Memorandum from the Office of the Inspector General

February 12, 2010

Leslie P. Bays, JSF 1A-RGT
Kimberly S. Greene, WT 7B-K

FINAL REPORT – AUDIT 2009-12326 – REVIEW OF TVA'S PENSION RISK

Attached is our final report on our review of TVA's pension risk. This report is for information purposes only; therefore, no response is necessary.

Recipients of this report are responsible for safeguarding it to prevent publication or other improper disclosure. As requested, we will redact the Appendices from public disclosure due to their proprietary nature; however, please advise us of any other sensitive information in this report that you recommend be withheld.

If you have any questions or wish to discuss the report, please contact Rick L. Taylor, Project Manager, at (865) 633-7370; Lisa H. Hammer, Director, Financial and Operational Audits, at (865) 633-7342; or me at (865) 633-7450. We appreciate the courtesy and cooperation received from you during this review.

Robert E Martin

Robert E. Martin
Assistant Inspector General
(Audits and Inspections)
ET 3C-K

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OIG File No. 2009-12326

Office of the Inspector General

Audit Report

To the Chairman, TVA Retirement System Board of Directors and the Group President, Strategy & External Relations

REVIEW OF TVA'S PENSION RISK

Audit Team
Rick L. Taylor
David S. Shields

Audit 2009-12326
February 12, 2010

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EXECUTIVE SUMMARY

As part of our annual audit plan, our office reviewed the risks associated with the Tennessee Valley Authority's (TVA) pension plan and how those risks are mitigated. Our audit covered areas, such as (1) controls designed to mitigate pension risk, (2) the TVA Retirement System's (TVARS) financial statement audit performed by their external auditor as it relates to the existence and valuation of assets, (3) the work of TVARS' actuary in determining TVA's pension liability, (4) funding and benefits decisions and other factors impacting the financial status of TVARS, and (5) concerns raised during the audit by TVARS members.

Our review determined TVARS' (1) controls were suitably designed and operating with sufficient effectiveness to provide reasonable assurance that the control objectives specified were achieved, (2) external auditor performed the work according to their audit program, and we found nothing to question their work or conclusions, and (3) method used to calculate the pension liability and funding contribution was acceptable.

We also determined that a combination of factors resulted in TVARS experiencing a significant shortfall between assets and projected obligations and being funded at a lower level relative to obligations than most other comparison utilities. Four factors contributed to this shortfall. Specifically, (1) not making contributions to TVARS in six years, (2) adding significant benefits to the plan when the funding status was better, (3) making TVARS rules that had the effect of enticing employees to retire, and (4) the market crash of 2008 and early 2009 resulted in the funding shortfall. These events constituted a near "perfect storm" that created a financially unhealthy system with a funding shortfall of approximately $3 billion and annual retirement benefit payments of about $575 million as of December 31, 2008.

During our review, TVA and TVARS were in negotiations regarding the fiscal year 2010 contribution to TVARS and potential benefit reductions. Our office was contacted by several TVARS members expressing concerns on the impact the reductions might have. Most of these concerns were related to perception issues, such as (1) the fairness of proposing cuts to TVARS' benefits without cuts to the SERP (Supplemental Executive Retirement Plan) or the FERS (Federal Employees Retirement System), (2) past benefit decisions encouraging employees to retire early, which increased the benefit payments by TVARS, and then hiring some of those retirees back under contract, and (3) lack of independent legal counsel to assist in determining whether certain benefits are vested.

We provided TVA management and the TVARS Board an opportunity to comment on a draft of this report. They generally agreed with our findings and offered additional clarifying and contextual comments. We made minor clarifying changes to our draft report. Their complete responses are attached as appendices to this report. We also received written comments from one individual TVARS Board member and chose to publish the two sets of official comments from TVA management and the TVARS Board.

