                           | (1,026)  | (1,113)  | (1,127)  | (1,122)  | (1,110)         | (1,102)        | (1,097)  | (1,097)  | (1,106)  | (1,116)  | (\$11,017) |   |
| Common Equity Issuance/(Repurchase) | 0        | 0        | (1,000)  | (500)    | (1,000)         | (500)          | 0        | (1,000)  | 0        | (500)    | (4,500)    |   |
| Net External Financing Requirements | \$677    | \$384    | \$410    | (\$578)  | \$62            | (\$352)        | (\$716)  | \$585    | (\$225)  | \$93     | \$340      | -   |
|                                     |          |          |          |          |                 |                |          |          |          |          |            |   |
| CREDIT PROFILE                      |          |          |          |          |                 |                |          |          |          |          |            |   |
| Cash & Cash Equivalents             | \$1,187  | \$1,137  | \$1,137  | \$1,137  | \$1,137         | \$1,137        | \$1,772  | \$1,137  | \$1,137  | \$2,060  |            | Credit Rating/Outlook                       |
| Total Debt                          | 16,583   | 16,937   | 17,367   | 16,810   | 16,892          | 16,559         | 16,497   | 16,466   | 16,260   | 17,291   |            | S&P BBB+/Stable                             |
| Common Equity                       | 16,863   | 17,462   | 17,069   | 17,173   | 16,771          | 16,864         | 17,455   | 17,046   | 17,641   | 17,742   |            | Moody's Baa1/Stable                         |
| Total Capitalization                | \$33,446 | \$34,400 | \$34,436 | \$33,983 | \$33,663        | \$33,424       | \$33,953 | \$33,512 | \$33,901 | \$35,033 |            |   |
| *                                   |          |          |          |          |                 |                |          |          |          |          |            | Indicative Credit Statistics <sup>(a)</sup> |
|                                     |          |          |          |          |                 |                |          |          |          |          |            | Significant                                 |
| FFO/Interest                        | 6.3x     | 7.0x     | 6.1x     | 5.7x     | 5.8x            | 6.1x           | 6.1x     | 6.2x     | 6.3x     | 6.0x     |            | 3.0x - 3.5x                                 |
| FFO/Total Debt                      | 22.8%    | 24.4%    | 25.3%    | 26.4%    | 26.8%           | 28.2%          | 28.4%    | 29.1%    | 29.5%    | 27.8%    |            | 20.0% - 30.0%                               |
| Total Debt/EBITDA                   | 3.4x     | 3.3x     | 3.2x     | 3.0x     | 3.0x            | 2.9x           | 2.9x     | 2.9x     | 2.9x     | 3.1x     |            | 4.0x - 3.0x                                 |
| Total Debt/Total Capitalization     | 49.6%    | 49.2%    | 50.4%    | 49.5%    | 50.2%           | 49.5%          | 48.6%    | 49.1%    | 48.0%    | 49.4%    |            | 50.0% - 45.0%                               |

Source: TVA FY14 LRFP.

Credit metric ranges implied for a company with a business risk profile of "Strong" and a financial risk profile of "Significant," for which the expected credit ratings under S&P methodology would be (a) BBB.

### 4 Other Supporting Materials

#### **TVA Selected Comparable Companies Trading Analysis**

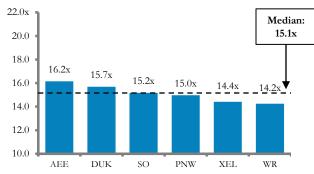
(\$ in millions)

|               |         |            |       | Price / |       | Enterpris | e Value / | 2013E    |          | I/B/E/S     |        | 2013E PE/ |
|---------------|---------|------------|-------|---------|-------|-----------|-----------|----------|----------|-------------|--------|-----------|
|               | Equity  | Enterprise | I/B/E | /S EPS  | Book  | EBI       | TDA       | Dividend | Dividend | Long-Term   | Total  | Total     |
| Company Name  | Value   | Value      | 2014E | 2015E   | Value | 2014E     | 2015E     | Payout   | Yield    | Growth Rate | Return | Return    |
| Ameren        | \$8,969 | \$15,109   | 16.2x | 14.5x   | 1.3x  | 7.5x      | 7.1x      | 76.8%    | 4.3%     | 1.5%        | 5.8%   | 2.77x     |
| Duke          | 50,932  | 90,032     | 15.7x | 15.0x   | 1.2x  | 10.1x     | 9.7x      | 73.0%    | 4.3%     | 3.0%        | 7.3%   | 2.14x     |
| Pinnacle West | 6,116   | 9,675      | 15.0x | 14.4x   | 1.5x  | 7.3x      | 6.9x      | 60.9%    | 4.1%     | 4.0%        | 8.1%   | 1.85x     |
| Southern Co.  | 37,260  | 61,357     | 15.2x | 14.6x   | 2.1x  | 9.2x      | 8.7x      | 75.2%    | 4.8%     | 3.0%        | 7.8%   | 1.95x     |
| Westar        | 4,124   | 7,613      | 14.2x | 14.1x   | 1.4x  | 8.2x      | 7.9x      | 61.3%    | 4.2%     | 2.6%        | 6.8%   | 2.09x     |
| Xcel Energy   | 14,232  | 25,627     | 14.4x | 13.7x   | 1.5x  | 8.2x      | 7.8x      | 58.0%    | 3.9%     | 4.9%        | 8.8%   | 1.64x     |
|               |         | High       | 16.2x | 15.0x   | 2.1x  | 10.1x     | 9.7x      | 76.8%    | 4.8%     | 4.9%        | 8.8%   | 2.77x     |
|               |         | Mean       | 15.1x | 14.4x   | 1.5x  | 8.4x      | 8.0x      | 67.5%    | 4.3%     | 3.2%        | 7.4%   | 2.07x     |
|               |         | Median     | 15.1x | 14.4x   | 1.4x  | 8.2x      | 7.9x      | 67.1%    | 4.3%     | 3.0%        | 7.6%   | 2.02x     |
|               |         | Low        | 14.2x | 13.7x   | 1.2x  | 7.3x      | 6.9x      | 58.0%    | 3.9%     | 1.5%        | 5.8%   | 1.64x     |

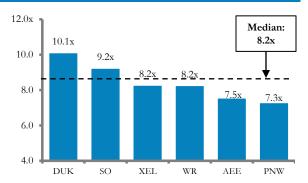




PRICE/2014E EPS



#### ENTERPRISE VALUE/2014E EBITDA



*Source: Company filings, FactSet and Wall Street research.* Note: Figures shown as of November 14, 2013.

### Selected Electric Utility Precedent Transactions

| (\$ in milli     | ions)      |                             |                              |                   |                      |                     |                |             |         |           |             |       |      |
|------------------|------------|-----------------------------|------------------------------|-------------------|----------------------|---------------------|----------------|-------------|---------|-----------|-------------|-------|------|
|                  | Close      |                             |                              | Equity            |                      |                     |                | ase Price P |         |           | Transaction |       |      |
| Announc.<br>Date | Date/      | A                           | Terret                       | Purchase<br>Price | Transaction<br>Value | % Cash /<br>% Stock | 1-Day<br>Prior | 5-Day       | 20-Day  | P/<br>LTM | E<br>FY+1   | EV/EI | FY+1 |
| Date             | Status     | Acquiror                    | Target                       | Price             | value                |                     |                | Average     | Average | LIM       | FI+I        | LIM   |      |
| 12/11/2013       | Pending    | Fortis                      | UNS                          | \$2,531           | \$4,286              | 100% / 0%           | 31.4%          | 28.3%       | 26.1%   | 18.3x     | 17.6x       | 8.6x  | 8.6x |
| 5/29/2013        | 12/16/2013 | MidAmerican                 | NV Energy                    | 5,658             | 10,429               | 100% / 0%           | 23.2%          | 15.5%       | 15.0%   | 17.1x     | 17.7x       | 8.9x  | 8.9x |
| 2/21/2012        | 6/27/2013  | Fortis                      | CH Energy                    | 978               | 1,473                | 100% / 0%           | 10.6%          | 12.2%       | 12.8%   | 22.2x     | 19.6x       | 10.4x | 9.5x |
| 7/12/2011        | 6/27/2012  | Gaz Metro                   | CVPS                         | 477               | 707                  | 100% / 0%           | 8.7%           | 51.8%       | 52.6%   | 18.3x     | 19.6x       | 9.0x  | NA   |
| 4/28/2011        | 3/12/2012  | Exelon                      | Constellation                | 7,744             | 10,781               | 0% / 100%           | 12.5%          | 16.6%       | 18.1%   | 10.3x     | 11.9x       | 6.2x  | 5.9x |
| 4/20/2011        | 11/28/2011 | AES                         | DPL                          | 3,524             | 4,678                | 100% / 0%           | 8.7%           | 10.2%       | 9.4%    | 12.0x     | 12.4x       | 7.3x  | 7.6x |
| 2/11/2010        | 2/25/2011  | FirstEnergy                 | Allegheny Energy             | 4,701             | 8,501                | 0% / 100%           | 31.6%          | 35.0%       | 28.1%   | 12.0x     | 12.1x       | 7.5x  | 7.3x |
| 12/7/2010        | 12/9/2011  | AGL Resources               | Nicor                        | 2,383             | 3,113                | 41% / 59%           | 12.5%          | 42.5%       | 38.7%   | 15.6x     | 18.1x       | 6.7x  | 7.7x |
| 10/26/2007       | 2/6/2009   | Macquarie                   | Puget Energy                 | 3,518             | 6,726                | 100% / 0%           | 25.3%          | 26.3%       | 23.1%   | 18.8x     | 17.6x       | 9.4x  | 9.8x |
| 6/25/2007        | 9/17/2008  | Iberdrola                   | Energy East                  | 4,522             | 8,126                | 100% / 0%           | 27.4%          | 23.8%       | 22.1%   | 15.7x     | 18.8x       | 7.4x  | 8.8x |
| 2/26/2007        | 10/10/2007 | KKR/TPG                     | TXU                          | 31,910            | 44,467               | 100% / 0%           | 15.4%          | 22.2%       | 23.6%   | 12.7x     | 13.6x       | 8.0x  | 8.8x |
| 2/7/2007         | 7/14/2008  | Great Plains/Black Hills    | Aquila                       | 1,710             | 2,763                | 40% / 60%           | 8.4%           | 4.9%        | 6.6%    | NM        | 22.7x       | 11.3x | 8.6x |
| 7/10/2006        | 2/21/2007  | WPS Resources               | Peoples Energy               | 1,592             | 2,577                | 0% / 100%           | 15.0%          | 14.5%       | 14.3%   | 18.1x     | 18.7x       | 9.1x  | 7.5x |
| 7/5/2006         | 5/31/2007  | Macquarie                   | Duquesne                     | 1,594             | 2,799                | 100% / 0%           | 21.7%          | 23.9%       | 24.3%   | 22.3x     | 17.4x       | 10.8x | NA   |
| 2/27/2006        | 8/24/2007  | National Grid               | KeySpan                      | 7,391             | 11,874               | 100% / 0%           | 16.1%          | 16.8%       | 16.5%   | 18.9x     | 17.1x       | 9.2x  | 8.6x |
| 5/24/2005        | 3/21/2006  | MidAmerican                 | PacifiCorp                   | 5,138             | 9,400                | 100% / 0%           | NA             | NA          | NA      | 21.7x     | NA          | 8.8x  | NA   |
| 5/9/2005         | 4/3/2006   | Duke Energy                 | Cinergy                      | 9,123             | 13,974               | 0% / 100%           | 13.4%          | 15.2%       | 15.0%   | 20.7x     | 15.0x       | 11.5x | 8.9x |
| 4/28/2002        | 1/31/2003  | Ameren                      | Cilcorp                      | 540               | 1,382                | 100% / 0%           | NA             | NA          | NA      | 11.3x     | NA          | 6.4x  | NA   |
| 2/20/2001        | 6/28/2002  | Energy East                 | RGS                          | 1,290             | 2,304                | 55% / 45%           | 11.5%          | 11.5%       | 15.4%   | 14.2x     | 16.1x       | 8.2x  | NA   |
| 2/12/2001        | 8/1/2002   | Pepco                       | Conectiv                     | 2,325             | 5,506                | 50% / 50%           | 36.9%          | 37.8%       | 38.7%   | 13.8x     | NA          | 7.1x  | NA   |
| 9/5/2000         | 1/31/2002  | National Grid               | Niagara Mohawk               | 3,045             | 8,933                | 32.8% / 67.2%       | 36.9%          | 49.0%       | 40.2%   | NM        | NA          | 11.6x | NA   |
| 8/8/2000         | 11/6/2001  | FirstEnergy                 | GPU                          | 4,110             | 11,615               | 50% / 50%           | 10.4%          | 26.9%       | 22.4%   | 8.9x      | 11.4x       | 6.6x  | NA   |
| 7/17/2000        | 3/27/2001  | AES                         | IPALCO                       | 2,182             | 3,026                | 0% / 100%           | 16.3%          | 16.9%       | 21.6%   | 11.3x     | NA          | 7.8x  | NA   |
| 2/28/2000        | 12/11/2000 | PowerGen                    | LG&E                         | 3,226             | 5,470                | 100% / 0%           | 57.8%          | 58.4%       | 51.4%   | 14.8x     | 14.2x       | 9.0x  | NA   |
| 10/25/1999       | 3/14/2000  | Berkshire Hathaway          | MidAmerican                  | 2,098             | 8,928                | 100% / 0%           | 28.6%          | 26.9%       | 24.0%   | 15.0x     | NA          | 9.9x  | NA   |
| 8/23/1999        | 11/30/2000 | Carolina Power & Light      | Florida Progress             | 5,253             | 8,003                | 65% / 35%           | 19.9%          | 30.1%       | 28.6%   | 17.5x     | 16.6x       | 7.4x  | 6.7x |
| 6/14/1999        | 9/1/2000   | Energy East                 | Central Maine Power          | 957               | 1,228                | 100% / 0%           | 47.0%          | 43.5%       | 48.0%   | 13.7x     | NA          | 5.9x  | NA   |
| 2/1/1999         | 4/19/2000  | New England Electric System | Eastern Utilities Associates | 643               | 1,130                | 100% / 0%           | 6.4%           | 3.1%        | 11.8%   | 16.7x     | 19.3x       | 7.7x  | 8.8x |
| 12/14/1998       | 3/22/2000  | National Grid               | New England Electric System  | 3,180             | 4,593                | 100% / 0%           | 25.0%          | 22.5%       | 26.1%   | 15.1x     | 17.6x       | 6.2x  | NA   |
| 5/11/1998        | 7/8/1999   | Consolidated Edison         | Orange & Rockland Utilities  | 792               | 1,323                | 100% / 0%           | 38.5%          | 40.5%       | 38.6%   | 17.1x     | 17.1x       | 9.7x  | NA   |
| 12/22/1997       | 6/15/2000  | American Electric Power     | Central & South West         | 6,629             | 12,383               | 0% / 100%           | 20.0%          | 18.6%       | 24.6%   | 27.6x     | 15.4x       | 8.4x  | 7.6x |

