

# 2006 RECRUITMENT & RETENTION BENCHMARKING SURVEY REPORT



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Collected and Compiled by the Benchmarking Sub-Committee of  
North American – Young Generation in Nuclear

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## Background & Purpose

Young professional recruitment, retention, and development are issues currently challenging the nuclear industry. Our aging nuclear workforce has a considerable impact on the young generation's careers. In order to facilitate progress on these issues, the North American Young Generation in Nuclear (NA-YGN) has undertaken a first-of-a-kind benchmarking study.

Through an online survey, NA-YGN gathered information on how organizations recruit, retain, and develop their young professionals. NA-YGN members who completed the survey encompass the nuclear workforce at North American utilities, corporations, government agencies, and research facilities. NA-YGN is in a unique position to influence the sectors within nuclear science and technology for the benefit of our generation.

Since its inception in 1999, NA-YGN has worked to promote nuclear science and technology, particularly from the perspective of a young professional. NA-YGN has provided many recruitment, retention, and development ideas via our international meetings. The benchmarking survey and its results are a continuation of this work, which shall be made available to NA-YGN members, nuclear utilities and companies, government agencies, universities, and any other interested parties.

Results of this survey have been summarized in a pamphlet intended to inform students and young professionals entering the nuclear science and technology industries of starting salaries and available benefits.

All NA-YGN members and nuclear science and technology organizations have access to the full report of the survey, which:

- Identifies the recruitment tactics that influence young professionals;
- Displays development opportunities available to young professionals;
- Reviews benefits available to young professionals; and
- Shows the influence of co-op/intern programs, education level, and employer type on starting salaries.

NA-YGN intends to benchmark the nuclear industry annually. This survey is a work in progress, which will be refined for future data collection and study. Future surveys will target all young professionals in the nuclear industry—not just those who are NA-YGN members.

## Data Collection and Analysis

### *Data Collection*

The online survey was available throughout the month of August 2006. Survey respondents were not personally identified, nor were they linked to their employers. The survey was open to all international NA-YGN members, who numbered 2100 as of August 2006, and was publicized through local chapters.

A total of 388 responses—approximately 18.5% of the international NA-YGN membership—were recorded. Of these responses, 29 were from Canadian members and were included in the salary analysis after confirming data was translated into US Dollars. However, since survey respondents were not identified, their NA-YGN membership could not be confirmed.

Emphasis has been placed on determining the factors which influence young professionals' recruitment and development. In particular, survey respondents indicate how valuable employers' mentoring, technical training, non-technical training, and educational reimbursement programs were in choosing to accept employment at their company.

Graphs shown in this report depict trends which may be of interest to young nuclear professionals and companies seeking to benchmark themselves against the industry. In particular, the graphs emphasize the impact of education level, company type, and participation in work-study programs on starting salary.

### *Analysis Methods*

Salaries were not corrected for inflation. However, in order to remove potential skew, all salary results presented here consider only those responses from individuals who began their careers within the past three years. Average salary data are accompanied by standard deviations.

Survey results are categorized both by job function and company type. Any job or company type category that did not include a minimum of ten respondents was considered not statistically significant and was not included into this report.

Engineering fields that did not include enough respondents to produce statistically significant information were combined into the Other Engineering category throughout the entirety of the report. The Other Engineering category includes the following job type responses:

- Industrial/Operations Engineering (7)
- Civil Engineering (8)
- Chemical Engineering (3)
- Other Engineering (52)

Job functions which did not have enough responses to be statistically significant are:

- Chemistry (6)
- Computer Science (3)
- Other Science (3)



## Conclusion

Of the 388 total responses collected, 218 were used in calculating starting salary results, as these respondents began their careers within the past three years. The overall average starting salary in the nuclear industry is \$52,866, with a standard deviation of \$8,624.

Young professionals listed location most frequently as a major deciding factor in accepting an employment opportunity. Salary, job description, and company reputation were the factors listed second, third, and fourth most frequently as influencing a young professional's job acceptance.

Of the common developmental opportunities offered to young professionals, Technical Training and Educational Reimbursement programs both positively influenced job acceptance decisions. In most cases, these programs "strongly" or "moderately" influenced the decision to accept employment more often than the programs "did not" influence the decision. The majority of employers offer an Educational Reimbursement program, and approximately 59% of all respondents have participated or plan to participate in this program.

