Nuclear Decommissioning Trusts

2008 Survey of Trust Sponsors




NISA INVESTMENT ADVISORS, L.L.C.®

Nuclear Decommissioning Trust Survey

NISA Investment Advisors, L.L.C. (NISA) is pleased to present the 11th edition of the biennial Survey of Nuclear Decommissioning Trust (NDT) Sponsors. This report is published as a resource for, and service to, the NDT community. It is intended to provide insight into investment activities and trends within the NDT industry. Information contained herein has many potential uses and a variety of audiences, including trust sponsors, federal and state regulatory bodies, trust custodians, and investment managers.

U.S. Nuclear Power Plants

- There are presently 104 nuclear power reactors licensed to operate at 65 sites in 31 states.
- Investor-Owned Utilities (IOUs) represent approximately 84% of operating megawatt capacity.
- There have been 54 20-year reactor license extensions granted. Forty-two others are pending and publicly announced.
- Currently, 28 power reactors are undergoing decommissioning or have completed a significant portion of decommissioning.
- Seventeen companies have announced the intent to submit, or have submitted, an application to the NRC for 26 new plant licenses.
- Plant consolidation has slowed, with three plants changing ownership since the last survey.

Survey Data

- Information as of December 31, 2008 was requested from Investor-Owned Utilities.
- Investor-Owned Utility sponsors were sent 28 surveys. Twenty-two surveys, representing 92% of total Investor-Owned Utility megawatt capacity, were completed and returned.
- All individual survey responses are confidential.

NISA wishes to thank NDT sponsors for their participation in this survey.

Jess B. Yawitz, Ph.D.
Chairman & Chief Executive Officer

William J. Marshall, Ph.D.
President

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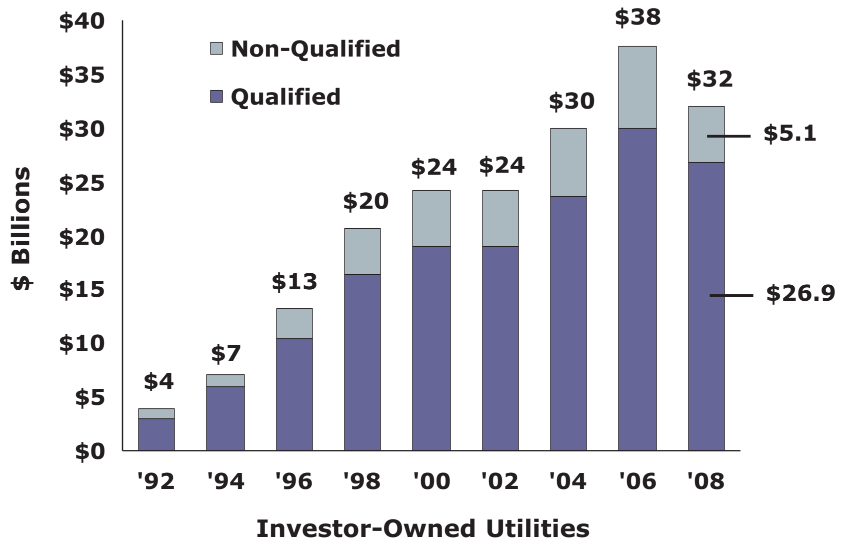
Nuclear Decommissioning Trusts

Estimated Assets

The estimated market value of NDT assets held by Investor-Owned Utilities decreased 15% since the last survey to $32 billion. Approximately 84% of total assets are held in Qualified Trusts, an increase of 4% from the last survey. Since the last survey, nine sponsors have poured-over and nine are evaluating whether to pour-over.

Based on information from recent NRC §50.75 filings, Public Power Authorities, Municipalities and Cooperatives held $4.3 billion in NDT assets as of December 31, 2008. Therefore, at the end of 2008, we estimate there were approximately $36.3 billion in total Nuclear Decommissioning Trust assets.

Total Estimated Assets

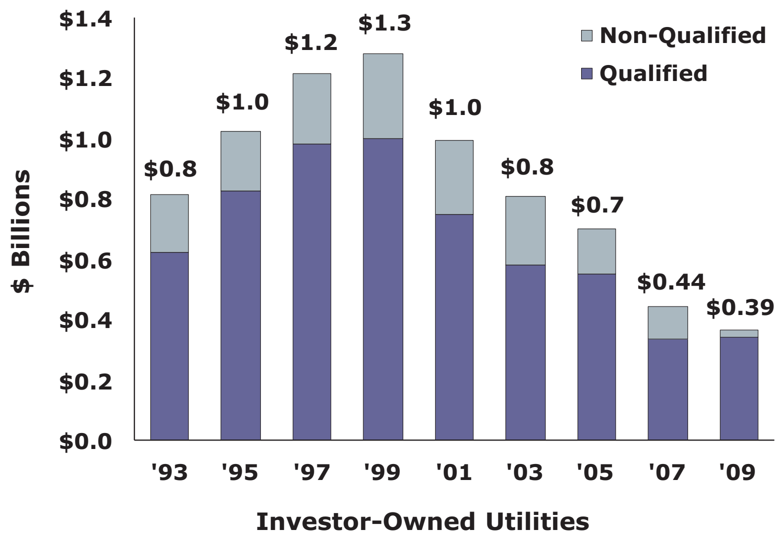


Expected Contributions

Expected contributions continue to decline, possibly resulting from plant sales or license extensions. Projected 2009 contributions are $393 million, an 11% drop compared to 2007 projections. Respondents expect 2009 contributions of $368 million to Qualified Trusts and $25 million to Non-Qualified Trusts. Many utilities have applied for and received license extensions, allowing for a longer investment horizon, which could result in lower annual contributions.