|   | Recent Preceder | nts: <sup>(a)</sup> |       |       |       |       |       |      |
|---|-----------------|---------------------|-------|-------|-------|-------|-------|------|
|   | High            | 31.6%               | 51.8% | 52.6% | 22.3x | 22.7x | 11.5x | 9.8x |
|   | Mean            | 17.6%               | 22.5% | 21.6% | 17.2x | 16.9x | 8.8x  | 8.3x |
|   | Median          | 15.2%               | 19.5% | 20.1% | 18.2x | 17.6x | 8.9x  | 8.6x |
|   | Low             | 8.4%                | 4.9%  | 6.6%  | 10.3x | 11.9x | 6.2x  | 5.9x |
|   | All Precedents: |                     |       |       |       |       |       |      |
| Source Court any filings and Wall Street research   | High            | 57.8%               | 58.4% | 52.6% | 27.6x | 22.7x | 11.6x | 9.8x |
| Source: Company filings and Wall Street research.   | Mean            | 22.0%               | 25.7% | 25.4% | 16.3x | 16.6x | 8.4x  | 8.2x |
| Note: Where stock price was affected by rumors of transaction prior to announcement,  | Median          | 19.9%               | 23.8% | 23.6% | 15.7x | 17.3x | 8.4x  | 8.6x |
| <ul><li>unaffected share price utilized as basis for calculating premia.</li><li>(a) Recent precedents include transactions announced since 2005.</li></ul> | Low             | 6.4%                | 3.1%  | 6.6%  | 8.9x  | 11.4x | 5.9x  | 5.9x |

(a) Recent prec 111 | LAZARD

Pre-Tax/After-Tax Cost of Debt

### WACC Analysis

(\$ in millions, except per share data)

|                        | Stock Price | Equity  | Net     | Debt/     | Net Debt/  | Net Debt/    | Levered             | Unlevered           |
|------------------------|-------------|---------|---------|-----------|------------|--------------|---------------------|---------------------|
| TVA Energy Comparables | 11/14/2013  | Value   | Debt    | Book Cap. | Ent. Value | Equity Value | Beta <sup>(a)</sup> | Beta <sup>(b)</sup> |
| Ameren                 | \$36.67     | \$8,969 | \$6,140 | 47.2%     | 40.6%      | 68.5%        | 0.63                | 0.43                |
| Duke                   | \$71.51     | 50,932  | 39,100  | 49.1%     | 43.4%      | 76.8%        | 0.57                | 0.38                |
| Pinnacle West          | \$55.72     | 6,116   | 3,559   | 45.3%     | 36.8%      | 58.2%        | 0.64                | 0.22                |
| Southern Co.           | \$42.36     | 37,260  | 24,097  | 55.8%     | 39.3%      | 64.7%        | 0.54                | 0.38                |
| Westar                 | \$32.12     | 4,124   | 3,488   | 53.5%     | 45.8%      | 84.6%        | 0.65                | 0.42                |
| Xcel Energy            | \$28.59     | 14,232  | 11,395  | 54.6%     | 44.5%      | 80.1%        | 0.57                | 0.33                |
| Mean                   |             |         |         | 50.9%     | 41.7%      | 72.1%        | 0.60                | 0.36                |

| Assumptions                               |       |
|---|-------|
| Marginal Tax Rate                         | 35.0% |
| Risk Free Rate of Return <sup>(c)</sup>   | 3.80% |
| Equity Risk/Market Premium <sup>(d)</sup> | 6.70% |

|       |        |           |                       |         |                        | 4.75% | 5.00%        | 5.25%          | 5.50%                  | 5.75% |
|-------|--------|-----------|-----------------------|---------|------------------------|-------|--------------|----------------|------------------------|-------|
|       |        | Mee       | lian                  |         |                        | 3.09% | 3.25%        | 3.41%          | 3.58%                  | 3.74% |
| Debt/ | Debt/  | Unlevered | Levering              | Levered | Cost of                |       |              |                |                        |       |
| Cap.  | Equity | Beta      | Factor <sup>(e)</sup> | Beta    | _Equity <sup>(f)</sup> |       | Weighted Ave | rage Cost of ( | Capital <sup>(g)</sup> |       |
| 0.0%  | 0.0%   | 0.361     | 1.000                 | 0.361   | 6.2%                   | 6.22% | 6.22%        | 6.22%          | 6.22%                  | 6.22% |
| 10.0% | 11.1%  | 0.361     | 1.072                 | 0.387   | 6.4%                   | 6.06% | 6.08%        | 6.09%          | 6.11%                  | 6.13% |
| 20.0% | 25.0%  | 0.361     | 1.163                 | 0.420   | 6.6%                   | 5.91% | 5.94%        | 5.97%          | 6.00%                  | 6.04% |
| 30.0% | 42.9%  | 0.361     | 1.279                 | 0.462   | 6.9%                   | 5.75% | 5.80%        | 5.85%          | 5.90%                  | 5.95% |
| 40.0% | 66.7%  | 0.361     | 1.433                 | 0.517   | 7.3%                   | 5.59% | 5.66%        | 5.72%          | 5.79%                  | 5.85% |
| 50.0% | 100.0% | 0.361     | 1.650                 | 0.596   | 7.8%                   | 5.44% | 5.52%        | 5.60%          | 5.68%                  | 5.76% |
| 60.0% | 150.0% | 0.361     | 1.975                 | 0.713   | 8.6%                   | 5.28% | 5.38%        | 5.48%          | 5.58%                  | 5.67% |
| 70.0% | 233.3% | 0.361     | 2.517                 | 0.909   | 9.9%                   | 5.13% | 5.24%        | 5.35%          | 5.47%                  | 5.58% |
| 80.0% | 400.0% | 0.361     | 3.600                 | 1.300   | 12.5%                  | 4.97% | 5.10%        | 5.23%          | 5.36%                  | 5.49% |

Source: Company filings, FactSet, Barra, and Wall Street research.

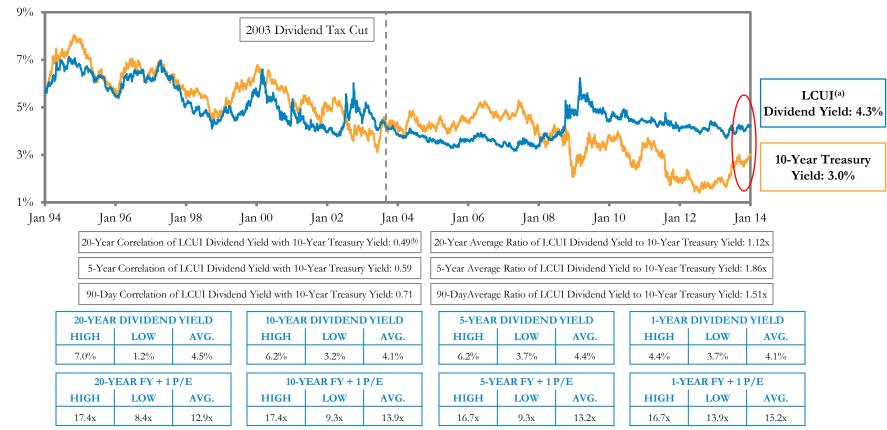
- (a) Betas as of October 31, 2013.
- (b) Unlevered Beta = Levered Beta/[1+(1-Tax Rate)(Debt/Equity)].
- (c) Risk Free Rate is 30-Year Treasury Bond Yield as of 11/14/13.
- (d) Represents the long-horizon expected equity risk premium based on differences of historical arithmetic mean returns on the S&P 500 from 1926-2011 (Ibbotson Associates' 2012 Yearbook).
- (e) Levering Factor = [1 + (1-Tax Rate)(Debt/Equity)].
- (f) Cost of Equity = (Risk Free Rate of Return)+(Levered Beta)(Equity Risk Premium)+ Equity Size Premium.
- (g) Weighted Average Cost of Capital = (After-Tax Cost of Debt)(Debt/Cap.)+(Cost of Equity)(Equity/Cap.).

### **B** Supplemental Materials

1 Power & Utility Industry

#### **Industry Valuation Dynamics: Interest Rates**

After a disruption following the fiscal/credit crisis, the correlation between Industry dividend yields and 10-year Treasury yields appears to be re-emerging (90-day correlation of 0.71). Industry dividend yields remain well above 10-year Treasury yields on a historical basis (1.51x 90-day average ratio vs. 1.12x 20-year average ratio)—this relationship suggests that, while rising interest rates may pressure Industry valuations, the effect may be somewhat muted if the yield relationship converges to historical norms



Source: I/B/E/S, Bloomberg and FactSet.

Note: As of January 24, 2014.

 (a) Here and throughout this presentation, unless otherwise indicated, the Lazard Core Utility Index ("LCUI") consists of AEP, AGL, Ameren, Consolidated Edison, Duke, Dominion, DTE, Edison International, Entergy, Exelon, FirstEnergy, NextEra Energy, NiSource, Northeast Utilities, PG&E, Pinnacle West, PPL, PSEG, SCANA, Sempra, Southern, WGL, Wisconsin Energy and Xcel.
 (b) Correlation of LCUI dividend yield with 10-year Treasury yield over past year is (0.22).

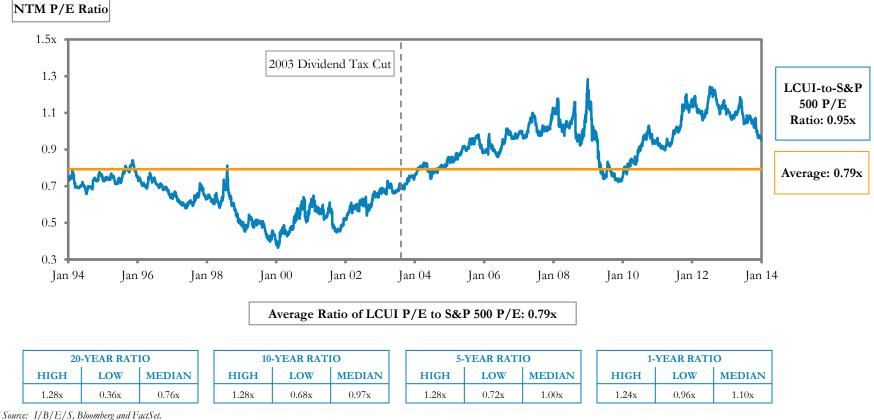
113 LAZARD

Yield

#### Industry Valuation Dynamics: LCUI vs. S&P 500 Forward P/E

Over the past 20 years, the average ratio of the LCUI one-year forward P/E to the S&P 500 one-year forward P/E has been approximately 0.79x; this ratio has generally increased over the past several years, reflecting factors such as the 2003 Dividend Tax Cut, the low interest rate environment and relatively stable earnings and dividend prospects

With interest rates expected to continue to rise as a result of Fed "tapering" and other factors (e.g., economic growth), the relationship may revert to historical averages over time



*Source: I*/*B*/*E*/*S*, *Bloomberg and FactSet* Note: As of January 24, 2014.