BACKGROUND

Established in 1939, the Tennessee Valley Authority Retirement System (TVARS) is a defined benefit plan (Plan) covering most full-time and part-time annual employees. TVARS is a separate legal entity from TVA and is administered by an independent, seven-member Board of Directors. Three of the directors are appointed by TVA, and three are elected by and from the membership. A seventh director is selected by the other six. The TVARS Board also has responsibility for administration of a defined contribution plan, the TVA Savings and Deferral Retirement Plan (401(k) Plan).

TVA is to contribute to TVARS amounts necessary on an actuarial basis to provide TVARS with assets sufficient to meet TVA-financed benefit obligations to be paid to members. While members are not required to make contributions to TVARS, members are eligible to make voluntary contributions to TVARS' Fixed and/or Variable Funds unless they transferred their funds to the 401(k) Plan after May 1, 2005. Members can also contribute to the 401(k) Plan, and TVA makes matching contributions to that Plan.

A member's retirement benefit consists of a pension benefit provided by TVA's contributions and earnings on Plan assets. The benefit may also include an annuity and/or lump sum benefit derived from the member's contributions to the Fixed and/or Variable Funds and the 401(k) Plan. The pension plus the annuity, if applicable, compose TVARS' retirement allowance. In addition, TVARS provides a supplemental benefit to eligible retirees that may be used to help with the cost of medical insurance.

The Plan's funding process begins with TVARS annually commissioning an actuarial study of Plan assets and obligations. As part of this study, the actuary develops a range of contributions for funding the Plan. TVA and TVARS representatives meet and discuss recommended funding options. TVARS Board members then vote on a contribution to recommend to TVA. Subsequently, TVARS will present the recommendation to TVA. If TVA agrees with the recommended contribution, it is then approved by the TVA Board, and payment is made to TVARS.

On June 8, 2009, the TVARS Board voted to recommend a contribution by TVA to the retirement system of $300 million for fiscal year (FY) 2010. According to a TVARS representative, TVARS' actuary determined annual contributions of $300 million over the next 30 years would provide 60 percent[1] confidence that all current benefits would be fully funded at the end of such period. According to the TVARS Board, absent any changes in Plan provisions or actuarial assumptions or differences between actual and expected experience, this level of annual

[1] According to an actuary consulted by the Office of the Inspector General (OIG), a confidence interval greater than 60 percent would be difficult to attain due to the extended time period of 30 years. Typically, a more common and accurate approach is a 5- to 7-year projection. However, according to the OIG consultant, a 20- to 30-year amortization of funding shortfall is common for government pension funds.

contribution will be necessary over the next 30 years to provide a reasonable chance that all current benefits will be fully funded. {REDACTED}

On July 14, 2009, TVA's Finance, Strategy, Rates, and Administration Committee recommended the TVA Board approve a contribution by TVA of $1 billion to TVARS in FY 2010 in lieu of contributions over the next four years (FY 2010-2013), provided TVARS' Board of Directors reduced the liabilities of the retirement system by at least $600 million.

At its August 20, 2009, meeting, the TVA Board approved a contribution to TVARS of $1 billion for FY 2010 and as an advance on its contributions through FY 2013.[2] TVA approved the $1 billion contribution given there would be benefit reductions of $300 million. Some of the benefit reductions were temporary while others were permanent reductions. Approved changes are as follows:

- The temporary benefit reductions involved the TVARS cost-of-living-adjustment (COLA).
  - For calendar year 2010, the COLA will be zero.
  - For calendar year 2011, the COLA will be the change in the Consumer Price Index (CPI), capped at 3 percent.
  - For calendar year 2012, the COLA will be zero.
  - For calendar year 2013, the COLA will be the change in the CPI, capped at 2.5 percent.
- At the end of this four-year period, the current COLA benefit of CPI, capped at 5 percent, will be restored. These changes were made temporary to consider the possibility of the markets recovering after four years.
- Current employees who retire on or after January 1, 2010, will be eligible to receive a COLA at actual age 60.
- The interest crediting rate for the Fixed Fund balances and future contributions will be reduced to 6 percent from 7.25 percent, effective January 1, 2010. No change was made to the 8 3/8 percent Fixed Annuity Fund conversion rate or any other benefits.
- Investment professionals are to be added to the TVARS Investment Committee as advisors. This is in addition to Wilshire Consulting, TVARS' current financial advisor.