After survey responses had been collected, the NRC requested plans from sponsors of 18 plants to address apparent decommissioning funding shortfalls. The results of this dialogue could impact future expected contributions.

Total Expected Contributions



Estimated Decommissioning Costs

Estimated current-dollar decommissioning costs for Investor-Owned Utilities continued to increase from previous surveys. According to survey results, costs increased 6% over the two-year period, or 3% year-over-year.

The estimated costs shown here represent the higher of NRC filing or site-specific data, if provided by the respondent. NRC costs are approximately 70% of site-specific costs, based on respondents who provided both costs.

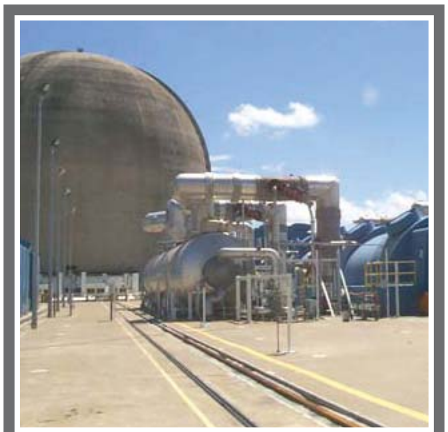
Based on survey responses and information from NRC §50.75 filings, the total estimated site-specific cost for Investor-Owned Utilities was $14.3 billion greater than the associated NRC cost estimate.

Estimated Decommissioning Costs

2008	$54B
2006	$51B
2004	$48B
2002	$46B
2000	$42B
1998	$39B
1996	$38B

NRC Filing Data

Selected asset and cost data were obtained from publicly available Decommissioning Financial Assurance filings as of December 31, 2008, and compared to survey data as a reasonableness check. Survey and NRC differences appear to result primarily from assets and costs attributable to non-radiological decommissioning and site-specific versus CFR §50.75 methodologies. The data in the table below were estimated based on NRC filings.



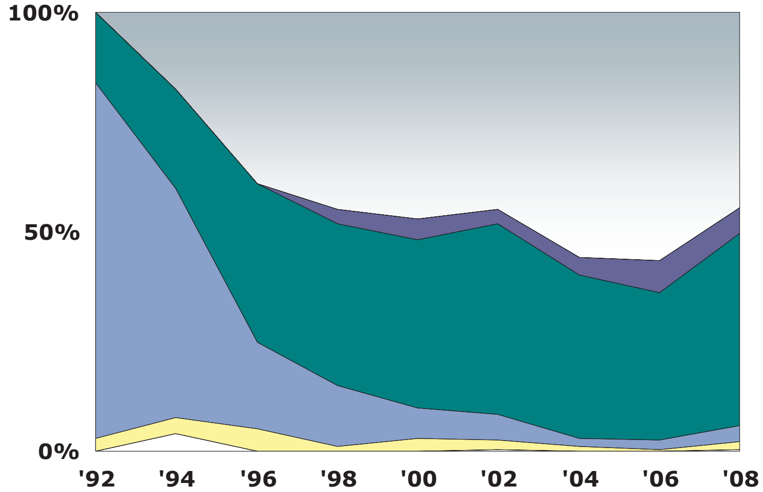
	NRC	
	Cost	Assets
Operational		
Investor-Owned Utilities	$39.7B	$29.3B
Non-Investor-Owned Utilities	$8.9B	$4.3B
Total	**$48.6B**	**$33.6B**

Qualified NDT

Historical Asset Allocation

Given that Qualified Trust assets are approximately 84% of total assets, Qualified Trusts dominate asset allocation results. The average Qualified Trust equity allocation decreased to 50% in 2008 from 64% in 2006, primarily due to equity market dislocations. Ten respondents currently have international equity exposure and four are considering investing in international equity. Tax-exempt municipal bond exposure remains low in Qualified Trusts and respondents did not indicate any allocation to international bonds during the past two years.