#### **Power & Utility Industry Dividend Payouts: Historical Perspective**

With Industry dividend yields continuing to approach historically low levels, dividends may provide less valuation support going forward, as investors rotate out of defensive sectors in a rising interest rate environment. Furthermore, an ongoing issue for some Industry participants will be dividend growth, in light of historically high payout ratios and a variety of earnings challenges in the near-to-intermediate term, thus limiting the ability of some to grow dividends more quickly than is already the case, even in a rising interest rate environment



| 20-IEAK AVG. |           | IU-IEAK AVG. |           | 5-TEAK AVG. |           | I-IEAK AVG. |           |
|--------------|-----------|--------------|-----------|-------------|-----------|-------------|-----------|
| DIV PAYOUT   | DIV YIELD | DIV PAYOUT   | DIV YIELD | DIV PAYOUT  | DIV YIELD | DIV PAYOUT  | DIV YIELD |
| 59.1%        | 4.7%      | 58.1%        | 4.1%      | 59.3%       | 4.4%      | 60.8%       | 4.1%      |

Source: FactSet.

Note: As of January 24, 2014.

### Natural Gas Price Overview

#### (\$ per MMBtu)

While natural gas prices have recovered from historically low levels in 2012, most market observers expect natural gas prices to remain range-bound for the foreseeable future, primarily due to the widespread belief that, as a result of the rapid adoption of shale gas drilling technology and the vast potentially available resources, there will be ample supply even in an economic recovery scenario



#### NATURAL GAS PRICE

### 116 LAZARD

Source: Bloomberg, SNL, CERA and Wall Street research.

(a) Averages for the next twelve, twenty-four and thirty-six months.

(b) Spot price at Henry Hub as of January 24, 2014.

## Natural Gas Prices: The Bull and the Bear Cases

- Residential, commercial and industrial demand recovery
- Greater utilization and growth of gas-fired generating capacity
- Alternative Energy technologies challenged by high cost, transmission, intermittency and storage issues
- Increased demand/broader acceptance of natural gas in other sectors
- Acceleration of decline curves in unconventional plays
- Shale gas will prove to be more difficult and costly to extract
- Drilling activity ebbs and flows depending on price signals
- Proved reserves ultimately less abundant than current estimates
- Midstream bottlenecks, given lack of infrastructure serving emerging shales
- Shale gas supply diverted to overseas markets via LNG exports
- Further environmental challenges to shale gas drilling/fracking



- Residential, commercial and industrial demand may be slow to recover
- Gas-fired generating capacity utilization and additions may be less than anticipated
- Rapid decline in manufacturing costs for certain Alternative Energy technologies
- Demand growth opportunities outside of power sector slow to materialize
- Accessible shale gas reserves now materially higher than previous estimates
- Robust drilling activity continues, notwithstanding price levels/profitability
- Substantial increases to reserve estimates ultimately proved to be accurate
- Energy infrastructure construction and development easing midstream and downstream bottlenecks
- Licensing challenges impeding growth of LNG export capacity
- Environmental challenges to shale gas drilling/fracking not effective

**BEAR CASE** 

TVA

## How Do Regulated Utility Companies "Make Money"?

(\$ in millions)

Under a privatized scenario, TVA would operate similarly to other ratebase IOUs in the Industry, earning a return on equity as illustrated below:

| ALLOWED RETURN ON RATEBASE                                       | AT 12% ROE          | AT 10% ROE          |
|--|---------------------|---------------------|
| Net Utility Plant in Service                                     | \$1,000             | \$1,000             |
| Working Capital  | 150                 | 150                 |
| Deferred Taxes   | (150)               | (150)               |
| Total Ratebase   | \$1,000             | \$1,000             |
| x Weighted Average Cost of Capital (Pre-tax)                     | 9.5% <sup>(a)</sup> | 7.5% <sup>(b)</sup> |
| Return on Ratebase   | \$95                | \$75                |
| NET INCOME   | AT 12% ROE          | AT 10% ROE          |
| \$500 million of Equity in Capital Structure (50%) x Allowed ROE | \$60                | \$50                |
| TOTAL COST OF SERVICE  | AT 12% ROE          | AT 10% ROE          |
| Return on Ratebase   | \$95                | \$75                |
| O&M and Other Expenses   | 250                 | 250                 |
| Depreciation   | 50                  | 50                  |
| Income Taxes   | 37                  | 29                  |
| Base Revenue Requirement   | \$432               | \$404               |
| ÷ Estimated kWh Sales  | 6.2 GWh             | 6.2 GWh             |
| = Base Rate/kWh <sup>(c)</sup>                                   | \$0.0697            | \$0.0652            |

(a) Assumes (for illustrative purposes) 50% equity capital at 12% allowed ROE, 50% debt capital at cost of 7% and tax rate of 37.5%.

(b) Assumes (for illustrative purposes) 50% equity capital at 10% allowed ROE, 50% debt capital at cost of 5% and tax rate of 37.5%.

(c) Excludes recovery of fuel costs and/or cost of purchased power, capacity payments, etc.

## 2 Additional TVA Materials

## Selected Recent Rating Agency Commentary

Despite the lack of an explicit Federal Government guarantee on TVA's debt, S&P specifically links TVA's credit to that of the United States, whereas Moody's focuses more on TVA's statutory rate-setting authority

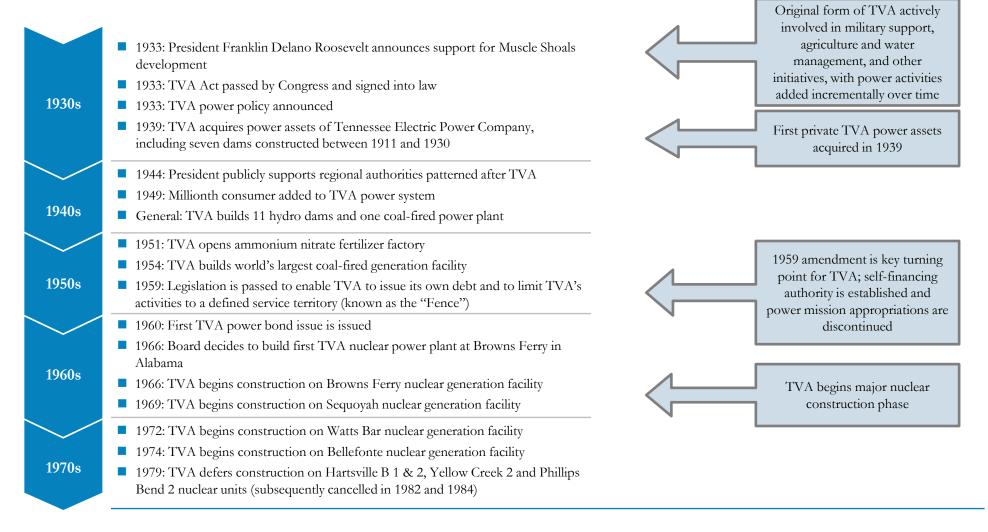
| RATING<br>AGENCY  | RATING/<br>OUTLOOK                        | DATE OF<br>REPORT | SELECTED COMMENTARY  |
|---|---|-------------------|--|
| STANDARD<br>&POOR'S   | AA+/Stable                                | 08/06/2013        | "The stable outlook on the Authority's long-term debt reflects the rating outlook on the U.S., which is TVA's sponsoring sovereign<br>However, the continuing pattern of problems at key generating assets could result in a lowering of the stand-alone credit profile if additional<br>incidents erode TVA's financial condition. We continue to monitor TVA's proximity to its federally mandated debt ceiling and the<br>possibility of increased use of sale-leaseback arrangements to avoid reaching the debt ceiling as well as potential changes from the  |
| S&P links TVA's r<br>that of the Fed<br>Government, ass<br>credit for what it b<br>to be implie<br>sponsorship          | leral<br>igning<br>pelieves<br>d          |                   | <ul> <li>upcoming strategic review."</li> <li>"TVA's recent commitment to enhance its gas-fired generation, such as 2012's John Sevier new combined cycle plant sale-leaseback will be important as TVA continues to simultaneously manage the risks associated with its coal-related assets The TVA is facing significant and potentially costly decisions regarding its coal generation assets."</li> <li>"Further pressuring the capital budget, TVA also has a sizable nuclear commitment, including at least one new unit under construction. The nominal 1,220MW Watts Bar unit 2, which management projects will be completed in 2015, at a total cost of just above \$4 billion, was originally budgeted to cost \$1.5 billion and to achieve commercial operations by the end of 2012. TVA is also dealing with a Nuclear Regulatory Commission (NRC) "red" finding at its Browns Ferry, Alabama nuclear station related to a valve in the emergency cooling system."</li> </ul>  |
| Moody's   | Aaa/Stable                                | 08/06/2013        | "The TVA Act is a key factor supporting the organization's credit strength and stability and rates have historically always been set at<br>levels sufficient to meet those obligations Compared to investor owned utilities and for-profit power companies, TVA's financial<br>metrics are unusually low and would not by themselves be sufficient to justify a Aaa rating. From 2010 through FY 2012, TVA's average<br>CFO pre-W/C interest coverage was 2.5x and its average CFO pre-W/C to Debt ratio was 7.6%. We generally view regulated utilities with a<br>CFO pre-W/C to debt of over 13% as investment grade, so TVA's ratings benefit significantly, by as much as nine notches, from<br>structural characteristics that include its rate-setting ability."<br>"TVA's financial and operational track record over the last decade reflects its very low dependence on its U.S. government owner,<br>affording its own Aaa credit rating some resilience to any pressure on the U.S. government's own Aaa credit rating, which currently has<br>a negative outlook. It also reflects its standalone credit strength as an unregulated provider of an essential service to customers in   |
| Moody's bases T<br>credit rating on its<br>to set rates and no<br>TVA's rating<br>independent from<br>the Federal Gover | s ability<br>otes that<br>is<br>a that of |                   | <b>a hegative outlook.</b> It also reflects its standalone credit strength as an unregulated provider of an essential service to customers in <b>portions of seven states.</b> In the event of a downgrade of the U.S. government's rating, we would consider any negative implications from a lower U.S. government rating on the future economic and financial conditions in TVA's region, electricity demand, the credit quality of TVA's relatively concentrated municipal and cooperative customer base, as well as on customer resistance to electric rate increases."<br><b>"TVA has a severely underfunded pension plan, with assets of \$7 billion and liabilities of \$12 billion, resulting in a net underfunded status of \$5 billion as of September 30, 2012.</b> This underfunding is a slight deterioration since September 30, 2011, when it stood at \$4.8 billion. Although net assets in the plan increased \$0.5 billion over the last year, liabilities grew by nearly \$0.7 billion since September 30, 2011. The ability of the underfunded position to be lowered quickly is limited due to the substantial retirement benefits being paid by TVA, with 23,000 retirees receiving benefits of approximately \$600 million per year. This is nearly double the annual retirement benefit paid out in 2011 by neighboring investor owned utilities Duke Energy and Southern Company." |
|   |   |                   | expenses and debt service requirements, its protected status in its service territory, few serious political or legislative challenges to this status to date, and the low risk that any of its statutory protections will be materially altered in the near term. It also reflects a credit profile that is largely separate and distinct from the U.S. government's credit profile."   |

Source: S&P and Moody's.

(a) TVA was downgraded by S&P in August 2011 following the downgrade of the United States; in its explanation of the downgrade, S&P explicitly linked the credit rating of TVA to that of the U.S. Government.