[2] On September 24, 2009, TVA contributed $1 billion to TVARS. According to TVA, this increased the funding level to above 80 percent.

OBJECTIVES, SCOPE, AND METHODOLOGY

As part of our annual audit plan, our office reviewed the risks associated with the TVA pension plan and how those risks are mitigated. Our audit covered areas, such as (1) controls designed to mitigate pension risk, (2) the TVARS financial statement audit performed by their external auditor as it relates to the existence and valuation of assets, (3) the work of TVARS' actuary in determining TVA's pension liability, (4) funding and benefits decisions and other factors impacting the financial status of TVARS, and (5) concerns raised during the audit by TVARS members. To achieve our objectives, we:

- Obtained a record of all internal controls[3] designed to mitigate pension risks. The list of controls was from the external auditor's Statement on Auditing Standards (SAS) 70 report, Report on Controls Placed in Operation and Tests of Operating Effectiveness, dated July 31, 2008.
- Reviewed the external auditor's work related to testing internal controls.
- Assessed whether the work performed and results obtained adequately supported the external auditor's conclusions.
- Reviewed the external auditor's workpapers related to the existence and valuation of assets.
- Compared the amounts listed in TVARS' most recent annual report to the amounts in the external auditor's workpapers.
- Hired a consultant to assess the work of TVARS' actuary, Mercer Human Resource Consulting (Mercer), in (1) determining TVA's pension liability and (2) developing its FY 2010 contribution recommendation.
- Obtained the actuarial valuation reports used to determine TVA's pension liability in the FYs 2007 and 2008 TVARS Annual Reports.
- Determined whether the key assumptions used by the actuary to calculate the pension liability were reasonable.
- Compared the pension liability amounts calculated by the actuary to the amounts in the TVARS 2007 and 2008 Annual Reports.
- Assessed the current funding status and actuarial assumptions and methodology used to develop the FY 2010 contribution recommendation.
- Obtained a record of TVA's pension system contributions dating back to FY 1990.
- Compared TVARS' funding level to that of other utilities.
- Reviewed other decisions made by TVA and TVARS (i.e., adding benefits and early retirement age).

[3] We did not review information technology controls, as we deemed these were outside the scope.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. In performing this audit, nothing came to our attention that indicated noncompliance with applicable laws and regulations.

FINDINGS

Our review determined TVARS' (1) controls were suitably designed and operating with sufficient effectiveness to provide reasonable assurance that the control objectives specified were achieved, (2) external auditor performed the work according to their audit program, and we found nothing to question their work or conclusions, and (3) method used to calculate the pension liability and funding contribution was acceptable.

We also determined that a combination of factors resulted in TVARS experiencing a significant shortfall between assets and projected obligations and being funded at a lower level relative to obligations than most other comparison utilities. Four factors contributed to this shortfall. Specifically, (1) not making contributions to TVARS in six years, (2) adding significant benefits to the plan when the funding status was better, (3) making TVARS rules that had the effect of enticing employees to retire, and (4) the market crash of 2008 and early 2009 resulted in the funding shortfall. These events constituted a near "perfect storm" that created a financially unhealthy system with a funding shortfall of approximately $3 billion and annual retirement benefit payments of about $575 million as of December 31, 2008.

We provided an informal draft of this report to TVA management and the TVARS Board. These responses are attached. In addition, we received one TVARS Board member's response.