Average Trust Allocations

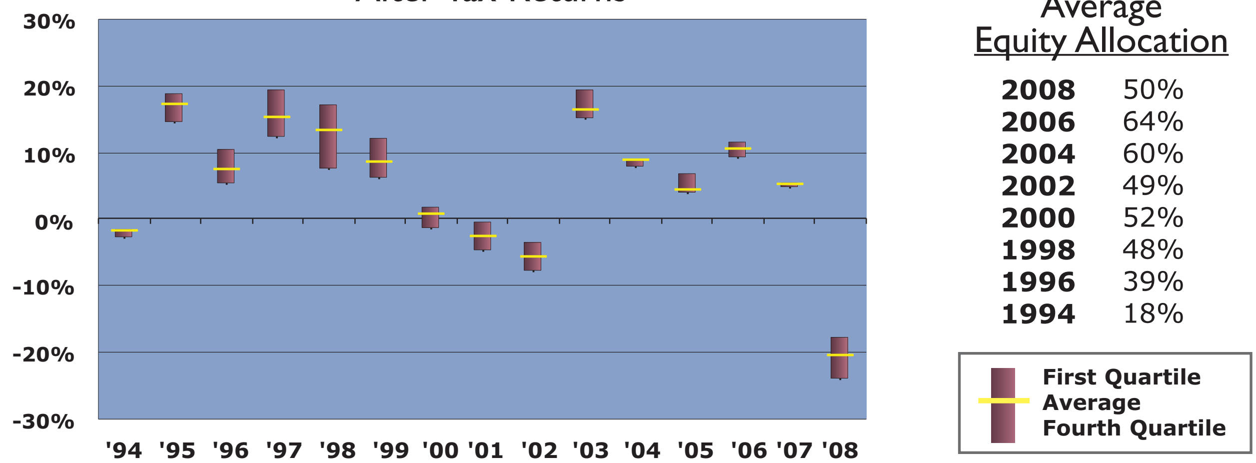


	2006	2008
US Equity	57%	44%
Int'l Equity	7%	6%
Taxable Bonds	34%	44%
Tax-Exempt Bonds	2%	4%
Cash	0%	2%
Other	0%	0%

Historical After-Tax Returns

Recession and market uncertainty led to the weakest after-tax trust performance since this survey began. The annualized returns for the S&P 500 Index and Barclays Capital Aggregate Index over the past two years were (18.4%) and 6.1%, respectively. The average annualized Qualified Trust after-tax return for the past two years was (8.6%).

After-Tax Returns



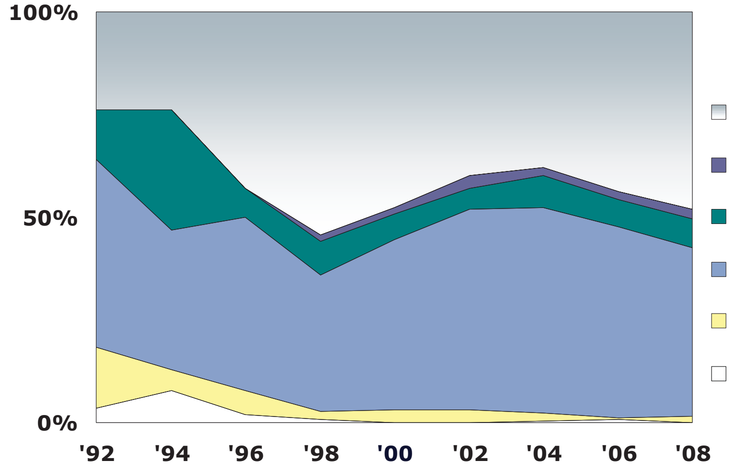
Average
Equity Allocation

2008	50%
2006	64%
2004	60%
2002	49%
2000	52%
1998	48%
1996	39%
1994	18%

Historical Asset Allocation

Equity assets as a percent of Non-Qualified Trusts increased. Several sponsors poured-over assets this year from Non-Qualified Trusts to Qualified Trusts, so although relative allocations remained similar to 2006 levels, pour-over activities and equity market dislocations decreased total Non-Qualified Trust assets. Four sponsors reported having an exposure to international equity in Non-Qualified Trusts.

Average Trust Allocations

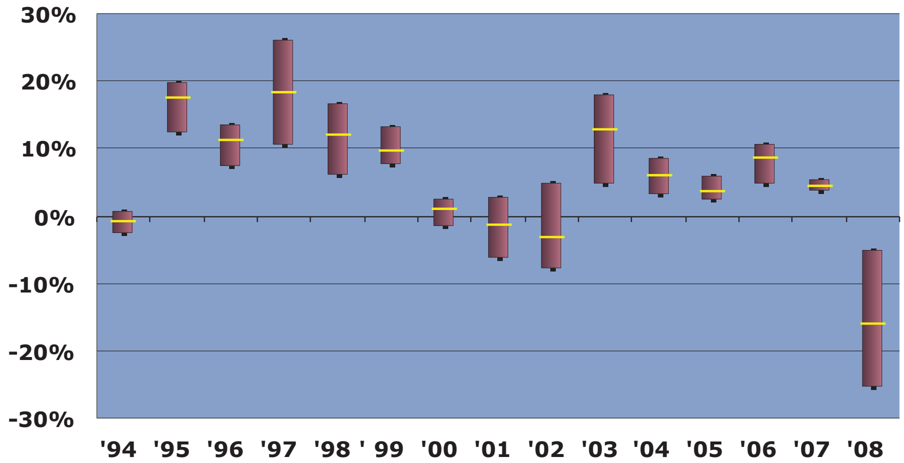


	2006	2008
US Equity	44%	48%
Int'l Equity	2%	2%
Taxable Bonds	7%	7%
Tax-Exempt Bonds	46%	41%
Cash	0%	2%
Other	1%	0%

Historical After-Tax Returns

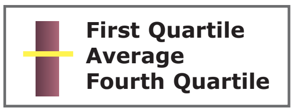
The annualized returns for the S&P 500 Index and Full Municipal Bond Index over the past two years were (18.4%) and 0.4%, respectively. The average annualized Non-Qualified Trust after-tax return for the past two years was (6.4%).