## History of TVA

Since its formation, TVA has evolved from a government-financed entity with a diverse set of regional mission parameters into a standalone, self-financing organization that addresses its regional stewardship mission primarily through the provision of regional power



#### 2 ADDITIONAL TVA MATERIALS

|       | History of TVA (cont'd)  | 4 | TVA slows and eventually halts  |
|-------|--|---|---|
| 1980s | <ul> <li>1981: TVA defers construction on Phillips Bend 1 nuclear unit (subsequently cancelled in 1982)</li> <li>1982: TVA defers construction on Hartsville A 1 &amp; 2 and Yellow Creek 1 nuclear units (subsequently cancelled in 1984)</li> <li>1988: TVA sets goals to freeze power rates for three years, reduce overhead from appropriated programs, and to become more businesslike</li> </ul>   |   | many nuclear development<br>programs due to construction<br>cost inflation pressures, other<br>negative industry experiences and<br>slowing demand growth                 |
| 1990s | <ul> <li>1994: TVA makes decision to halt construction of Bellefonte nuclear generating station</li> <li>1995: TVA's vision is "to be the recognized world leader in providing energy and related service, independently and in alliance with others, for society's global needs"</li> <li>1999: Final year that TVA received federal appropriations for non-power mission; TVA has subsequently been self-financing</li> </ul>  |   | TVA's appropriations for non-<br>power mission ends in 1999; non-<br>power mission now supported via  |
| 2000s | <ul> <li>2000: TVA reformulates strategic goals (supply low cost reliable power, support a thriving river system, and stimulate economic growth) within the context of the TVA Keys to the Future (Operational Excellence, Financial Flexibility, Customer Relationships, Quality of Life in the Valley)</li> <li>2006: Three-member full-time Board changes to nine-member, part-time Board due to Congressional amendments</li> <li>2006: TVA files first 10-K with the Securities &amp; Exchange Commission</li> <li>2008: TVA adopts an Energy Efficiency &amp; Demand Response Plan, a Renewable &amp; Clean Energy Assessment and an Environmental Policy</li> </ul> |   | TVA increasingly adopts policies<br>of private sector corporations,<br>such as expanded Board structure<br>and requirement to make SEC<br>filings                         |
| 2010s | <ul> <li>2010: TVA realigns its senior management structure around a new executive council in order to "increase organizational efficiency and accountability, streamline business processes and improve customer service"</li> <li>2011: TVA Vision is announced: Low Rates, High Reliability, Responsibility, Cleaner Air, More Nuclear Generation and Greater Energy Efficiency</li> <li>2011: TVA Board authorizes completion of Bellefonte nuclear station</li> <li>2013: Completion of Bellefonte by 2022 – 2023 is removed from TVA's budget; efficiency targets are set; accelerated retirement of 3.1 GW of coal is approved</li> </ul>                           |   | Under new administration, TVA's<br>revised strategy emphasizes<br>economic development, industrial<br>customer focus, low emissions,<br>efficiency and capital allocation |

### Summary TVA Financial Projections—Prior Plan

#### (\$ in millions)

In the prior plan, TVA was expected to experience mildly positive load growth over the next decade and anticipated steady rate increases and significant external financing to support its significant capital expenditure program

| 1<br>Loss of large industrial customer<br>(USEC) and stagnant overall volume<br>growth drives significant near-term<br>decline in total power sales, but<br>long-term CAGR of 0.4%<br>anticipated through 2023 | 2<br>Rates expecte<br>8.63 ¢/kWh b<br>(excluding dia<br>adder), repres<br>CAGR over 20 | ed to reach<br>y 2023<br>stribution ra<br>senting a 2.5 | ate       | Base rate in<br>revenue gro<br>of volume g<br>vs. 0.4%) | creases driv<br>owth in exce<br>growth (2.9% | 7e<br>Esss s<br>6 ii<br>2 | Entry of Wat<br>ervice in 201<br>ervice in 202<br>ncreases; ov<br>2.1% from 20 | ts Bar Unit<br>6 and Belle<br>23 drives O&<br>erall O&M | 2 into<br>fonte into<br>&M | decrea<br>increas<br>expens | come expect<br>se in 2023, di<br>sed O&M and<br>se from entry<br>onte into serv | iven by<br>d interest<br>of<br>ice |
|--|--|---|-----------|---|--|---------------------------|--|---|----------------------------|-----------------------------|---|------------------------------------|
|  | ·  |   |           |   | For the Fiscal Y                             |                           |  |   |                            |                             |   | '13 - '23                          |
|  | 2013A  | 2014E   | 2015E     | 2016E   | 2017E  | 2018E                     | 2019E  | 2020E   | 2021E                      | 2022E                       | 2023E   | CAGR                               |
| GWh Sales  | 165,155  | 159,891   | 161,999   | 163,893   | 164,825                                      | 166,046                   | 167,214  | 168,888   | 170,715                    | 171,714                     | 172,619   | 3 0.4%                             |
| % Growth   |  | (3.2%)  | 1.3%      | 1.2%  | 0.6%   | 0.7%                      | 0.7%   | 1.0%  | 1.1%                       | 0.6%                        | 0.5%  |                                    |
| Gross Revenue  | \$11,236   | \$11,213  | \$11,467  | \$12,090  | \$12,595                                     | \$12,767                  | \$13,329   | \$13,514  | \$14,299                   | \$14,852                    | \$14,890  | 2.9%                               |
| % Growth   | -  | (0.2%)  | 2.3%      | 5.4%  | 4.2%   | 1.4%                      | 4.4%   | 1.4%  | 5.8%                       | 3.9%                        | 0.3%  |                                    |
| Less: Fuel Cost  | (3,968)  | (3,823)   | (4,021)   | (4,116)   | (4,230)                                      | (4,325)                   | (4,556)  | (4,406)   | (4,504)                    | (4,752)                     | (4,644)   |                                    |
| Net Revenues   | \$7,268  | \$7,390   | \$7,445   | \$7,974   | \$8,366                                      | \$8,442                   | \$8,773  | \$9,108   | \$9,794                    | \$10,100                    | \$10,246  | 3.5%                               |
| % Gronth   | -  | 1.7%  | 0.7%      | 7.1%  | 4.9%   | 0.9%                      | 3.9%   | 3.8%  | 7.5%                       | 3.1%                        | 1.4%  |                                    |
| Less: Non-fuel O&M   | (\$3,661)  | (\$3,559)   | (\$3,479) | (\$3,652)   | 4) (\$3,789)                                 | (\$3,641)                 | (\$3,845)  | (\$4,024)   | (\$4,177)                  | (\$4,291)                   | 4 (\$4,524)   | 4 2.1%                             |
| Less: Payments in Lieu of Taxes <sup>(a)</sup>   | (550)  | (536)   | (553)     | (557)   | (591)  | (616)                     | (630)  | (646)   | (666)                      | (718)                       | (722)   |                                    |
| Plus: Other Income   | 16   | 16  | 16        | 16  | 16   | 16                        | 16   | 16  | 16                         | 16                          | 16  |                                    |
| EBITDA   | \$3,074  | \$3,310   | \$3,429   | \$3,781   | \$4,002                                      | \$4,201                   | \$4,315  | \$4,455   | \$4,967                    | \$5,107                     | \$5,015   | 5.0%                               |
| % Margin   | 42.3%  | 44.8%   | 46.1%     | 47.4%   | 47.8%  | 49.8%                     | 49.2%  | 48.9%   | 50.7%                      | 50.6%                       | 48.9%   |                                    |
| Less: D&A  | (1,655)  | (1,689)   | (1,735)   | (2,022)   | (1,691)                                      | (1,753)                   | (1,819)  | (1,999)   | (2,127)                    | (2,236)                     | (2,403)   |                                    |
| EBIT   | \$1,418  | \$1,621   | \$1,693   | \$1,759   | \$2,311                                      | \$2,448                   | \$2,496  | \$2,456   | \$2,840                    | \$2,872                     | \$2,613   | 6.3%                               |
| Less: Net Interest Expense   | (1,336)  | (1,266)   | (1,299)   | (1,590)   | (1,682)                                      | (1,678)                   | (1,649)  | (1,861)   | (1,961)                    | (2,039)                     | (2,251)   |                                    |
| Net Income   | \$82   | \$355   | \$394     | \$169   | \$629  | <b>\$</b> 770             | \$847  | \$595   | \$879                      | \$833                       | (5)<br>\$362  | 16.0%                              |
| Total Debt <sup>(b)</sup>  | \$26,874   | \$27,962  | \$29,101  | \$29,871  | \$30,452                                     | \$31,157                  | \$32,362   | \$33,806  | \$34,684                   | \$35,451                    | \$35,337  |                                    |
| Proprietary Capital <sup>(c)</sup>   | 5,027  | 5,356   | 5,732     | 5,883   | 6,494  | 7,246                     | 8,074  | 8,651   | 9,512                      | 10,327                      | 10,670  |                                    |
| Total Capitalization   | \$31,901   | \$33,318  | \$34,833  | \$35,754  | \$36,946                                     | \$38,403                  | \$40,436   | \$42,457  | \$44,196                   | \$45,777                    | \$46,008  |                                    |
| Cash Flow from Operations  | \$2,119  | \$2,391   | \$2,535   | \$2,578   | \$2,710                                      | \$2,984                   | \$3,251  | \$3,329   | \$3,805                    | \$3,894                     | \$3,790   | '14 – '23                          |
| Capital Expenditures & Other   | (2,727)  | (3,434)   | (3,638)   | (3,312)   | (3,255)                                      | (3,652)                   | (4,419)  | (4,737)   | (4,646)                    | (4,624)                     | (3,644)   | Total                              |
| Cash Flow from Operations - Capex  | (608)  | (1,043)   | (1,103)   | (733)   | (545)  | (668)                     | (1,168)  | (1,408)   | (841)                      | (730)                       | 146   | (8,093)                            |
| Net PP&E   | \$29,505   | \$31,041  | \$32,686  | \$33,630  | \$34,826                                     | \$36,189                  | \$38,072   | \$40,211  | \$41,915                   | \$43,273                    | \$43,816  |                                    |

Source: TVA FY13 LRFP Management Plan and TVA filings.

(a) Amount of these payments is five percent of gross revenues from sales of power during the preceding year, excluding sales or deliveries to other federal agencies and off-system sales with other utilities, with a provision for minimum payments under certain circumstances.

(b) Total debt includes current maturities of long-term debt (including VIEs), short-term debt and long-term debt.

(c) Proprietary capital includes the remaining portion of the U.S. Treasury's Power Program Appropriation Investment (~\$270 million) and retained earnings.



### **TVA Cash Flow and Credit Profile—Prior Plan**

(\$ in millions)

In the prior plan, TVA's debt balance was expected to exceed its \$30 billion statutory limit by 2019 and rise to \$34.6 billion by 2023