REVIEW OF TVARS' INTERNAL CONTROLS

E H Johnson & Co, P.C. (EHJCO), performed tests of internal controls for TVARS as part of a SAS 70 review for TVA.[4] We obtained the most recent "Report on Controls Placed in Operation and Tests of Operating Effectiveness" dated July 31, 2008, as well as the prior year's report dated July 31, 2007, performed by EHJCO. This annual report details the review of the controls

[4] SAS 70, "Service Organizations," is a widely recognized auditing standard developed by the American Institute of Certified Public Accountants. A service auditor's examination performed in accordance with SAS 70 ("SAS 70 Audit") is widely recognized because it represents that a service organization has been through an in-depth audit of their control objectives and control activities, which often include controls over information technology and related processes.

performed to reduce pension risk. We reviewed the workpapers supporting the July 31, 2008, report. We found (1) evidence all "tests performed" as described in the July 31, 2008, report were actually performed, (2) all EHJCO conclusions were supported by the test results documented in the workpapers, and (3) EHJCO concluded TVARS controls were suitably designed and operating with sufficient effectiveness to provide reasonable assurance that the control objectives specified were achieved.

REVIEW OF TVARS' EXTERNAL AUDIT

Crowe Horwath, LLP (Crowe), was hired by TVARS to perform its FY 2008 financial statement audit. We reviewed Crowe's workpapers related to the existence and valuation of assets. For existence testing, Crowe confirmed (1) the assets held by Bank of New York Mellon and (2) the limited partnerships and derivatives held by various investment management firms. We found Crowe performed the work according to their audit program and found no reason to question Crowe's work or conclusions.

Crowe used a third party, Harvest Investments, LTD. (Harvest), to test (1) a sample of defined benefit plan investment values at year-end and (2) the buy/sell price of a sample of defined benefit plan investment transactions that were made during the year. With regard to FY 2008 year-end investment valuations, Harvest calculated a value of $4,069,356,886. However, the TVARS provided value was $4,102,634,963—a difference of $33,278,077. TVARS made an adjusting entry of ($29,775,377). After the adjusting entry was made, the final difference was $3,502,700, which Crowe deemed immaterial. Crowe found no exceptions in the investment transaction testing that could not be explained to their satisfaction. In summary, Crowe concluded the financial statements present fairly, in all material respects, the financial status of the Plan.

We also compared the total asset and liability amounts in the auditor's workpapers to TVARS' most recent annual report and found no material differences.

REVIEW OF TVARS' ACTUARY IN DETERMINING PENSION LIABILITY

The Office of the Inspector General (OIG) hired a consultant to assess the work of TVARS' actuary, Mercer, in (1) determining TVA's pension liability and (2) developing its FY 2010 contribution recommendation. The OIG's consultant reviewed Mercer's "Report of the Actuary on the Actuarial Valuation of the TVA Retirement System," prepared as of September 30, 2007, and September 30, 2008, and determined the method used to calculate the pension liability was acceptable. In addition, the consultant concluded the assumptions used in the calculation were reasonable. However, the consultant stated TVARS would have had to use a lower discount rate if TVA were subject to the Pension Protection

Act of 2006 (PPA).[5] This would have likely resulted in higher required contribution levels to TVARS. Because of its governmental status, TVA is not subject to the minimum funding requirements of the Employee Retirement Income Security Act of 1974 (ERISA) as amended by the PPA.

The OIG consultant also reviewed Mercer's work in developing the FY 2010 contribution recommendation and noted that TVARS used a 20- to 30-year time horizon in developing its FY 2010 contribution recommendation for TVA. The consultant stated they are more comfortable using projections that extend five to seven years. However, according to the OIG consultant, a 20- to 30-year time horizon is common for government pension funds.

TVA'S FUNDING AND BENEFITS DECISIONS AND MARKET CONDITIONS IMPACTED TVARS' FUNDING STATUS

A combination of factors resulted in TVARS experiencing a significant shortfall between assets and projected obligations and being funded at a lower level relative to obligations than most other comparison utilities. Four factors contributed to this shortfall. Specifically, (1) not making contributions to TVARS in six years, (2) adding significant benefits to the plan when the funding status was better, (3) making TVARS rules that had the effect of enticing employees to retire, and (4) the market crash of 2008 and early 2009 resulted in the funding shortfall. In effect, this combination of decisions and events constituted a near "perfect storm" that created a financially unhealthy system with a funding shortfall of approximately $3 billion and annual retirement benefit payments of about $575 million as of December 31, 2008.