After-Tax Returns



Average Equity Allocation

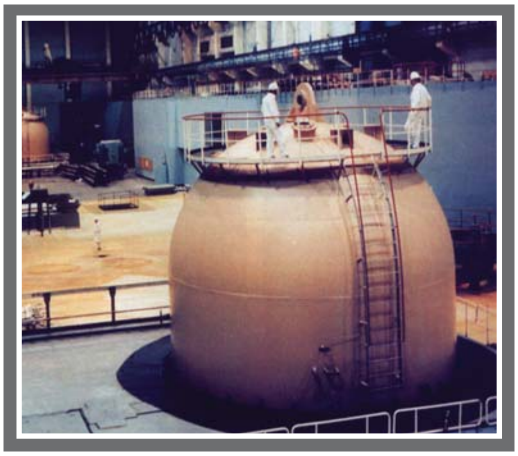
2008	50%
2006	46%
2004	40%
2002	43%
2000	50%
1998	56%
1996	43%
1994	24%



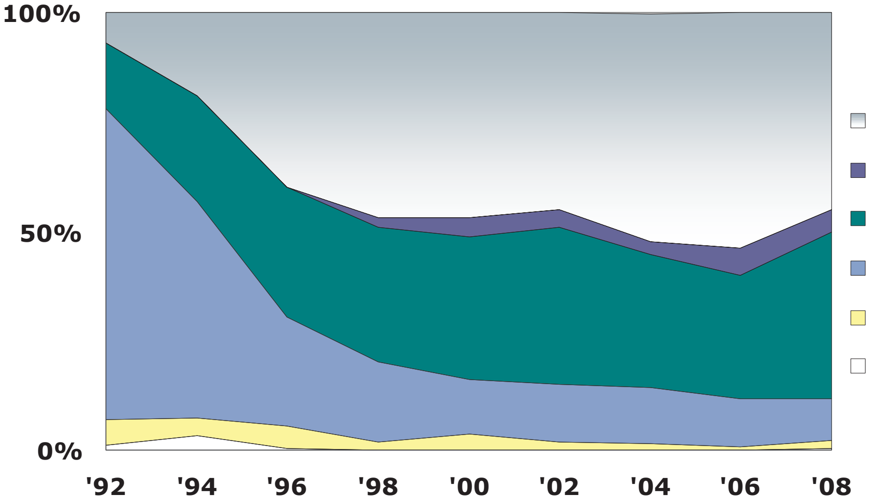
Total NDT

Historical Asset Allocation

Average allocations to the major asset classes since 1992 are shown in the graph below. Although the total average target equity allocation remained virtually unchanged among sponsors, equity exposure within Qualified Trusts declined to 50% in 2008, from a reported 64% in 2006. This is likely due to the 33% decline in the equity market since 2006 and tactical implementation of rebalancing activities. Sixteen sponsors rebalanced or are gradually rebalancing, many by directing contributions, security maturities, and coupon/dividend payments. Reported allocations to international equity were generally unchanged since 2006.



Average Trust Allocations



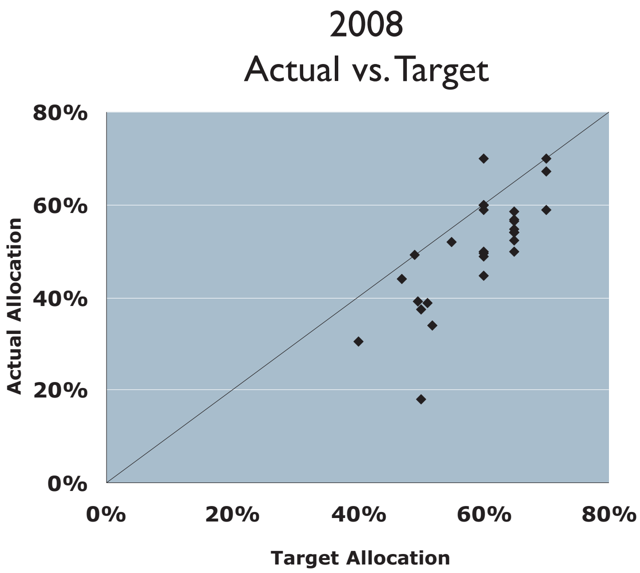
	2006	2008
US Equity	54%	45%
Int'l Equity	6%	5%
Taxable Bonds	28%	38%
Tax-Exempt Bonds	11%	10%
Cash	1%	2%
Other	0%	0%

Average Total Trust Equity Allocations

	1992	1994	1996	1998	2000	2002	2004	2006	2008
Actual	7%	19%	40%	49%	51%	49%	56%	60%	50%
Target	29%	44%	50%	55%	55%	55%	60%	60%	59%