| Total capital expe<br>2023 of \$33.2 billio<br>construction of Be | on including  | - 2014 –     | flows         | inancing n   | n increase    | in            | Statutory d<br>forecasted<br>billion by 2<br>billion by 2 | to exceed<br>019 and \$3 | \$30          | modestl       | y over 201<br>easing for | prove only<br>3-2023, given<br>ecasted |                    | Ţ                     |               |
|---|---------------|--------------|---------------|--------------|---------------|---------------|---|--------------------------|---------------|---------------|--------------------------|--|--------------------|-----------------------|---------------|
|   |               |              |               |              | For           | the Fiscal Ye | ar Ended Septen   | uber 30,                 |               |               |                          | '14 - '23                              |                    |                       |               |
| CASH FLOW PROFILE   | 2013A         | 2014E        | 2015E         | 2016E        | 2017E         | 2018E         | 2019E   | 2020E                    | 2021E         | 2022E         | 2023E                    | Total                                  |                    |                       |               |
| Net Income  | \$82          | \$355        | \$394         | \$169        | \$629         | \$770         | \$847   | \$595                    | \$879         | \$833         | \$362                    | \$5,832                                |                    |                       |               |
| Depreciation & Amortization                                       | 2,025         | 2,084        | 2,170         | 2,532        | 2,249         | 2,395         | 2,513   | 2,803                    | 2,975         | 3,093         | 3,357                    | 26,171                                 |                    |                       |               |
| Working Capital and Other   | 12            | (49)         | (29)          | (123)        | (168)         | (180)         | (109)   | (69)                     | (48)          | (32)          | 71                       | (736)                                  |                    |                       |               |
| Cash Flow from Operations   | \$2,119       | \$2,391      | \$2,535       | \$2,578      | \$2,710       | \$2,984       | \$3,251   | \$3,329                  | \$3,805       | \$3,894       | \$3,790                  | (1)\$31,268                            |                    |                       |               |
| Base Capital Expenditures   | (673)         | (880)        | (904)         | (1,008)      | (1,052)       | (1,051)       | (1,081)   | (1,152)                  | (1,173)       | (1,197)       | (1,247)                  | (\$10,744)                             |                    |                       |               |
| Incremental Capital Expenditures                                  | (1,645)       | (2,096)      | (2,228)       | (1,946)      | (1,824)       | (2,053)       | (2,608)   | (2,974)                  | (2,647)       | (2,385)       | (1,687)                  | (\$22,448)                             |                    |                       |               |
| Nuclear Fuel & Other  | (410)         | (458)        | (507)         | (358)        | (379)         | (548)         | (729)   | (611)                    | (826)         | (1,042)       | (710)                    | (6,168)                                |                    |                       |               |
| Free Cash Flow  | (\$608)       | (\$1,043)    | (\$1,103)     | (\$733)      | (\$545)       | (\$668)       | (\$1,168)   | (\$1,408)                | (\$841)       | (\$730)       | \$146                    | (\$8,093)                              |                    |                       |               |
| Payments to Treasury <sup>(a)</sup>                               | (35)          | (26)         | (18)          | (18)         | (18)          | (18)          | (18)  | (18)                     | (18)          | (18)          | (18)                     | (189)                                  |                    |                       |               |
| Net External Financing Requirements                               | \$644         | \$1,070      | \$1,121       | \$751        | \$563         | \$686         | \$1,186   | \$1,426                  | \$859         | \$748         | (\$128)                  | \$8,282                                |                    |                       |               |
| Long-term Debt Maturities   | 2,311         | 32           | 1,032         | 29           | 1,555         | 1,681         | 32  | 33                       | 1,860         | 1,028         | 29                       | 7,309                                  |                    |                       |               |
| Gross External Financing Requirements                             | \$2,954       | \$1,101      | \$2,153       | \$781        | \$2,118       | \$2,367       | \$1,218   | \$1,459                  | \$2,719       | \$1,776       | (\$100)                  | \$15,592                               |                    |                       |               |
| CREDIT PROFILE  |               |              |               |              |               |               |   |                          |               |               |                          |  |                    |                       |               |
| Cash & Cash Equivalents   | \$241         | \$241        | \$241         | \$241        | \$241         | \$241         | 3   | \$241                    | \$241         | \$241         | <b>3</b> \$241           |  | -                  |                       |               |
| Total Statutory Debt <sup>(b)</sup>                               | 25,220        | 26,390       | 27,619        | 28,483       | 29,162        | 29,970        | <b>5</b> 1,274  | 32,799                   | 33,893        | 34,705        | 34,612                   |  |                    | Rating/O              |               |
| Total Debt <sup>(c)</sup>   | 26,874        | 27,962       | 29,101        | 29,871       | 30,452        | 31,157        | 32,362  | 33,806                   | 34,684        | 35,451        | 35,337                   |  | S&P                |                       | A+/Stable     |
| Proprietary Capital <sup>(d)</sup>                                | 5,027         | 5,356        | 5,732         | 5,883        | 6,494         | 7,246         | 8,074   | 8,651                    | 9,512         | 10,327        | 10,670                   |  | Moody's            | Α                     | Aaa/Stable    |
| Total Capitalization  | \$31,901      | \$33,318     | \$34,833      | \$35,754     | \$36,946      | \$38,403      | \$40,436  | \$42,457                 | \$44,196      | \$45,777      | \$46,008                 |  |                    |                       |               |
| FFO/Interest  | 4<br>2.6x     | 3.0x         | 2.1           | 2.7x         | 2.7x          | 2.0           | 3.1x  | 2.9x                     | 2.0           | 3.0x          | 4<br>2.7x                |  | Indicative<br>4.5x | e Credit St<br>Modest |               |
| FFO/Interest<br>FFO/Total Debt                                    | 8.1%          | 3.0x<br>8.9% | 3.1x<br>9.2%  | 2.7x<br>9.1% | 2.7x<br>9.4%  | 2.9x<br>10.2% | 5.1x<br>10.6%   | 2.9x<br>10.2%            | 3.0x<br>11.4% | 5.0x<br>11.5% | 2.7x<br>11.0%            |  | 4.5x<br>45.0%      | -                     | 6.0x<br>60.0% |
| Total Debt/EBITDA   | 8.1%<br>8.7x  | 8.9%<br>8.4x | 9.2%<br>8.5x  | 9.1%<br>7.9x | 9.4%<br>7.6x  | 10.2%<br>7.4x | 7.5x  | 10.2%<br>7.6x            | 7.0x          | 6.9x          | 7.0x                     |  | 45.0%<br>2.0x      | -                     | 60.0%<br>1.5x |
| Total Debt/Total Capitalization                                   | 8.7x<br>84.2% | 83.9%        | 8.5x<br>83.5% | 83.5%        | /.0x<br>82.4% | /.4x<br>81.1% | xc./<br>80.0%   | 79.6%                    | 78.5%         | 6.9x<br>77.4% | 76.8%                    |  | 2.0x<br>35.0%      | -                     | 1.5x<br>25.0% |

Source: TVA FY13 LRFP Management Plan and TVA filings.

Repayment of and return on U.S. Treasury's Power Program Appropriation Investment. Outstanding investment is approximately \$270 million. Return rate is based on average interest rate payable to U.S. Treasury and (a) its total marketable obligations on a given date.

Reflects Statutory Debt as defined by TVA; excludes debt associated with VIEs. (b)

(c) Total debt includes current maturities of long-term debt (including VIEs), short-term debt, long-term debt and capitalized leases.

(d) Proprietary capital includes the remaining portion of the U.S. Treasury's Power Program Appropriation Investment (~\$270 million) and retained earnings.

(e) Credit metric ranges implied for a company with a business risk profile of "Excellent" and a financial risk profile of "Modest," for which the expected credit ratings under S&P methodology would be AA.

## **TVA Capitalization Summary**

(\$ in millions)

|  |            |              | TVA SU       | MMARY CAPITA          | LIZATION |                    |        |        |          |          |
|--|------------|--------------|--------------|-----------------------|----------|--------------------|--------|--------|----------|----------|
|  | Face Value | Market Price | Market Value | Debt/2013E            | S&P      | Debt               |        |        | Annual   |          |
|  | Of Debt    | 11/4/2013    | 11/4/2013    | EBITDA <sup>(a)</sup> | Rating   | Structure          | YTW    | Coupon | Interest | Maturity |
| Short-term Debt                              |            |              |              |                       |          |                    |        |        |          |          |
| Discount Notes                               | \$3,261    |              | \$3,261      |                       |          |                    |        | 0.043% | \$1      |          |
| U.S. Treasury Line of Credit (\$150 million) | 0          |              | 0            |                       |          |                    |        | 0.000% | 0        |          |
| Commercial Lines of Credit (\$2.5 billion)   | 0          |              | 0            |                       |          |                    |        | 0.000% | 0        |          |
| Total Short-term Debt                        | \$3,261    |              | \$3,261      | 1.1x                  |          |                    |        | 0.043% | \$1      |          |
| Long-term Bonds                              |            |              |              |                       |          |                    |        |        |          |          |
| 2005 B Global                                | \$1,000    | 106.3%       | \$1,063      |                       | AA+      | 10-year NCL        | 0.465% | 4.375% | \$44     | Jun-15   |
| 2009 A Amort                                 | 8          | 101.4%       | 8            |                       | AA+      | 6-year Amort       | 1.578% | 2.250% | 0        | Nov-15   |
| 2001 D Put Global                            | 524        | 112.3%       | 589          |                       | AA+      | 15-year PUT5       | 0.866% | 4.875% | 26       | Dec-16   |
| 2007 A Global                                | 1,000      | 115.6%       | 1,156        |                       | AA+      | 10-year NCL        | 1.196% | 5.500% | 55       | Jul-17   |
| 1997 E (8)                                   | 650        | 119.1%       | 774          |                       | AA+      | 20-year NCL        | 1.439% | 6.250% | 41       | Dec-17   |
| 2008 B Global                                | 1,000      | 112.7%       | 1,127        |                       | AA+      | 10-year NCL        | 1.506% | 4.500% | 45       | Apr-18   |
| 2011 A Global                                | 1,500      | 107.8%       | 1,616        |                       | AA+      | 10-year NCL        | 2.694% | 3.875% | 58       | Feb-21   |
| 1998 H Sterling Global                       | 331        | 116.9%       | 388          |                       | AA+      | 23-year NCL        | 2.940% | 5.805% | 19       | Jun-21   |
| 2012 A Global                                | 1,000      | 90.9%        | 909          |                       | AA+      | 10-year NCL        | 3.071% | 1.875% | 19       | Aug-22   |
| 1995 E Global                                | 1,350      | 130.2%       | 1,758        |                       | AA+      | 30-year NCL        | 3.623% | 6.750% | 91       | Nov-25   |
| 1998 D PARRS (TVC)                           | 324        | 22.2%        | 72           |                       | AA+      | 30-year NC5        | N/A    | 3.830% | 12       | Jun-28   |
| 1999 A PARRS (TVE)                           | 270        | 22.8%        | 62           |                       | AA+      | 30-year NC5        | N/A    | 3.955% | 11       | May-29   |
| 2000 G Global                                | 1,000      | 134.7%       | 1,347        |                       | AA+      | 30-year NCL        | 4.193% | 7.125% | 71       | May-30   |
| 2001 B Sterling Global                       | 352        | 122.6%       | 431          |                       | AA+      | 31-year NCL        | 3.950% | 6.587% | 23       | Jun-32   |
| 2003 B Global                                | 472        | 103.3%       | 488          |                       | AA+      | 30-year NCL        | 4.446% | 4.700% | 22       | Jul-33   |
| 2009 B Amort                                 | 440        | 101.9%       | 449          |                       | AA+      | 25-year Amort      | 3.675% | 3.770% | 17       | Jun-34   |
| 2005 A Global                                | 436        | 102.2%       | 446          |                       | AA+      | 30-year NCL        | 4.491% | 4.650% | 20       | Jun-35   |
| 1996 A Put Put                               | 121        | 120.9%       | 147          |                       | Aaa*     | 40-year PUT2 PUT10 | 4.491% | 5.980% | 7        | Apr-36   |
| 1997 C Exchange                              | 1,500      | 119.8%       | 1,797        |                       | Aaa*     | 39-year PUT2 PUT9  | 4.471% | 5.880% | 88       | Apr-36   |
| 1998 B                                       | 1,000      | 124.1%       | 1,241        |                       | NR       | 40-year NCL        | 4.501% | 6.150% | 62       | Jan-38   |
| 2008 C Global                                | 500        | 113.2%       | 566          |                       | AA+      | 30-year NCL        | 4.601% | 5.500% | 28       | Jun-38   |
| 2009 C Global                                | 2,000      | 109.1%       | 2,182        |                       | AA+      | 30-year NCL        | 4.641% | 5.250% | 105      | Sep-39   |
| 2012 B Global                                | 1,000      | 81.2%        | 812          |                       | Aaa*     | 30-year NCL        | 4.691% | 3.500% | 35       | Dec-42   |
| 2003 A Sterling Global                       | 245        | 111.4%       | 273          |                       | AA+      | 40-year NCL        | 4.013% | 4.962% | 12       | Jun-43   |
| 1995 B Put                                   | 140        | 112.1%       | 157          |                       | AA+      | 50-year NC25       | 4.154% | 6.235% | 9        | Jul-45   |
| 2008 A Global                                | 500        | 99.7%        | 499          |                       | AA+      | 40-year NCL        | 4.891% | 4.875% | 24       | Jan-48   |
| 2006 A Global                                | 1,000      | 107.1%       | 1,071        |                       | AA+      | 50-year NCL        | 4.971% | 5.375% | 54       | Apr-56   |
| 2010 A Global                                | 1,000      | 93.4%        | 934          |                       | AA+      | 50-year NCL        | 4.991% | 4.625% | 46       | Sep-60   |
| Total Long-term Bonds                        | \$20,664   |              | \$22,359     | 6.8x                  |          |                    | 3.538% | 5.051% | \$1,044  |          |

Source: TVA, FactSet and Bloomberg.

Note: Excludes interest rate and other swap arrangements.

\* Represents Moody's rating; S&P rating not available.

(a) Based on \$3,055 million of 2013E EBITDA.