Funding Status and History – As of December 31, 2008, the Plan was approximately 63 percent funded with plan assets of $5.1 billion, while projected benefit obligations were $8.1 billion. The system has almost twice as many retirees as active members. Currently TVARS has 23,000 retirees and only 12,000 active members.

[5] PPA significantly changed the funding requirements for defined benefit pension plans. PPA generally establishes a 100 percent funding target for plans. If plan assets are less than the plan's target liability, in general, the minimum contribution is the amount needed to fund benefits earned during the current plan year plus a seven-year amortization of the amount that liabilities exceed assets. If the funding level of the plan falls below certain thresholds, the plan may be considered at risk and subject to additional contributions.

As shown in Table 1, TVARS' funding status[6] since 1990 has ranged from as high as 156 percent at September 30, 1997, to as low as 63 percent at December 31, 2008.

TVARS' FUNDING HISTORY

Year	Contribution ($ Millions)	Percentage of Payroll	Percentage Funded	Liabilities Added ($ Millions)
1990	45.1	6.7	112	---
1991	48.0	6.7	127	---
1992	49.8	6.7	129	---
1993	51.2	6.7	133	---
1994	53.3	6.7	124	---
1995	49.6	6.7	133	209.6
1996	49.7	6.4	139	71.0
1997	---	---	156	---
1998	27.0	4.0	134	1,102.8
1999	---	---	150	---
2000	3.0	0.4	137	584.1
2001	---	---	104	---
2002	---	---	80	---
2003	---	---	93	---
2004	21.8	2.7	97	(119.1)
2005	53.2	6.2	104	---
2006	75.0	9.1	104	11.6
2007	75.2	9.1	108	---
2008	75.0	8.7	79	---
2009	85.1	9.7[A]	63[B]	---
	$762.0	Average – 4.8		Sum = 1,860.0

[A] estimated
[B] at 12/31/08

TABLE 1

During the 1990 through 2009 time period, TVA's contribution rate to TVARS averaged 4.8 percent of payroll. During that same time period, TVA made an average annual contribution to the Federal Employees Retirement System (FERS) of 11.54 percent of payroll which was based on federal mandate for TVA employees enrolled in that plan. Had TVA made the same percentage of payroll contributions to TVARS as it did to FERS during this time period, the system assets would be higher by approximately $2.2 billion. In addition, TVA has funded the Supplemental Executive Retirement Plan (SERP) since its inception in FY 1996, including the six[7] years when no contribution to TVARS was made.

[6] Funding status was calculated by dividing net assets available for benefits by the accumulated benefit obligation. We obtained this information from TVARS' Annual Reports, except for the net assets available for benefits at December 31, 2008, which we obtained directly from TVARS.

[7] There were five years of no contribution and a sixth year when a $3 million contribution was made only to cover TVARS' administrative expenses.

As of October 1, 2008, the SERP had a pension benefit obligation of $43.2 million with only 35 participants.

In the OIG's April 1, 1990, to September 30, 1990, Semiannual Report, the OIG informed the TVA Board of Directors that a reduced contribution rate would not materially affect the pension plan's soundness. Specifically, the report addressed the appropriateness of TVA's FY 1990 contribution rate to TVARS. At that time, the fair market value of plan assets exceeded estimated accrued liabilities by $485 million. The OIG report stated that reducing the 1990 contribution rate from 11.5 percent of payroll to 6.55 percent would allow TVA to avoid annual interest cost of $2.8 million and would not have affected TVARS' ability to pay approved benefits. However, the report also recommended requiring contribution rates that would result in fair market value of TVARS' assets not being significantly less than TVARS' estimated accrued liabilities.