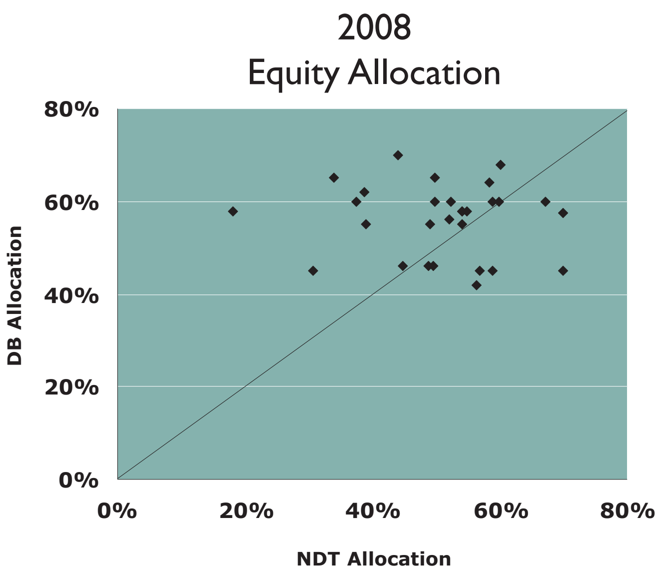
Equity Allocations

The chart at the right shows each trust's actual equity allocation relative to its target equity allocation in 2008. Observations below the diagonal reflect equity allocations below their target. Observations above the diagonal reflect equity allocations above their target.



In 2008, the average total trust actual equity allocation was below the average trust target allocation. All but five respondents were below their target by more than one percent. Historically, except for 2006 survey reporting, sponsors' actual equity allocations have been below their target. Based on survey data, IOUs would need to shift $3.7 billion to equity in order to raise equity allocations to their target levels.

NDT vs. Defined Benefit Plans



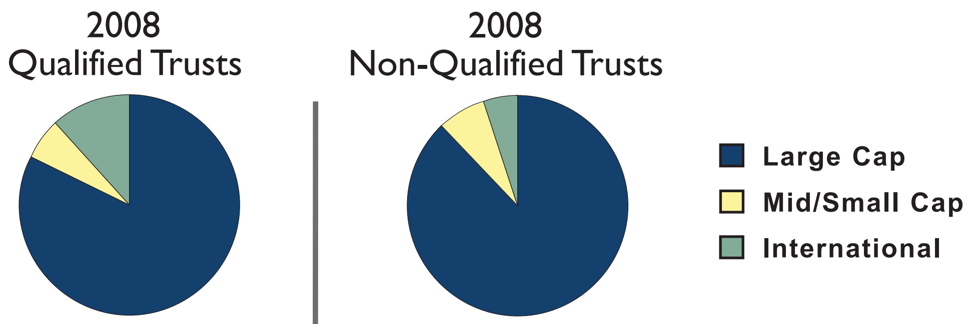
Similar to the last survey, respondents indicated that the average NDT had a much larger allocation to the fixed income asset class than the average Defined Benefit Plan (DB), possibly indicating a lower overall risk tolerance for NDTs. NDT and DB percent allocations to fixed income increased 11% and 4%, respectively, from the last survey. DB plans may have implemented asset class rebalancing earlier or more frequently than their NDT counterparts. While percent allocations to domestic equity were lower for both NDTs and DBs compared to the last survey, percent allocations to international equity were virtually unchanged.

Asset Class	NDT	DB
US Equity	45%	40%
Int'l Equity	5%	16%
Fixed Income	48%	32%
Other	2%	12%
Total	**100%**	**100%**

Equity

Style Allocations

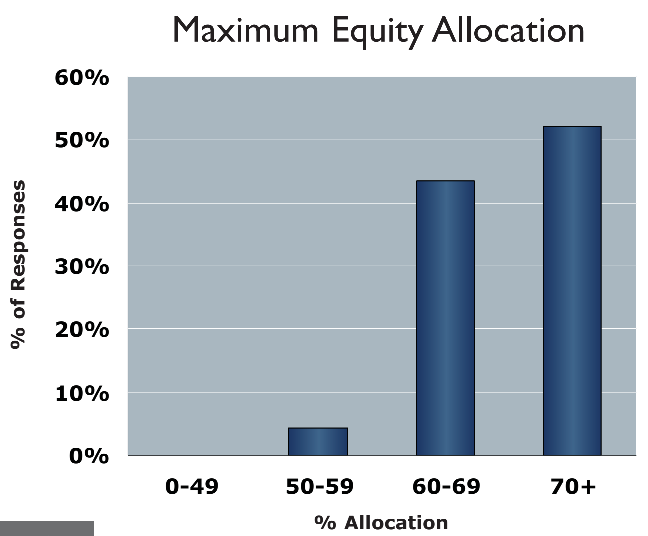
The estimated total equity Qualified Trust allocation was $11.7 billion and the total equity Non-Qualified Trust allocation was estimated at $2.0 billion, excluding cash. The average allocation to most frequently referenced equity styles at the total trust level remained nearly unchanged since the last survey. Large Cap styles continue to dominate equity allocations. The S&P 500, S&P 400, and S&P 600 had two-year total returns of (33.5%), (31.2%), and (31.3%) respectively, for the two-year period ended December 31, 2008.