## TVA Capitalization Summary (cont'd)

(\$ in millions)

|                           |            |              | TVA SU       | MMARY CAPITA          | LIZATION |               |        |        |          |          |
|---------------------------|------------|--------------|--------------|-----------------------|----------|---------------|--------|--------|----------|----------|
|                           | Face Value | Market Price | Market Value | Debt/2013E            | S&P      | Debt          |        |        | Annual   |          |
|                           | Of Debt    | 11/4/2013    | 11/4/2013    | EBITDA <sup>(a)</sup> | Rating   | Structure     | YTW    | Coupon | Interest | Maturity |
| Electronotes              |            |              |              |                       |          |               |        |        |          |          |
| 88059TEL1 Feb 13, 2009    | \$17       | 102.3%       | \$18         |                       | Aaa*     | 11-year Amort | 2.301% | 2.650% | \$0      | May-20   |
| 88059TFN6 Feb 28, 2013    | 10         | 90.1%        | 9            |                       | Aaa*     | 12-year NC2   | 3.441% | 2.375% | 0        | Feb-25   |
| 88059TFP1 Mar 7, 2013     | 12         | 90.1%        | 11           |                       | Aaa*     | 12-year NC2   | 3.441% | 2.375% | 0        | Feb-25   |
| 88059TFB2 May 13, 2010    | 23         | 100.1%       | 23           |                       | Aaa*     | 15-year NC3   | 3.491% | 4.250% | 1        | May-25   |
| 88059TFQ9 Mar 28, 2013    | 16         | 93.4%        | 15           |                       | Aaa*     | 16-year NC2   | 3.559% | 3.000% | 0        | Mar-29   |
| 88059TEP2 Apr 20, 2009    | 50         | 99.0%        | 49           |                       | Aaa*     | 20-year NC4   | 4.444% | 4.350% | 2        | Apr-29   |
| 88059TEQ0 May 21, 2009    | 49         | 99.5%        | 49           |                       | Aaa*     | 20-year NC4   | 4.544% | 4.500% | 2        | May-29   |
| 88059TER8 June 11, 2009   | 13         | 100.0%       | 13           |                       | Aaa*     | 20-year NC4   | 4.750% | 4.750% | 1        | Jun-29   |
| 88059TET4 July 16, 2009   | 36         | 99.3%        | 36           |                       | Aaa*     | 20-year NC4   | 4.814% | 4.750% | 2        | Jul-29   |
| 88059TEV9 August 13, 2009 | 19         | 99.8%        | 19           |                       | Aaa*     | 20-year NC4   | 4.891% | 4.875% | 1        | Aug-29   |
| 88059TEW7 Sept 25, 2009   | 51         | 99.0%        | 50           |                       | Aaa*     | 20-year NC4   | 4.589% | 4.750% | 2        | Sep-29   |
| 88059TEX5 Oct 16, 2009    | 82         | 99.4%        | 81           |                       | Aaa*     | 20-year NC4   | 4.431% | 4.375% | 4        | Oct-29   |
| 88059TFC0 Jan 13, 2011    | 26         | 97.9%        | 25           |                       | Aaa*     | 20-year NC4   | 4.424% | 4.250% | 1        | Jan-31   |
| 88059TFD8 Mar 10, 2011    | 14         | 97.9%        | 14           |                       | Aaa*     | 20-year NC4   | 4.424% | 4.250% | 1        | Mar-31   |
| 88059TFE6 Apr 14, 2011    | 16         | 97.9%        | 16           |                       | Aaa*     | 20-year NC4   | 4.424% | 4.250% | 1        | Apr-31   |
| 88059TFH9 Feb 16, 2012    | 37         | 88.7%        | 32           |                       | Aaa*     | 20-year NC4   | 4.141% | 3.250% | 1        | Feb-32   |
| 88059TFK2 Apr 19, 2012    | 27         | 87.8%        | 24           |                       | Aaa*     | 20-year NC4   | 4.341% | 3.375% | 1        | Apr-32   |
| 88059TFR7 Apr 4, 2013     | 13         | 84.5%        | 11           |                       | Aaa*     | 20-year NC4   | 4.340% | 3.150% | 0        | Apr-33   |
| 88059TFS5 Aug 22, 2013    | 47         | 97.2%        | 45           |                       | Aaa*     | 20-year NC4   | 4.341% | 4.125% | 2        | Aug-33   |
| 88059TFF3 June 16, 2011   | 25         | 97.0%        | 25           |                       | Aaa*     | 30-year NC5   | 4.564% | 4.375% | 1        | Jun-41   |
| 88059TFG1 July 21, 2011   | 17         | 96.2%        | 17           |                       | Aaa*     | 30-year NC5   | 4.541% | 4.300% | 1        | Jul-41   |
| 88059TFJ5 Mar 22, 2012    | 32         | 85.5%        | 27           |                       | Aaa*     | 30-year NC5   | 4.541% | 3.625% | 1        | Mar-42   |
| 88059TFL0 May 24, 2012    | 39         | 85.7%        | 34           |                       | Aaa*     | 30-year NC5   | 4.441% | 3.550% | 1        | May-42   |
| 88059TFM8 Feb 15, 2013    | 53         | 89.7%        | 48           |                       | Aaa*     | 30-year NC5   | 4.241% | 3.625% | 2        | Feb-43   |
| Total Electronotes        | \$726      |              | \$692        | 0.2x                  |          | 2             | 4.330% | 4.034% | \$29     |          |
| Total TVA Statutory Debt  | \$24,651   |              | \$26,311     | 8.1x                  |          |               | 3.093% | 4.358% | \$1,074  |          |

Source: TVA, FactSet and Bloomberg.

Note: Excludes interest rate and other swap arrangements.

\* Represents Moody's rating; S&P rating not available.

(a) Based on \$3,055 million of 2013E EBITDA.



## TVA Capitalization Summary (cont'd)

(\$ in millions)

|                            |                      |             |              | TVA SUMI     | MARY CAPITA | LIZATION |                           |             |        |          |         |
|----------------------------|----------------------|-------------|--------------|--------------|-------------|----------|---------------------------|-------------|--------|----------|---------|
|                            | Initial              | Value       | Market Price | Market Value |             | S&P      |                           | Termination |        | Annual   | Final   |
| Leasebacks                 | Financing            | Outstanding | 11/4/2013    | 11/4/2013    |             | Rating   | Asset                     | Value       | Coupon | Interest | Payment |
| John Sevier                | \$1,000              | \$981       |              | \$981        |             | AA-      | John Sevier               | \$989       | 4.626% | \$45     | Jan-42  |
| Southaven                  | 400                  | 400         |              | 400          |             | AA-      | Southaven                 | 402         | 3.846% | 15       | Aug-33  |
| New Valley Gen I           | 300                  | 135         |              | 135          |             | AA-      | Johnsonville and Gallatin | 204         | 7.299% | 10       | Mar-19  |
| New Valley Gen II          | 320                  | 155         |              | 155          |             | AA-      | Lagoon Creek              | 225         | 5.572% | 9        | May-20  |
| New Valley Gen III         | 163                  | 87          |              | 87           |             | AA-      | Lagoon Creek              | 118         | 5.131% | 4        | Jan-21  |
| New Valley Gen IV          | 163                  | 89          |              | 89           |             | AA-      | Kemper County             | 90          | 4.687% | 4        | Jan-22  |
| New Valley Gen V           | 389                  | 295         |              | 295          |             | AA-      | Equipment                 | 312         | 4.929% | 15       | Dec-21  |
| Total Leasebacks           | \$2,734              | \$2,143     |              | \$2,143      | 0.7x        |          |                           | \$2,340     | 4.782% | \$102    |         |
| Prepayments                |                      |             |              |              |             |          | Counterparty              |             |        |          |         |
| MLGW                       | \$1,500              | \$518       |              | \$518        |             |          | Memphis Light Gas & Wate  | r           |        |          | Dec-18  |
| DEU                        | 55                   | 0           |              | 0            |             |          | Multiple Distributors     |             |        |          | Dec-13  |
| Total Prepayments          | \$1,555              | \$518       |              | \$518        | 0.2x        |          |                           |             |        |          |         |
| Total TVA Other Financial  | Obligations          | \$2,661     |              | \$2,661      | 0.9x        |          |                           |             |        | \$102    |         |
| Total TVA Debt & Other F   | inancial Obligations | \$27,311    |              | \$28,972     | 8.9x        |          |                           | 3.167%      | 4.309% | \$1,177  |         |
| Trust Balances             |                      |             |              |              |             |          |                           |             |        |          |         |
| TVA Retirement System      |                      | \$7,034     |              | \$7,034      |             |          |                           |             |        |          |         |
| Nuclear Decommissioning Tr | ust                  | 1,280       |              | 1,280        |             |          |                           |             |        |          |         |
| Asset Retirement Trust     |                      | 289         |              | 289          |             |          |                           |             |        |          |         |
| Total Trust Balances       |                      | \$8,602     |              | \$8,602      |             |          |                           |             |        |          |         |
| Proprietary Capital        |                      |             |              |              |             |          |                           |             |        |          |         |
| Total Proprietary Capital  |                      | \$5,430     |              | \$5,430      |             |          |                           |             |        |          |         |



## Analysis of Quantifiable TVA Structure Rate Impacts—IOU Comparison

(\$ in millions, except otherwise noted)

|  |                     | Interest Cost         |          | Capital Stru           | icture <sup>(a)</sup> | Tax Exemption |          |  |
|--|---------------------|-----------------------|----------|------------------------|-----------------------|---------------|----------|--|
|  | TVA<br>2014E        | Adjustment            | Variance | Adjustment             | Variance              | Adjustment    | Variance |  |
| Equity return                              | 0.0%                | 0.0%                  |          | → 10.0% <sup>(a)</sup> |                       | 10.0%         |          |  |
| Debt return                                | 4.6% <sup>(b)</sup> | → 5.3% <sup>(a)</sup> | )        | 5.3%                   |                       | 5.3%          |          |  |
| Tax rate                                   | 0.0%                | 0.0%                  |          | 0.0%                   |                       | → 35.0%       |          |  |
| Equity/Total Capitalization                | 6.7%                | 6.7%                  |          | → 50.0%                |                       | 50.0%         |          |  |
| Debt/Total Capitalization                  | 93.3%               | 93.3%                 |          | → 50.0%                |                       | 50.0%         |          |  |
| Ratebase                                   | \$29,328            | \$29,328              |          | \$29,328               |                       | \$29,328      |          |  |
| Equity                                     | 1,965               | 1,965                 |          | 14,664                 |                       | 14,664        |          |  |
| Debt                                       | 27,363              | 27,363                |          | 14,664                 |                       | 14,664        |          |  |
| Revenue requirement                        | \$10,467            | \$10,659              | \$192    | \$11,447               | \$789                 | \$12,237      | \$790    |  |
| Less: cost of fuel                         | (3,498)             | (3,498)               | -        | (3,498)                | -                     | (3,498)       | -        |  |
| Gross margin                               | 6,969               | 7,161                 | 192      | 7,949                  | 789                   | 8,739         | 790      |  |
| Less: operating expenses                   | (3,909)             | (3,909)               | -        | (3,909)                | -                     | (3,909)       | -        |  |
| EBITDA                                     | 3,060               | 3,251                 | 192      | 4,040                  | 789                   | 4,829         | 790      |  |
| Less: depreciation & amortization          | (1,791)             | (1,791)               | -        | (1,791)                | -                     | (1,791)       | -        |  |
| EBIT                                       | 1,269               | 1,460                 | 192      | 2,249                  | 789                   | 3,039         | 790      |  |
| Less: interest                             | (1,269)             | (1,460)               | (192)    | (783)                  | 678                   | (783)         | -        |  |
| EBT  | -                   | -                     | -        | 1,466                  | 1,466                 | 2,256         | 790      |  |
| Less: tax                                  | -                   | -                     | -        | -                      | -                     | (790)         | (790)    |  |
| Net income <sup>(c)</sup>                  | -                   | -                     | -        | 1,466                  | 1,466                 | 1,466         | -        |  |
| Incremental revenue requirement            |                     |                       | \$192    |                        | <b>\$</b> 789         |               | \$790    |  |
| Cumulative incremental revenue requirement |                     |                       | 192      |                        | 980                   |               | 1,770    |  |

(a) Based on illustrative comparison of TVA revenue forecast against pro forma IOU. Calculation of IOU interest cost assumes 70 basis point spread; calculation of IOU capital structure assumes 50% debt/50% equity capital structure and 10% ROE; calculation of impact of loss of tax exemption assumes 35% corporate income tax rate. For purposes of calculating the impact of revised capital structure, it is assumed that an illustrative IOU ratebase would equal TVA's net PP&E; however, any reduction in ratebase would decrease the incremental revenue impact.

(b) Calculated as 2014E interest expense divided by average 2013A – 2014E debt level.

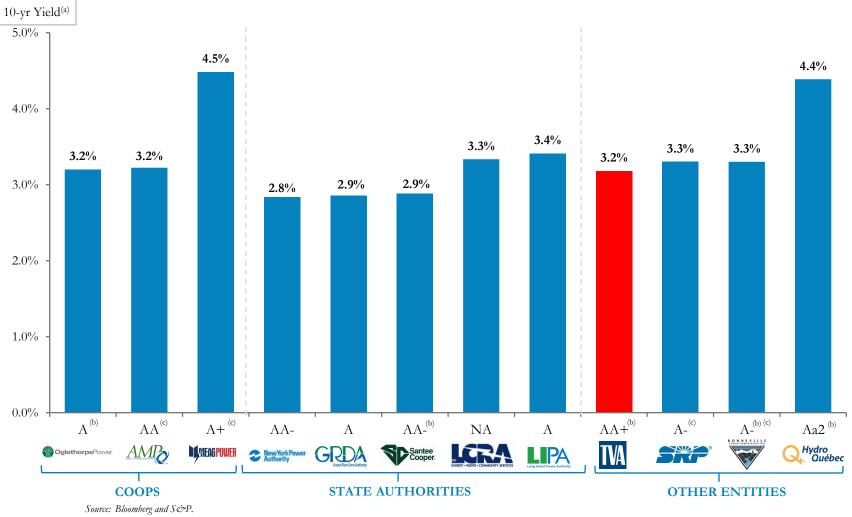
(c) Adjusted TVA 2014E net income to \$0 from \$1 for illustrative purposes.