We compared TVARS' funding percentage as of December 31, 2008, to ten other utilities' pension plans, and TVARS had one of the lowest funding percentages.[8] As the table on the following page illustrates, TVARS tied for seventh out of the 11 utilities with regard to funded percentage as of that date. We also performed the same comparison for FYs 2004 through 2007, and the results were similar with TVA being ranked either eighth or ninth each year.

In addition to being 63 percent funded, TVA makes the second largest annual pension benefit payment, trailing only Exelon. According to Exelon's December 31, 2008, 10-K, aggregate pension contributions are expected to be approximately $4 billion through 2014.

[8] Seven of the ten utilities were selected from TVA's "April 2009 Total Rewards Benchmark Analysis Executive Summary." The remaining three utilities were selected from a group that TVA lists in its 2008 10-K as being similar in revenue and scope to TVA.

COMPARISON OF TVARS FUNDING LEVEL TO OTHER UTILITIES
As of December 31, 2008
(All Dollar Amounts in Millions)

	Utility	Projected Benefit Obligation	Plan Assets	Unfunded	Funded %	Annual Pension Benefits
1	Dominion	$ 3,893	$ 3,757	$ (136)	97%	$ 196
2	Southern Company Services	5,879	5,093	(786)	87%	324
3	American Electric Power	4,301	3,161	(1,140)	73%	296
4	Ameren Corporation	3,303	2,393	(910)	72%	166
5	DTE	3,032	2,155	(877)	71%	201
6	Duke Energy Corporation	4,161	2,853	(1,308)	69%	304
7	Entergy Corporation	3,305	2,078	(1,227)	63%	151
8	TVA	8,080	5,102	(2,978)	63%	525
9	Consolidated Edison, Inc.	9,383	5,836	(3,547)	62%	433
10	Exelon	10,788	6,664	(4,124)	62%	630
11	Progress Energy, Inc.	2,234	1,285	(949)	58%	127

TABLE 2

Because of its governmental status, TVA is not subject to the minimum funding requirements of the Employee Retirement Income Security Act of 1974 (ERISA) as amended by the PPA. Generally, the minimum funding requirement under the PPA is based on the funded status of the plan. In general if the plan assets exceed the present value of accrued benefits, then the minimum contribution is the normal cost reduced by the excess of the assets less the present value of accrued benefits. If the plan assets are less than the present value of accrued benefits, then the required contribution is the normal cost plus a seven-year amortization of the shortfall.

While other utilities have legal obligations to abide by minimal pension funding standards set forth by ERISA and the PPA, TVA follows the guidelines set forth in the "Rules and Regulations of the TVA Retirement System." According to Section 9.B.5, TVA's total amount payable each year to TVARS shall not be less than the sum of the normal contribution rate and the accrued liability contribution rate applied to the total compensation earnable by all members, plus cost-of-living contributions. However, according to Section 9.B.7 of the guidelines, if the actuarial valuation determines the funds are in excess of the amount required to provide fully the nonforfeitable benefits and benefits that have not become forfeitable as set forth in Section 11B, TVA may limit its contributions in a year to an amount, if any, determined by the Board. The OIG consultant stated establishing a funding requirement where contributions were required until fund assets exceeded liabilities by 10 percent would be prudent in the case of TVARS because (1) TVA's pension plan is such a mature plan, with approximately 23,000 retirees and 12,000 employees, and (2) TVARS' annual benefit payments are so large ($575 million annually, or about 10 percent of the asset value at December 31, 2008).

Funding and Benefits Decisions – TVA's annual Plan contribution rate had been 11.5 percent of payroll during FYs 1979 through 1989. However, TVA's annual Plan contribution rate averaged only 4.8 percent of payroll during the period of FYs 1990 through 2009, including six[9] years when no contribution was made.[10] The rationale for the lower contribution rate was the fact that the TVARS funding status was relatively high in the year the contributions were skipped. However, according to an actuary we consulted to review TVARS' pension plan, most plan sponsors during the 1990s viewed the excess asset returns as their contribution to the pension plan. In reality, those excess asset returns were already anticipated in the asset return assumption to compensate for the negative asset return years, hence achieving a long-term rate of return assumption. When an employer uses those returns to fund their contributions, they should anticipate funding more in negative return years.