At least half of all engineering respondents participated in work-study programs, including internship and co-op positions. However, participation in work-study programs did not have an overall positive impact on starting salaries in any of the job functions examined.

Although not statistically determined, free response questions indicate a growing concern amongst young professionals that developmental opportunities are available only to individuals willing to move across departments, leaving departments with weak technical expertise.

Furthermore, young professionals feel that they are unable to receive supervisory roles because of the large number of baby boomers who remain in the nuclear workforce. This raises concerns that once the aging workforce retires, the individuals who remain will be unable to fulfill the necessary leadership needs.

## Results

The following pages include all statistically-significant survey results.

Figure 1 displays selected benefits offered to young professionals from various company types. Results shown in Figure 1 are based on Table 2, which compiles results by company type. Table 2 includes such statistics as turnover, promotion rates, developmental opportunities, and benefits. Salary results are excluded from the company type comparisons because salaries vary greatly within a company depending on job functions.

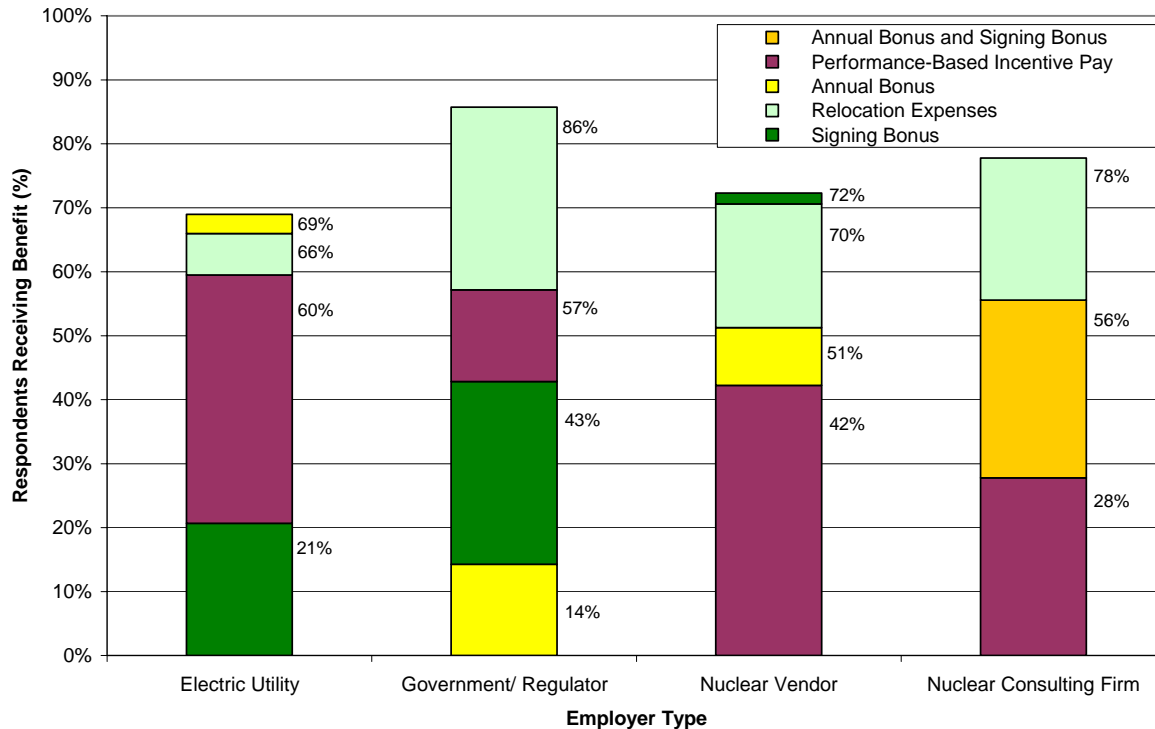
Figure 2 displays base starting salary variations by education level for different job functions. Figures 3-8 depict starting salaries along with the dependencies of starting salaries on work-study participation and company type. Table 1, which compiles all survey results by job function, is the basis of Figures 2-8.

Both Table 1 and Table 2 identify development opportunities and recruitment tactics that influence young professionals.

All opinions presented in this report are the opinions of the survey respondents, and should not be taken as the opinions or position of NA-YGN.