# 3 Public Sector Spin-off

### Public Power Entities—Cost of Capital Observations

TVA's cost of capital is approximately equivalent to selected other public power entities' cost of capital; importantly, public power entities that have explicit or implicit federal/provincial support (e.g., BPA, Hydro Quebec, TVA) do not appear to garner any distinct cost of capital advantage



(a) Cost of debt based on yield-to-worst on 10-year bonds as of November 20, 2013.

(b) Credit rating for taxable debt. Recently-observed spread between taxable and tax-exempt debt was ~44 basis points, based on a comparison of the 10-year rates for the AA-rated Municipal bond index (3.0%) and the AA-rated corporate bond index (3.4%) as of November 12<sup>th</sup>.

(c) Reflects credit rating for specific taxable debt issuance; may not reflect credit rating for parent issuer.

## **TVA Relative Cost of Capital Analysis—Public Power Entities**

(\$ in millions)



Source: Company filings, Barra, FactSet and Wall Street research.

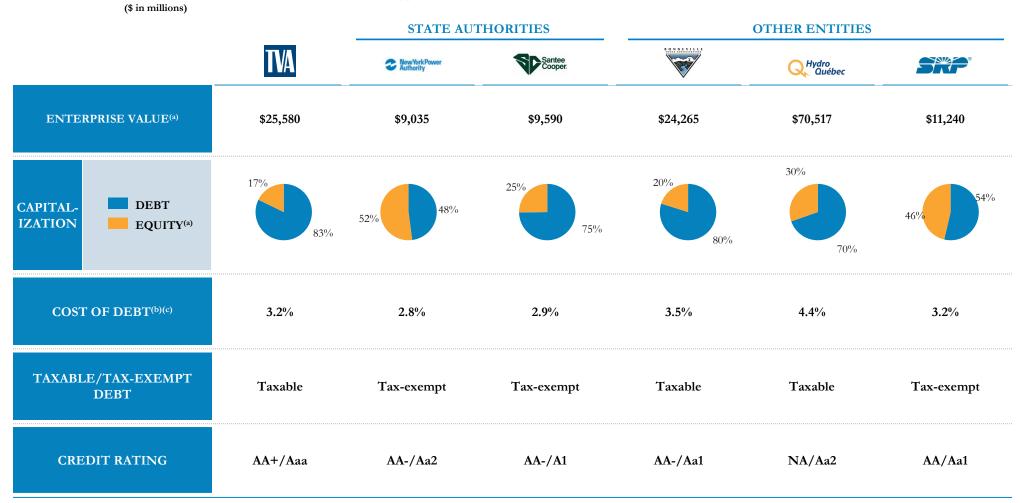
(a) Based on book value of debt and accumulated earnings.

(b) Cost of debt based on yield-to-worst on 10-year bonds as of November 20, 2013.

(c) Assumes long-term capital structure for non-profit/public sector entities of 100% debt to total capitalization.



## TVA Relative Cost of Capital Analysis—Public Power Entities (cont'd)



Source: Company filings, Barra, FactSet and Wall Street research.

130 LAZARD

(a) Based on book value of debt and accumulated earnings.

(b) Cost of debt based on yield-to-worst on 10-year bonds as of November 20, 2013.

(c) Assumes long-term capital structure for non-profit/public sector entities of 100% debt to total capitalization.



## Selected Profiles of Public Power Entities—Coops

The following public power cooperatives are organized and governed slightly differently; however, all have independent ratesetting authority and serve similar functions:

|                             | Associated Electric Cooperative, Inc.  | AMPROVE MANTHERE  | MEAG POWER   | <b>Oglethorpe</b> Power  |
|-----------------------------|--|---|--|--|
| ORGANIZATIONAL<br>STRUCTURE | <ul> <li>Associated Electric<br/>Cooperative Inc. ("AECI")<br/>provides generation and<br/>transmission services to<br/>cooperatives in Missouri, Iowa<br/>and Oklahoma</li> <li>Five member G&amp;T coops<br/>control AECI</li> </ul> | <ul> <li>American Municipal Power ("AMP") is an Ohio non-profit corporation that operates on a cooperative basis for the mutual benefit of its members (municipal electric utility system owners)</li> <li>AMP qualifies as a Section 501(c)(12) corporation under the IRS Code (federal taxexempt entity)</li> </ul> | <ul> <li>The Municipal Electric Authority of Georgia ("MEAG") operates generation and transmission resources and sells power to local community coops</li> <li>Though not a state entity, MEAG was created through an Act of the Georgia General Assembly to allow local governments to control energy decision-making</li> <li>MEAG is participating in the nuclear plant construction at Vogtle Units 3 and 4</li> </ul> | <ul> <li>Oglethorpe Power is the largest electric coop in the U.S., operating \$8 billion of generation and transmission resources in Georgia</li> <li>Oglethorpe sells wholesale power to 39 member-owner distribution cooperatives</li> <li>It is currently a partner with Southern Co. in building Vogtle nuclear facility</li> </ul> |
| SERVICE<br>TERRITORY        | <ul><li>Iowa</li><li>Missouri</li><li>Oklahoma</li></ul>   | <ul> <li>Kentucky</li> <li>Michigan</li> <li>Ohio</li> <li>Pennsylvania</li> <li>Virginia</li> <li>West Virginia</li> </ul>   | <ul> <li>Georgia</li> </ul>  | <ul> <li>Georgia</li> </ul>  |
| GOVERNANCE<br>STRUCTURE     | AECI is governed by a 12-<br>member Board, consisting of<br>six CEOs of coops and six<br>Board representatives of the<br>customer coops  | <ul> <li>AMP is governed by a 20-member Board</li> <li>Board representatives are appointed by AMP members who are elected by other AMP members or subgroups of members</li> <li>The Board President and General Counsel are appointed by the Board of Trustees and are ex-officio members of the Board</li> </ul>     | <ul> <li>MEAG is governed by a nine-<br/>member Board</li> <li>Board members are elected by an<br/>elections committee comprised of<br/>representatives from the local coops</li> </ul>  | Oglethorpe is managed and<br>overseen by a 13-member Board<br>which is made up of member coop<br>representatives   |
| RATE-SETTING<br>AUTHORITY   | Member coops, via the Board,<br>set the price of generation and<br>transmission services   | AMP has statutory authority to increase its<br>wholesale rates on a timely basis; its member<br>municipalities have unregulated rate-setting<br>authority to pass on purchased power costs<br>to retail customers   | <ul> <li>Rates are established by the Board<br/>of coop representatives</li> </ul>   | Rates are established by the Board<br>of coop representatives  |

### Selected Profiles of Public Power Entities—State Authorities

The following state authorities are organized and governed slightly differently; however, all have independent rate-setting authority and serve similar functions:

|                           | GREA   | LCRA   |  | NewYorkPower<br>Authority   | Santee<br>Cooper.  |
|---------------------------|--|--|--|---|--|
| ORGANIZATION<br>STRUCTURE | The Grand River Dam<br>Authority ("GRDA") is an<br>Oklahoma state agency that<br>manages the Grand River and<br>its drainage basin, as well as<br>hydro and non-hydro<br>generation assets   | <ul> <li>The Lower Colorado River<br/>Authority ("LCRA") is a<br/>Texas conservation and<br/>reclamation district operating<br/>with no taxing authority</li> <li>LCRA's mission is to manage<br/>the water supply and<br/>environment, while providing<br/>low-cost power to Central<br/>Texas</li> <li>LCRA operates coal, gas and<br/>hydro generation, as well as<br/>transmission networks</li> </ul> | <ul> <li>The Long Island Power<br/>Authority ("LIPA") is a<br/>municipal electric provider<br/>that owns the retail electric<br/>Transmission and<br/>Distribution system on<br/>Long Island</li> <li>LIPA is owned by the State<br/>of New York; LIPA<br/>recently transitioned to<br/>being operated by Public<br/>Service Enterprise Group<br/>("PSEG") under a<br/>management services<br/>contract</li> </ul> | <ul> <li>New York Power Authority<br/>("NYPA") operates generation<br/>and transmission resources in<br/>New York</li> <li>NYPA is a corporate municipal<br/>instrumentality and political<br/>subdivision of the State of New<br/>York</li> <li>NYPA's primary customers are<br/>munis, coops and IOUs who<br/>purchase both generation and<br/>transmission services</li> </ul> | <ul> <li>Santee Cooper is owned by<br/>the State of South Carolina<br/>and sells power to coops<br/>and wholesale customers</li> <li>Santee Cooper operates<br/>power generation and<br/>transmission assets, as well<br/>as water management<br/>systems</li> </ul> |
| GEOGRAPHIC<br>TERRITORIES | <ul> <li>Oklahoma</li> </ul>   | Texas  | New York   | New York  | South Carolina   |
| GOVERNANCE                | GRDA is governed by a<br>seven-member Board, with<br>three members appointed by<br>the Governor, one by the<br>Speaker of the State House<br>and one by the President of<br>the State Senate | LCRA is governed by a 15-<br>member Board, appointed by<br>the Governor of Texas and<br>confirmed by the Texas State<br>Senate   | LIPA is governed by a<br>Board of Directors; Board<br>members are appointed by<br>the Governor   | The Governor of New York<br>appoints a Board of six<br>Trustees to oversee NYPA   | Santee Cooper is governed<br>by a 12-member Board, with<br>directors appointed by the<br>Governor, confirmed by the<br>PUC and state Senate  |
| RATE-SETTING<br>AUTHORITY | <ul> <li>GRDA has independent rate-<br/>setting authority; however,<br/>the rate-setting process is<br/>overseen by the state of<br/>Oklahoma</li> </ul>                                     | <ul> <li>LCRA has independent rate-<br/>setting authority</li> </ul>   | <ul> <li>LIPA has independent rate-<br/>setting authority; however,<br/>increases greater than 2.5%<br/>annually are subject to state<br/>Public Service Commission<br/>approval</li> </ul>  | <ul> <li>NYPA has independent rate-<br/>setting authority</li> </ul>  | <ul> <li>Santee Cooper has<br/>independent rate-setting<br/>authority</li> </ul>   |

## Selected Profiles of Public Power Entities—Other Entities

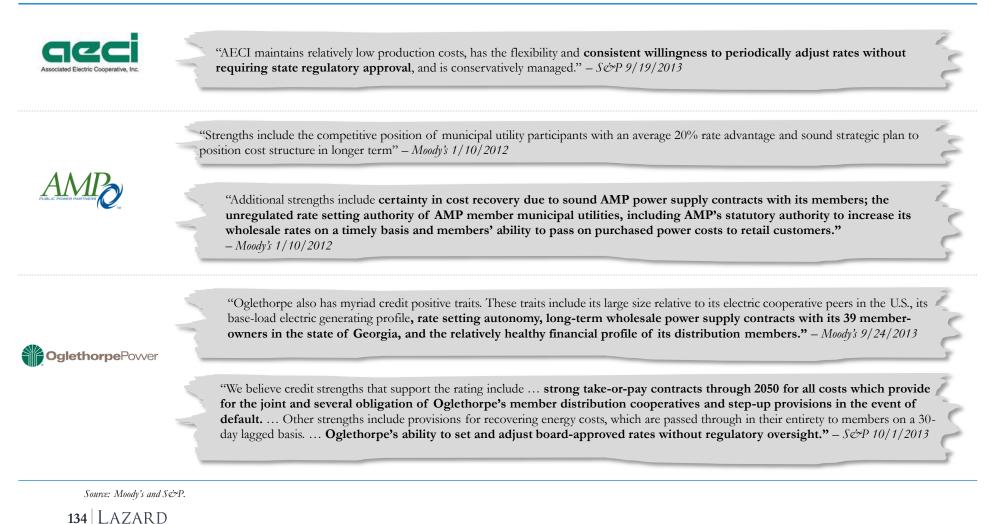
The following public power entities are not cooperatives or state-owned authorities; each is organized and governed differently with varying levels of independence and rate-setting authority:

|                           |   | Q Hydro<br>Québec  | <b>S</b> RP°  |
|---------------------------|---|--|---|
| ORGANIZATION<br>STRUCTURE | <ul> <li>BPA is a federal agency operating under the U.S. DOE</li> <li>BPA operates generation and transmission assets in the Pacific Northwest</li> <li>BPA maintains a close financial relationship with the Federal Government via credit lines and direct governance/oversight</li> </ul> | <ul> <li>Hydro Quebec is an integrated utility wholly-<br/>owned by the Province of Quebec</li> <li>Hydro Quebec's T&amp;D operations are regulated<br/>by the Energy Board (a non-governmental<br/>authority) of Quebec, while its generation assets<br/>are unregulated</li> </ul> | <ul> <li>The Salt River Project ("SRP") is a vertically-integrated utility providing electricity service and water to Phoenix, Arizona and surrounding areas</li> <li>SRP is a public power company but is not directly controlled by the State of Arizona</li> </ul> |
| GEOGRAPHIC<br>TERRITORIES | ■ Washington  | Quebec, Canada   | Arizona   |
| GOVERNANCE                | The President appoints an<br>Administrator (effectively the<br>CEO) of the BPA  | <ul> <li>Hydro Quebec's regulatory authority, the<br/>Energy Board, is comprised of three<br/>commissioners</li> </ul>   | SRP is governed by two separate boards which<br>are both elected by local landowners via<br>elections; the two boards work in conjunction<br>to guide SRP strategy and generally have<br>overlapping membership   |
| RATE-SETTING<br>AUTHORITY | <ul> <li>BPA has independent rate-<br/>setting authority</li> </ul>   | The Energy Board sets rates based on cost-<br>recovery plus reasonable return on ratebase  | SRP is authorized to set its own rates  |