In addition, during the time period 1995–2006, TVA/TVARS added approximately $1.9 billion in liabilities/benefits to the retirement system, while only contributing $279 million for the same time period. Among these additional liabilities/benefits were $921 million for the Supplemental Benefit and additional military liabilities/benefits totaling $765.9 million. {REDACTED}

Moreover, the TVARS benefit reductions discussed previously in the Background section came less than a year after a TVA-imposed deadline enticed employees to retire by December 31, 2008. The Supplemental Benefit provided through TVARS enticed many employees to retire early, especially in calendar year 2008. The Supplemental Benefit is a monthly benefit that is intended to aid in paying for retiree medical insurance costs. The monthly payment is based on the member's number of years of service multiplied by a dollar amount determined by TVARS. Employees who were at least age 50 with ten years of service could retire and receive the Supplemental Benefit. However, based upon the TVARS Rules and Regulations, the age to receive the Supplemental Benefit increased from age 50 to 55 for retirees who retire after December 31, 2008. Thus employees who were age 50–54 during 2008 had to decide whether to retire before

[9] There were five years of no contribution and a sixth year when a $3 million contribution was made only to cover TVARS' administrative expenses.

[10] TVA's fiscal year-end is September 30.

December 31, 2008, or wait to retire when they were 55 years old. Retirements for people in the 50- to 54-year old age groups increased significantly based on information provided by TVARS. The number of employees who retired between the ages of 50-54 increased by about 282 percent from 2006 to 2008 (164 to 462 retirements).

The Market Crash – In calendar year 2008, primarily the last quarter of 2008, and the first quarter of calendar year 2009, stock markets experienced significant declines as evidenced by the decline of the Dow Jones Industrial Average (DJIA). The DJIA declined by about 30 percent for the period January 1, 2008, through December 31, 2008, and about 40 percent for the period January 1, 2008, through March 30, 2009. TVARS, as well as other pension funds, invested a significant percentage, approximately 60 percent, of Plan assets in stocks during this market decline, which negatively impacted the value of the Plan assets.

CONCERNS EXPRESSED BY TVARS MEMBERS

This review was ongoing when TVA and TVARS were in negotiations regarding the FY 2010 contribution and potential benefit reductions as described previously. During those negotiations, our office was contacted by several TVARS members—both by e-mail and telephone—expressing concerns related to the impact the reductions might have. Most of these concerns were related to perception issues. One such concern related to the fairness of proposing cuts to the TVARS benefits without cuts to the SERP or the FERS plans, especially given the fact two of the TVARS Board members are covered by SERP. Another issue was the perception that past benefit decisions encouraged employees to retire early, thus increasing the benefit payments by TVARS and ultimately hiring some of those retirees back under contract. As described in this report, TVA has (1) continued to fund the SERP and FERS while reducing or eliminating contributions to TVARS and (2) increased the number of retirees due to the benefit enticements.

Lastly, TVARS members informed us that the cost-of-living adjustment has been a benefit for many years, but the TVARS Board does not have independent legal counsel to assist in determining whether those benefits, or other benefits, are vested. TVA's Office of the General Counsel also represents TVARS in the same capacity. According to the OIG consultant, it is a good governance practice for pension funds to have outside legal counsel available instead of relying solely on internal legal counsel for significant issues. This also mitigates the risk of reputational harm.