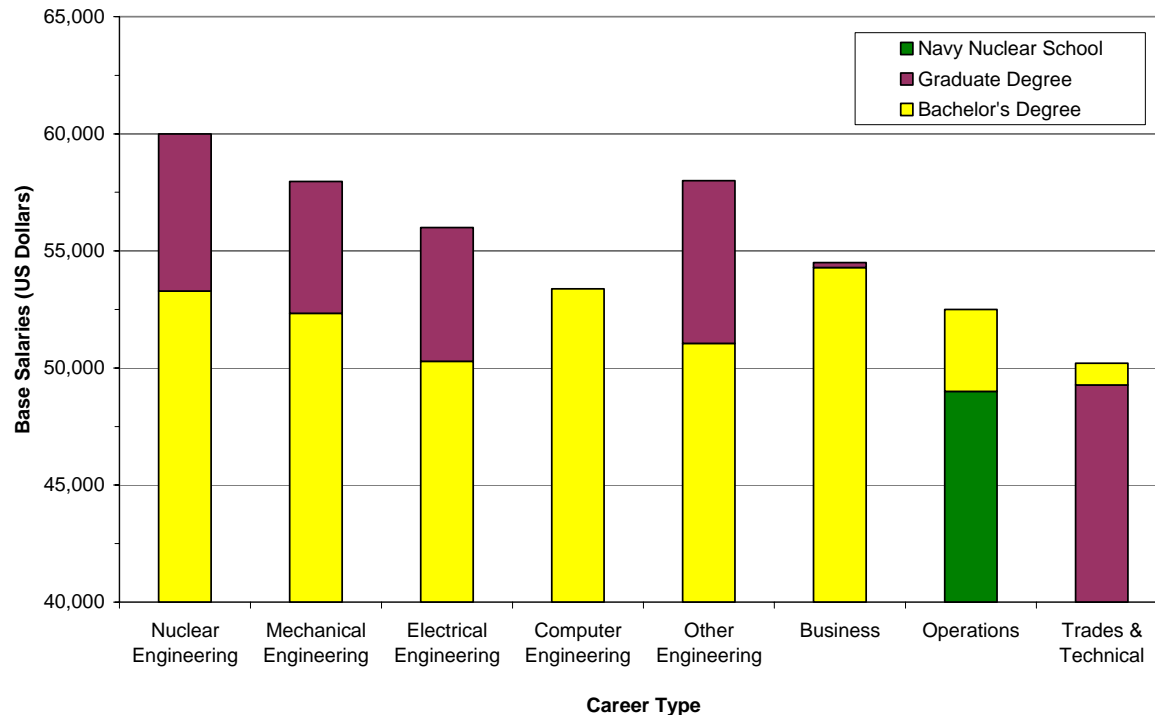
## Benefits

Figure 1: Benefits by Employer Type



## Starting Base Salary Results

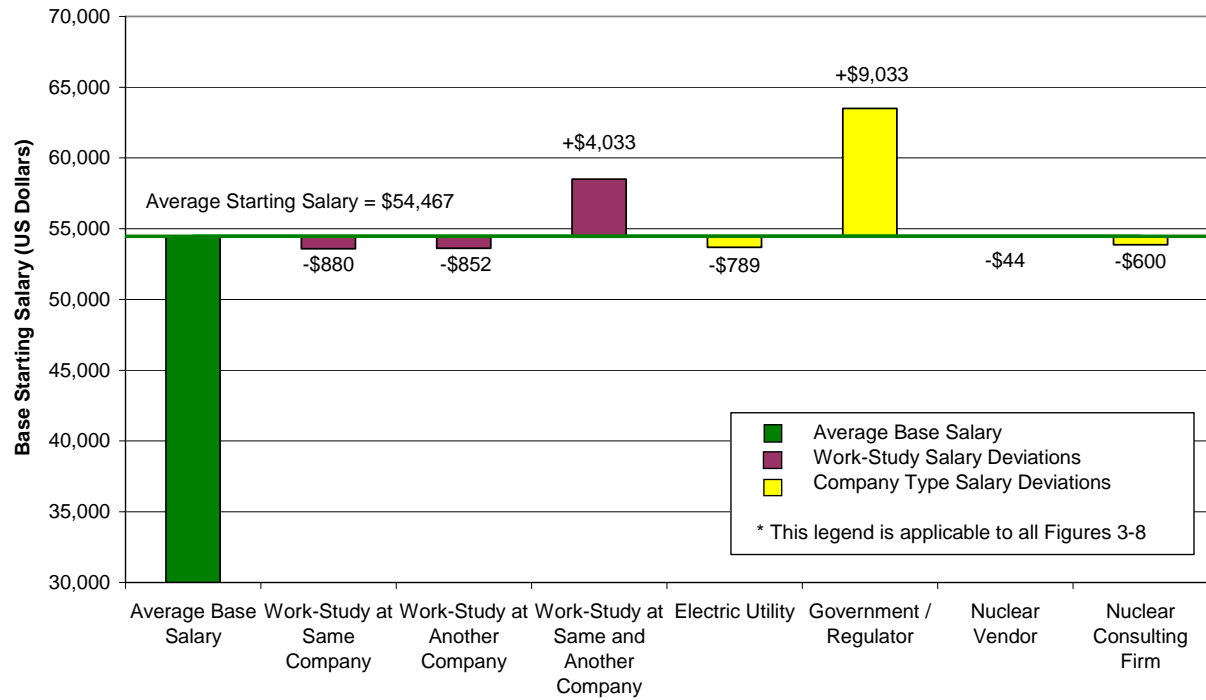
Figure 2: Average Starting Salaries by Career Type