## Selected Public Power Entity Rating Agency Commentary—Coops

The credit strengths of public power cooperatives appear to be related to independent rate-setting authority and long-term contracts with creditworthy counterparties, among other factors—importantly, these public power entities do not benefit from federal or state support, yet still achieve strong ratings and competitive borrowing costs

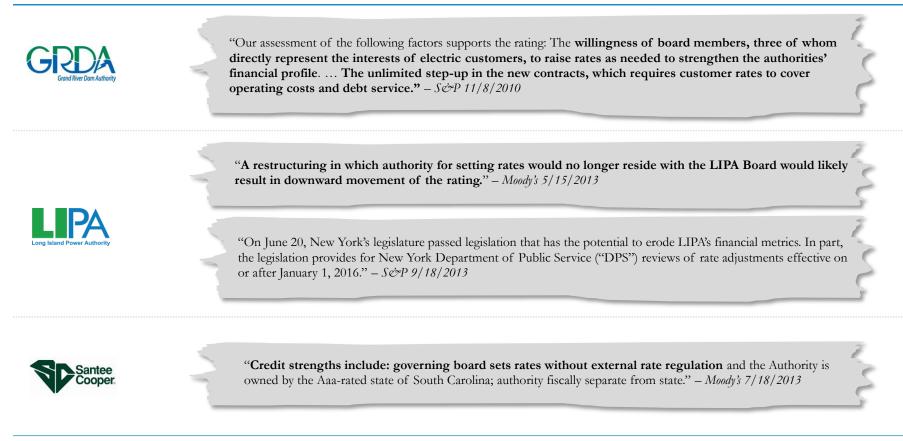
RATING AGENCY COMMENTARY



### Selected Public Power Entity Rating Agency Commentary—State Authorities

The credit strengths of public power-related state authorities appear to be related to independent rate-setting authority and long-term contracts with creditworthy counterparties, among other factors—importantly, these public power entities do not benefit from explicit federal or state support, yet still achieve strong ratings and competitive borrowing costs

#### **RATING AGENCY COMMENTARY**



Source: Moody's and S&P. 135 LAZARD

### Selected Public Power Entity Rating Agency Commentary—Other Entities

Certain public power authorities that are federally owned (e.g., BPA) or state/province-owned (e.g., Hydro Quebec) are directly supported by the government and have credit explicitly linked to the government; however, even for these entities, rating agencies highlight the level of independence of each entity's rate-setting process

Salt River Project is uniquely owned by a set of constituent landowners; the entity appears to achieve a competitive cost of capital largely due to its independent rate-setting authority

**RATING AGENCY COMMENTARY** 



"Hydro-Quebec's Aa2 rating is identical to that of the Province's, which explicitly guarantees all of its rated debt. ... The baseline credit assessment is provided solely for the benefit of investors as a reference and it has no impact on Hydro-Quebec's Aa2 rating, which is solely determined by the Province's credit rating. ... The Energy Board, which sets rates, operates independently with no direct government intervention." – *Moody's 10/11/2013* 



"The rating on regulated electric utility Hydro-Quebec's senior unsecured debt reflects the timely debt service guarantee that the Province of Quebec provides the utility's owner. ... The rating on the province reflects our view of Quebec's resilient economy, adequate cash and investment balances, exceptional access to capital markets, significant support from the federal government, and commitment to reduce its net tax-supported debt burden in the medium to long-term. ... A change in the rating on the province would likely result in a similar change to the guaranteed debt rating on the utility." – S O P 5/30/2013

"The ratings reflect what we view as the following strengths: the financial flexibility flowing from autonomous rate-setting authority and its competitive rates." –  $S e^{p} 6/18/2013$ 



"SRP's Aa1 rating reflects our views about the utility's strong governance, including its **timely and unregulated rate setting** process. ... Demonstrated willingness to exercise rate autonomy to achieve timely and full recovery of costs, including through general rate increases." – *Moody's* 3/29/2012

## 4 **Privatization**

## TVA Relative Cost of Capital Analysis—IOUs

| (\$ in millions)                              |   |          | ELECTRIC-ORIENTED REGULATED UTILITIES |                       |               |  |  |
|---|---|----------|---------------------------------------|-----------------------|---------------|--|--|
|   |   | TVA      | <b>DUKE</b><br>ENERGY                 |                       | 🕖 Xcel Energy |  |  |
| MARKET<br>VALUES                              | EQUITY VALUE                                  |          | \$50,932                              | \$37,260              | \$14,228      |  |  |
|   | ENTERPRISE VALUE                              | \$25,580 | \$90,032                              | \$61,357              | \$25,622      |  |  |
| CAPITAL-<br>IZATION                           | DEBT<br>EQUITY<br>OTHER <sup>(a)</sup>        | 17%      | 49%                                   | <sup>42%</sup><br>56% | 45%           |  |  |
| TAX RATE <sup>(b)</sup>                       |   | 0.0%     | 35.0%                                 | 35.0%                 | 35.0%         |  |  |
| CREDIT RATING                                 |   | AA+/Aaa  | BBB+/Baa1                             | A/Baa1                | A-/Baa1       |  |  |
| COST OF<br>DEBT                               | INTEREST RATE <sup>(c)</sup>                  | 3.2%     | 3.9%                                  | 3.9%                  | 4.3%          |  |  |
|   | AFTER-TAX<br>COST OF DEBT                     | 3.2%     | 2.5%                                  | 2.5%                  | 2.8%          |  |  |
| COST OF<br>EQUITY                             | BETA  |          | 0.50                                  | 0.46                  | 0.56          |  |  |
|   | "PRE-TAX" COST OF<br>EQUITY <sup>(d)(c)</sup> | NA       | 10.8%                                 | 10.5%                 | 11.6%         |  |  |
|   | COST OF EQUITY <sup>(d)</sup>                 | NA       | 7.1%                                  | 6.9%                  | 7.6%          |  |  |
|   |   |          |                                       |                       |               |  |  |
| WEIGHTED AVERAGE "PRE-TAX"<br>COST OF CAPITAL |   | 3.2%     | 7.4%                                  | 6.7%                  | 7.6%          |  |  |
| WEIGHTED AVERAGE COST OF<br>CAPITAL           |   | 3.2%     | 4.8%                                  | 4.4%                  | 4.9%          |  |  |

Source: Company filings, Barra, FactSet and Wall Street research.

(a) Includes non-controlling interest and/or preferred equity, if applicable.

(b) Observed historical effective tax rates may differ.

(c) Cost of debt based on yield-to-worst on 10-year bonds as of November 20, 2013.

(d) Assumes a risk free rate of 3.70% (based on 30-year Treasury yield) and market risk premium of 6.70%.

(e) Represents cost of equity "grossed up" for taxes at 35% tax rate.



## **TVA Relative Cost of Capital Analysis—IPPs**

|   | (\$ in millions)                              | -        | -<br>INDEPENDENT POWER PRODUCERS |                  |  |
|---|---|----------|----------------------------------|------------------|--|
|   |   | TVA      | <b>©</b> CALPINE                 | nrg <sup>‡</sup> |  |
| MARKET<br>VALUES                              | EQUITY VALUE                                  |          | \$3,584                          | \$9,736          |  |
|   | ENTERPRISE VALUE                              | \$25,580 | \$11,302                         | \$18,141         |  |
| CAPITAL-<br>IZATION                           | DEBT<br>EQUITY<br>OTHER <sup>(a)</sup>        | 17%      | 24%                              | 34%              |  |
| TAX RATE <sup>(b)</sup>                       |   | 0.0%     | 35.0%                            | 35.0%            |  |
| CREDIT RATING                                 |   | AA+/Aaa  | B+/B1                            | BB-/Ba3          |  |
| COST OF<br>DEBT                               | INTEREST RATE <sup>(c)</sup>                  | 3.2%     | 6.1%                             | 6.0%             |  |
|   | AFTER-TAX<br>COST OF DEBT                     | 3.2%     | 4.0%                             | 3.9%             |  |
|   | BETA  |          | 0.64                             | 0.93             |  |
| COST OF<br>EQUITY                             | "PRE-TAX" COST OF<br>EQUITY <sup>(d)(c)</sup> | NA       | 12.4%                            | 15.5%            |  |
|   | COST OF EQUITY <sup>(d)</sup>                 | NA       | 10.0%                            | 8.1%             |  |
|   |   |          |                                  |                  |  |
| WEIGHTED AVERAGE "PRE-TAX" COST<br>OF CAPITAL |   | 3.2%     | 7.6%                             | 9.1%             |  |
| WEIGHTED AVERAGE COST OF<br>CAPITAL           |   | 3.2%     | 5.1%                             | 6.1%             |  |

Source: Company filings, Barra, FactSet and Wall Street research.

(a) Includes non-controlling interest and/or preferred equity, if applicable.

Observed historical effective tax rates may differ. (b)

(c) Cost of debt based on yield-to-worst on 10-year bonds as of November 20, 2013.

(d) Assumes a risk free rate of 3.70% (based on 30-year Treasury yield) and market risk premium of 6.70%.

(e) Represents cost of equity "grossed up" for taxes at 35% tax rate.



# Largest U.S. Utilities vs. Illustrative Recapitalized Equity Value of TVA

(\$ in millions)

An acquisition of TVA in its entirety may represent a significant percentage of the market capitalization of possible U.S. utility buyers

The participation of financial sponsor capital (e.g., traditional private equity, infrastructure investors, etc.) may be a way to mitigate any size issues, and a break-up of TVA by geography and/or function may also address the buyer scarcity/scale issue

#### TEN LARGEST UTILITIES BY MARKET CAPITALIZATION

#### ILLUSTRATIVE EQUITY VALUE OF RECAPITALIZED TVA AS % OF BUYER MARKET CAPITALIZATION<sup>(a)</sup>

|                                | Market Capitalization | Enterprise Value | No Change in<br>Rate Path Case | Rate Mitigation Case | IOU Returns<br>Rate Path Case |
|--------------------------------|-----------------------|------------------|--------------------------------|----------------------|-------------------------------|
| Berkshire Hathaway/MidAmerican | \$285,263             | \$311,972        | 4.8%                           | 4.0%                 | 8.9%                          |
| Duke                           | 50,932                | 90,032           | 27.0%                          | 22.4%                | 49.8%                         |
| Dominion                       | 38,895                | 60,008           | 35.3%                          | 29.3%                | 65.2%                         |
| NextEra                        | 37,713                | 64,519           | 36.5%                          | 30.2%                | 67.2%                         |
| Southern                       | 37,260                | 61,357           | 36.9%                          | 30.6%                | 68.0%                         |
| Exelon                         | 23,910                | 42,400           | 57.5%                          | 47.7%                | 106.0%                        |
| AEP                            | 23,189                | 41,402           | 59.3%                          | 49.1%                | 109.3%                        |
| PPL                            | 19,437                | 38,460           | 70.7%                          | 58.6%                | 130.4%                        |
| PG&E                           | 18,397                | 32,160           | 74.7%                          | 62.0%                | 137.8%                        |
| FirstEnergy                    | 15,010                | 35,181           | 91.6%                          | 75.9%                | 168.9%                        |

Note: Market data as of November 14, 2013.

(a) Illustratively assumes TVA privatization is funded 50% with equity, implying a \$13.7 billion equity contribution in the No Change in Rate Path Case, an \$11.4 billion equity contribution in the Rate Mitigation Case and a \$25.4 billion equity contribution in the IOU Returns Rate Path Case (assuming midpoints of sale scenario values).