APPENDIX A
{REDACTED}

APPENDIX B
{REDACTED}

TVA RETIREMENT SERVICES
400 West Summit Hill Drive, WT 8A
Knoxville, Tennessee 37902-1401
865-632-4052 or 800-824-3870
Fax: 865-632-8591

January 20, 2010

Lisa Hammer
TVA Office of the Inspector General
400 West Summit Hill Drive (ET 3C)
Knoxville, Tennessee 37902

Dear Ms. Hammer:

Thank you for the opportunity to comment on the draft audit report #2009-12326 which details the results of the audit you performed. We appreciate the efforts of the Office of the Inspector General to review TVA's Pension Risk. We were happy to invite you to perform this review with our Audit Committee. We trust that it will be mutually beneficial to both TVA and TVARS. With more than 22,000 retirees and 12,000 current TVA employees, TVARS is committed to both a competitive and financially sound retirement system.

Internal Control Review

We are pleased with your determination that the TVARS controls are suitably designed and operating with sufficient effectiveness.

Financial Statement Audit

We agree with your review concluding the TVARS external auditor performed the work according to the TVARS audit program.

Actuarial Review

We agree with your review concluding that the TVARS external actuary performed calculations and methods for pension liability that are acceptable, and developed the FY 2010 contribution recommendation that was acceptable, in part due to our government plan status and time horizon.

Impact of Funding and Benefit Decisions on System Funding Status

We understand and agree that decisions made in the past have impacted our current funding status. The recent global financial crisis and market crash affected most investment classes, which has impacted many pension plans in a similar way. A priority for the TVARS Board is to de-risk the System in the future, especially since our plan is so mature.

Lisa Hammer
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January 20, 2010

Concerns Expressed by TVARS Members

During the FY 2010 contribution and potential benefit reduction discussion period, we also were contacted by members of the System concerned with the potential impacts of benefit changes and all the fairness issues you mentioned and more.

The TVARS Board has employed outside counsel in the past, and will likely consider it in the future. We appreciate that it is deemed to be a good governance practice, recognizing that the System is a separate legal entity from the plan sponsor.

Disclosure of Mercer's Information

The charts in the appendix were provided by the TVARS actuary and are therefore confidential. We request both charts be redacted from public disclosure.

OIG Observations

The report makes several other observations and comparisons that the TVARS Board will consider as appropriate. In particular, this Board has performed benchmarking on both power utilities and federal government plans. Your report reminds us how government and non-government pension plans operate under different funding standards and rules. We will certainly continue to look closely at our recommended contributions with the system and it's beneficiaries in mind.

The TVARS Board appreciates the opportunity to comment on this report and the effort from the Inspector General to review TVA's pension risk. If you have any additional questions or need clarification on these comments, please let me know.

Sincerely,

Leslie P. Bays

Leslie P. Bays
Acting Chairman
TVA Retirement System Board of Directors

January 29, 2010

Lisa Hammer, ET 3C-K

RESPONSE TO AUDIT REPORT 2009-12326 – REVIEW OF TVA'S PENSION RISK

We appreciate the efforts of the Office of the Inspector General to review TVA's Pension Risk. With more than 22,000 retirees and 12,000 current TVA employees, TVA is committed to both a competitive and financially sound retirement system.

Internal Control Review

We agree with your determination that the TVARS controls are suitably designed and operating with sufficient effectiveness.

Financial Statement Audit

We agree with your review concluding the TVARS external auditor performed the work according to the TVARS audit program.

Actuarial Review

We agree with your review concluding that the TVARS external actuary performed calculations and methods for pension liability that are acceptable.

Impact of Funding and Benefit Decisions on System Funding Status

We understand and agree that decisions made in the past have impacted the System's current funding status. However, the recent global financial crisis and market crash which affected most investment classes besides U. S. Treasuries had the largest impact. In fact, the System was 108 percent funded September 30, 2007. This market crash has impacted all pension funds in a similar way.

OIG Observations

The report makes several other observations and comparisons that the TVARS Board has committed to consider, as appropriate.

Kim S Greene

Kimberly S. Greene
Group President, Strategy
and External Relations
WT 7B-K

TWW:JD
cc: Franklin E. Alford, Jr.
John E. Long, Jr., WT 7B-K
Robert E. Martin, ET 3C-K
Tammy Whyte Wilson, WT 8A-K