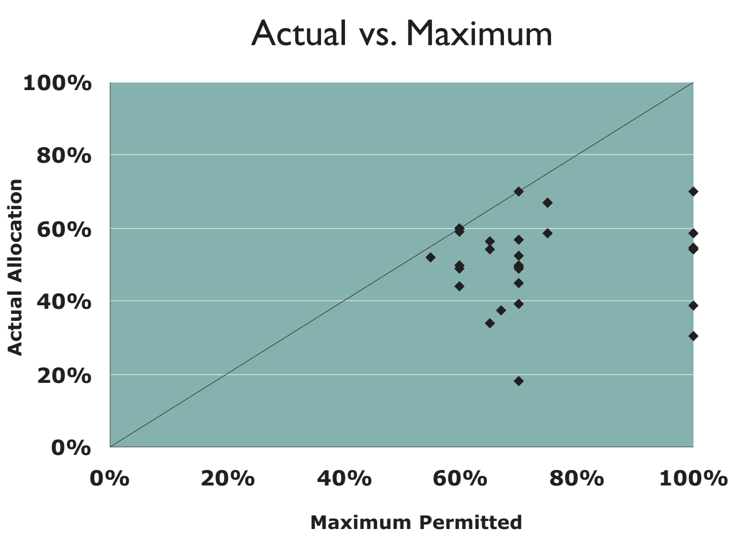


	Qualified 2008	Qualified 2006	Non-Qualified 2008	Non-Qualified 2006
Large Cap	82%	80%	88%	90%
Mid/Small Cap	6%	9%	7%	6%
International	12%	11%	5%	4%

Maximum Allocations

An internal committee or external regulatory agency usually limits allocations to equities. The average maximum equity allocation changed little from the 70% average of the last survey. Survey respondents were approximately 20% below the maximum equity allocation allowed, compared to 9% below in the last survey.





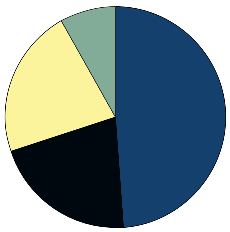
Sector Allocations

The estimated total fixed income Qualified Trust allocation was $14.3 billion and the total fixed income Non-Qualified Trust allocation was estimated at $2.8 billion, excluding cash.

Qualified Trusts were overweight government securities and underweight mortgages relative to the overall taxable securities market, as represented by the Barclays Capital Aggregate Index.

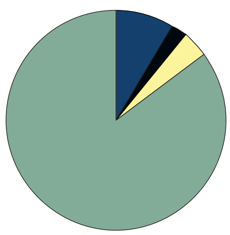
Non-Qualified Trust sector allocations remained largely unchanged from 2006, with the majority allocated to tax-exempt securities.

2008
Qualified Trusts



	Sector Allocation		2-year Annualized Sector Return
	2008	Barclays Capital Aggregate Index	
Government	49%	35%	10.5%
Mortgage	21%	43%	5.6%
Corporate	22%	22%	(0.3%)
Tax-Exempt	8%		0.4%

2008
Non-Qualified Trusts



	Sector Allocation		2-year Annualized Sector Return
	2008	Full Municipal Bond Index	
Tax-Exempt	85%	100%	0.4%
Government	9%		10.5%
Mortgage	2%		5.6%
Corporate	4%		(0.3%)

Some respondents indicated that international fixed income or TIPS asset classes were being considered for use in their Nuclear Decommissioning Trusts. No respondent stated that high-yield fixed income debt was currently under consideration as an asset class. This is a marked shift from responses received four years ago, when it was the most frequently mentioned asset class under consideration that was not presently utilized.

Asset Return Assumptions

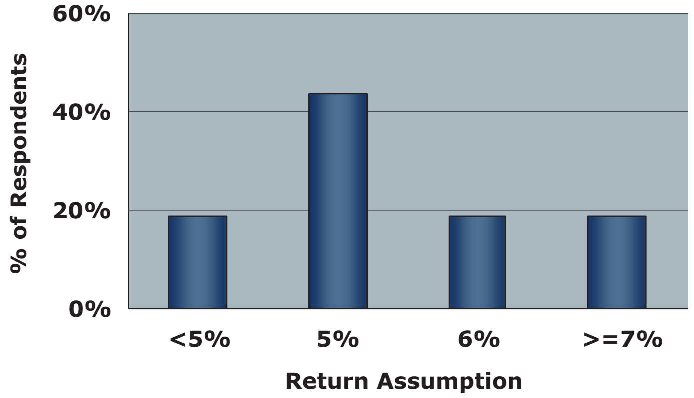
After-Tax Return Assumptions: Qualified Trusts

Average Qualified Trust expected after-tax returns remain below the peak levels of 1998. The reported total trust average return assumption remained unchanged from the last survey. Based on each respondent's target asset allocations and expected returns for each asset class, the median return assumption was 5.8%, and the average was 6.3%.

Average After-Tax Return Assumption

2008	6.3%
2006	6.3%
2004	6.6%
2002	6.5%
2000	6.3%
1998	6.7%
1996	6.5%
1994	6.4%
1992	6.1%

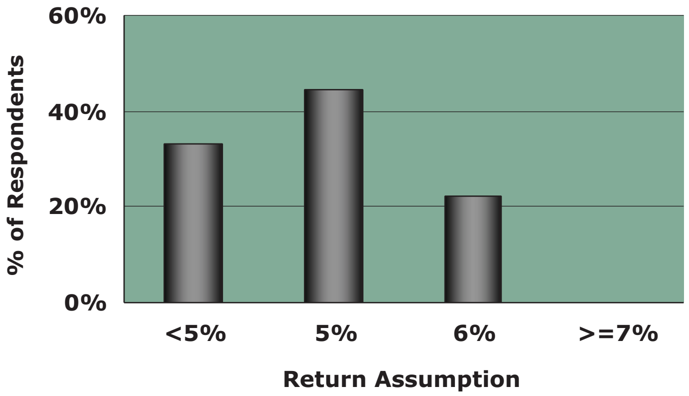
Qualified Trust After-Tax Return Assumption



After-Tax Return Assumptions: Non-Qualified Trusts

Average Non-Qualified Trust expected after-tax returns remain below the peak levels of 1992. The reported total trust average return assumption declined by 10 basis points from the last survey. Based on each respondent's target asset allocations and expected returns for each asset class, the median return assumption was 5.8%, and the average was 5.3%.