\*Base Starting Salaries do not include overtime, signing, annual, or performance bonuses.

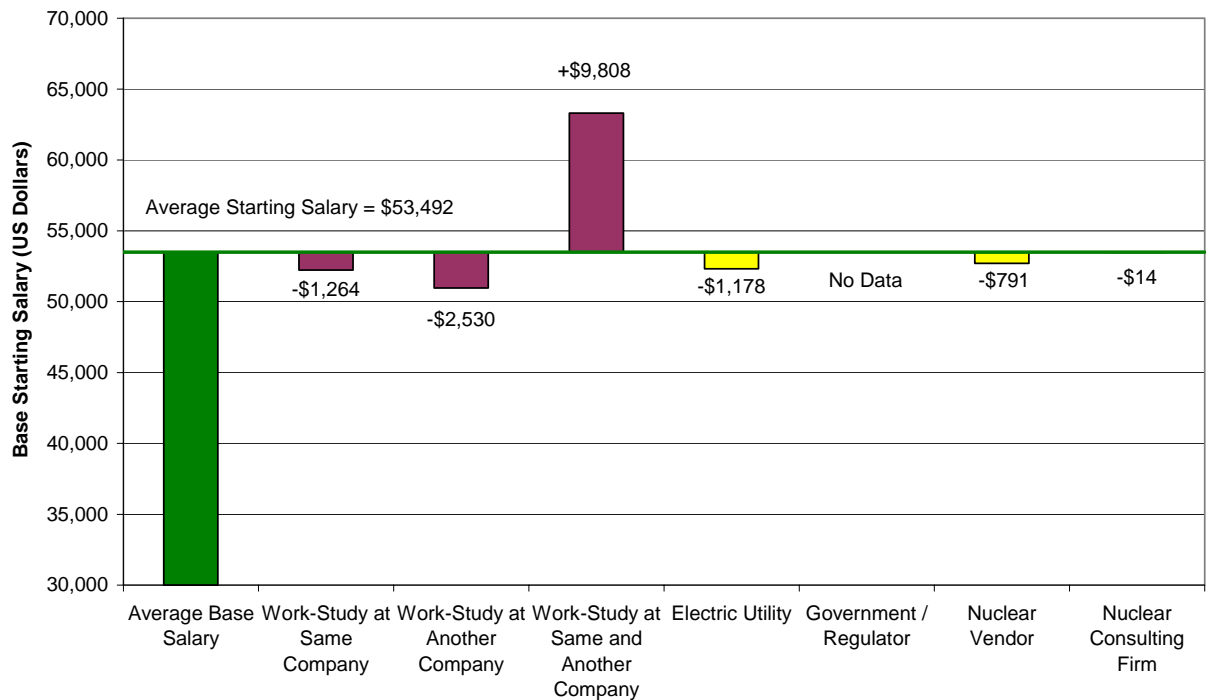
### Nuclear Engineering

Figure 3: Nuclear Engineering Average Starting Salary Differences



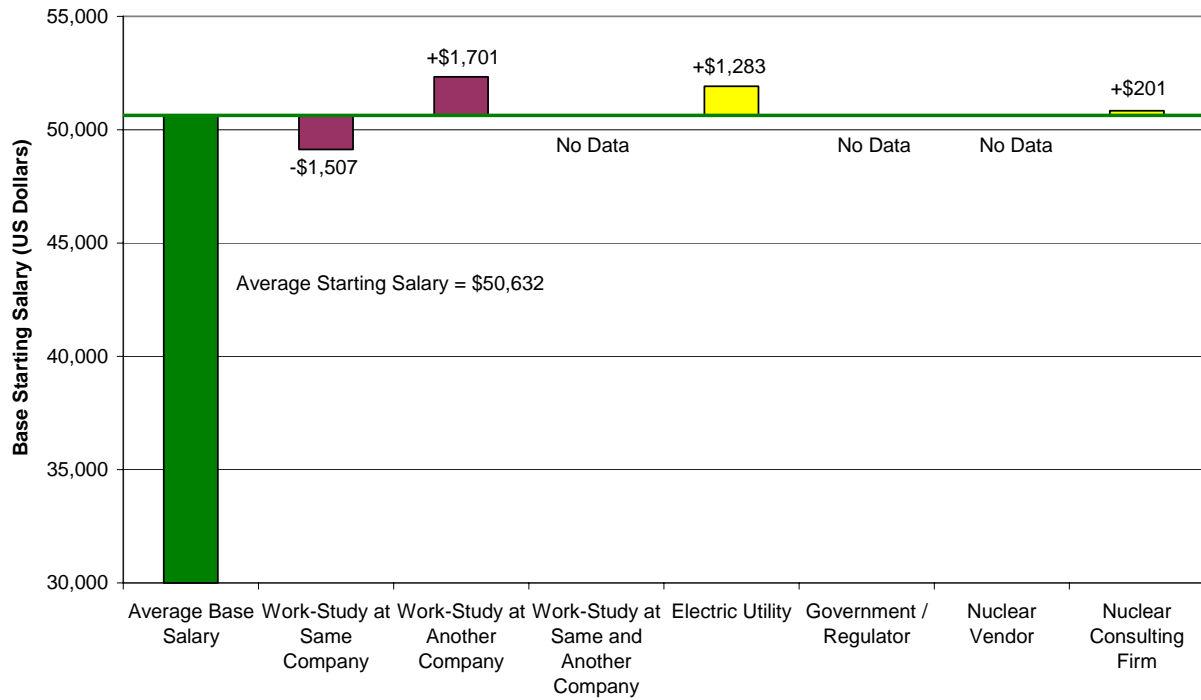
### Mechanical Engineering

Figure 4: Mechanical Engineering Average Starting Salary Differences



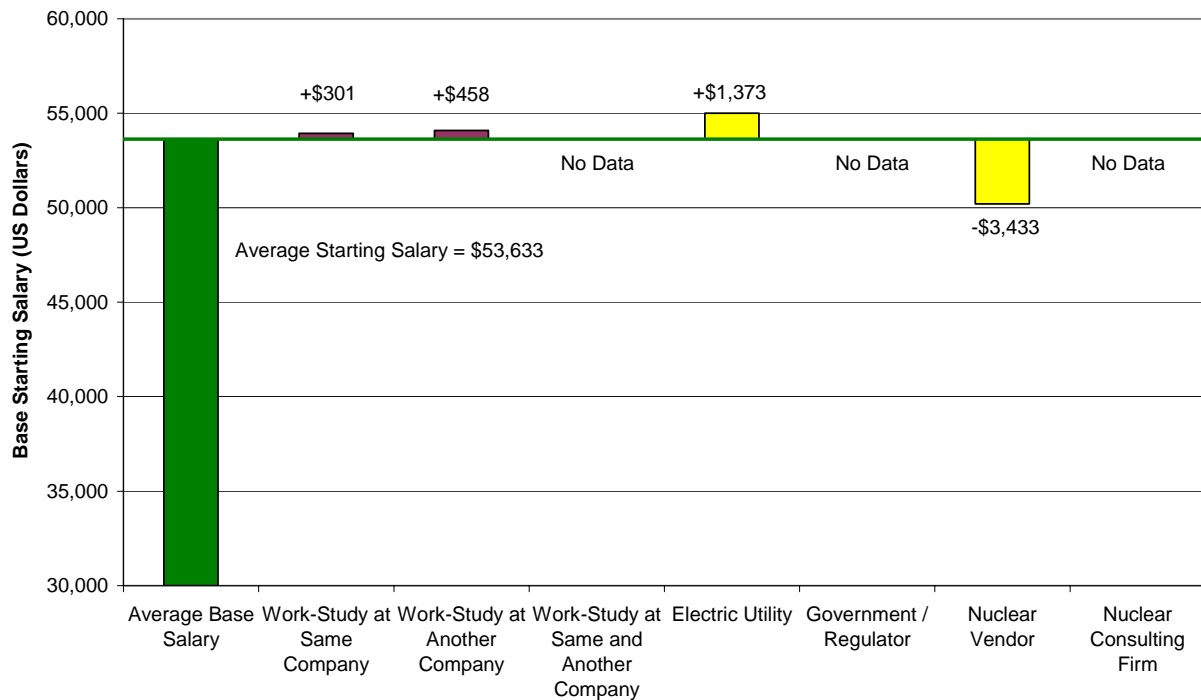