Non-Qualified Trust After-Tax Return Assumption



Average After-Tax Return Assumption

2008	5.3%
2006	5.4%
2004	5.5%
2002	5.9%
2000	5.8%
1998	6.2%
1996	6.2%
1994	6.0%
1992	6.6%

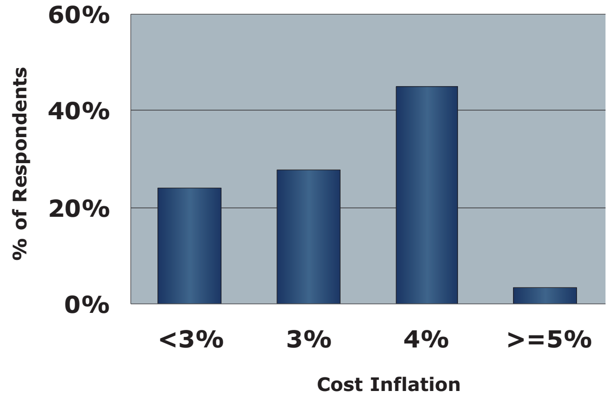
Cost Inflation Assumptions

The average composite cost inflation assumption declined by 40 basis points since the last survey, to the lowest level since the survey began. Inflation assumptions are particularly meaningful in both estimating liability decommissioning costs and in determining implied after-tax real returns.

Cost Inflation Assumptions

	Average Response	CPI 10-Year Forecast*
2008	3.6%	2.4%
2006	4.0%	2.5%
2004	4.2%	2.5%
2002	4.7%	2.5%
2000	4.4%	2.5%
1998	4.3%	2.5%
1996	4.7%	3.0%
1994	5.0%	3.5%
1992	5.2%	3.6%

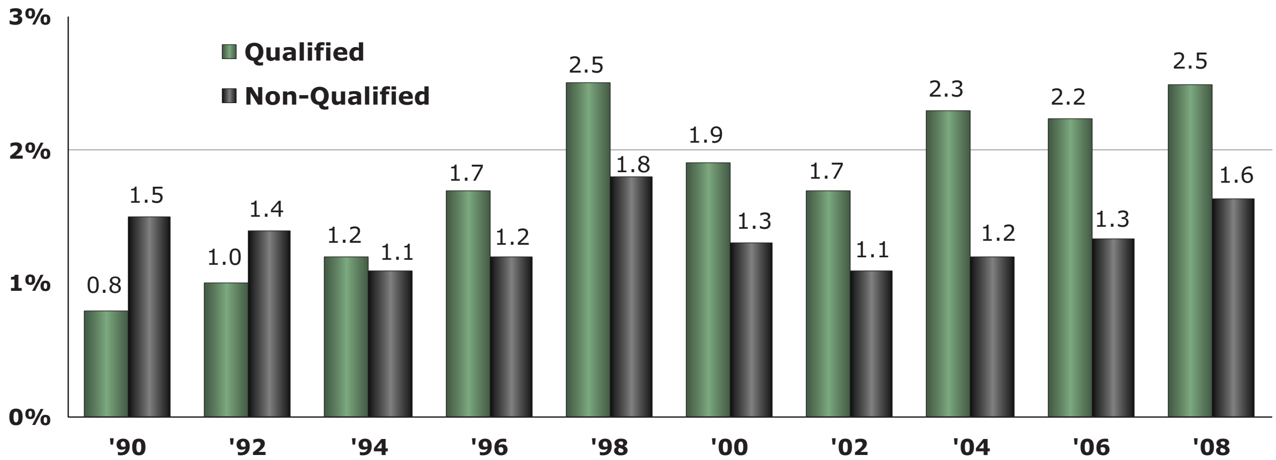
* Livingston Survey, Federal Reserve Bank of Philadelphia, December 2008.

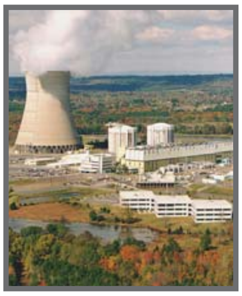


Implied After-Tax Real Return Assumptions

Implied real returns were calculated based on each respondent's after-tax expected return and cost inflation assumptions. The decline in expected inflation was greater than the decline in after-tax return expectations, resulting in an increase in the average implied real rate of return. The horizontal line at 2% represents the NRC-defined allowable real return assumption for assets from the time of collection through completion of decommissioning. The NRC established this threshold in 2002 10 CFR §50.75 (e)(1)(ii).

Implied After-Tax Real Return





Rebalancing

Although the total trust average target equity allocation as shown at the bottom of page six remained close to 60%, and 44% of respondents indicated regular rebalancing back to target allocations in line with established practices, reported actual equity allocations dropped to 50% in 2008, a decline of 10% from the last survey. A number of sponsors indicated use of a tactical / opportunistic approach towards rebalancing. Attainment of asset allocation targets through asset-class rebalancing was frequently held in abeyance until market uncertainty was perceived to have diminished. Nonetheless, contributions and organic cash flows continued to be directed to the underweight asset class. For those having rebalanced, implementation was accomplished through the sale of securities and/or utilization of derivatives.

Derivatives

Similar to the 2006 survey, approximately half of the respondents are permitted to utilize derivative instruments in their Nuclear Decommissioning Trusts, some with restrictions on the use of these instruments. Of those permitted, most have utilized derivatives over the past two years, and of those respondents currently utilizing derivatives, swaps were the most frequently mentioned.

Securities Lending and Short Term Investment Funds

Recent market dislocations only marginally impacted respondents' securities lending participation and Short Term Investment Fund (STIF) policies. Of all respondents, 82% did not change their STIF investment vehicle, with the balance either moving cash to a "less risky" STIF, or evaluating the prospect of changing their STIF portfolio investment. Respondents did not target lower STIF balances.

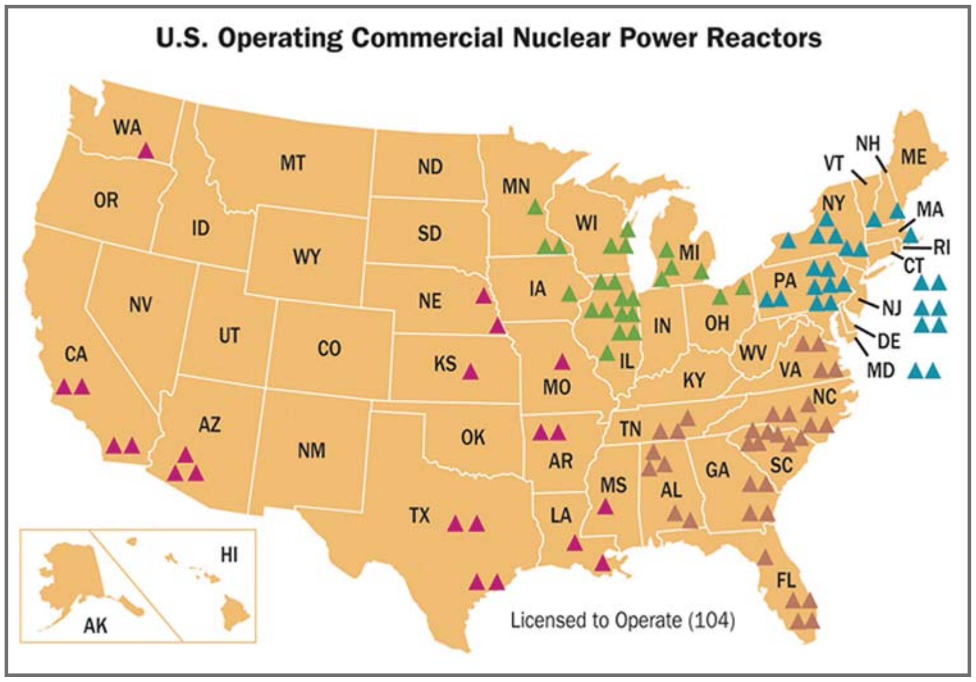
Of all respondents, 59% do not participate in securities lending programs. While 18% of respondents are discontinuing, unwinding, or limiting their securities lending participation, an alternative 9% are considering future participation in the programs. The remaining 14% currently utilize securities lending programs.

SFAS 115 - Other Than Temporarily Impaired Assets

Temporary impairment analysis has taken on increased scrutiny by auditors and regulators. Although FASB recently published revised guidance, there remains interpretative elasticity among auditors and reporting entities as to what constitutes temporary impairment, and the process by which to evaluate temporary impairment. Most sponsors indicated having an internal policy, analyzing unrealized losses at the lot level, and recognizing 100% of unrealized losses for all investments.

Asset/Liability Funding Study

Asset/liability studies may use simulation techniques to estimate the likelihood of a shortfall based on the sponsor's current funding policy and decommissioning cost analysis. The median year of sponsors' last funding study was 2007 and the median next-expected study to be performed is 2010. Consultants performed approximately 67% of asset/liability studies, with investment managers and sponsors themselves performing the balance.



The NDT team at NISA

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NISA is an employee-owned investment management firm headquartered in St. Louis, Missouri. NISA has $51 billion* in assets under management for 97 institutional clients, including NDTs, VEBA Trusts, corporate defined benefit and defined contribution plans, endowments, and foundations. As of June 30, 2009, NISA managed more than $6.8 billion in NDT fixed income and equity portfolios for 17 utilities.

Please contact Paul Jones if you would like additional copies of this report, or for more information regarding our NDT management services. The survey is also available on our website at www.nisanet.com.

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* Assets under management are as of June 30, 2009, and include $0.5 B in traditional GICs and $5.2 B in stable value oversight for externally managed bond portfolios.

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