### Electrical Engineering

Figure 5: Electrical Engineering Average Starting Salary Differences



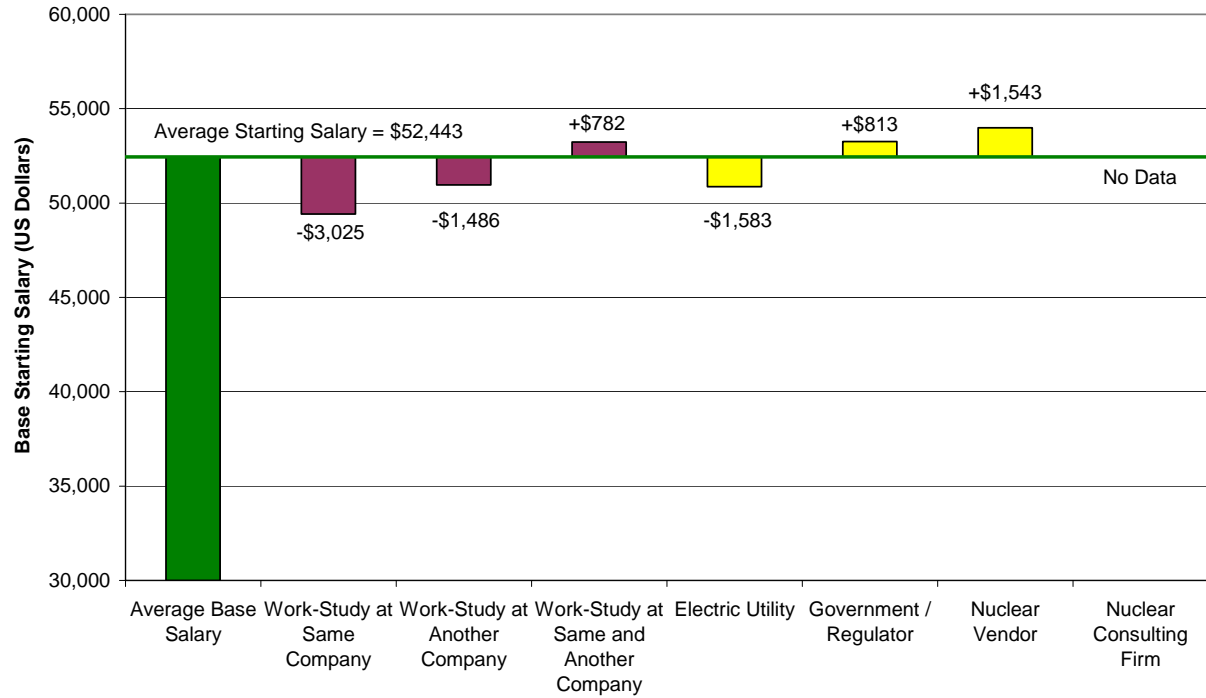
### Computer Engineering

Figure 6: Computer Engineering Average Starting Salary Differences



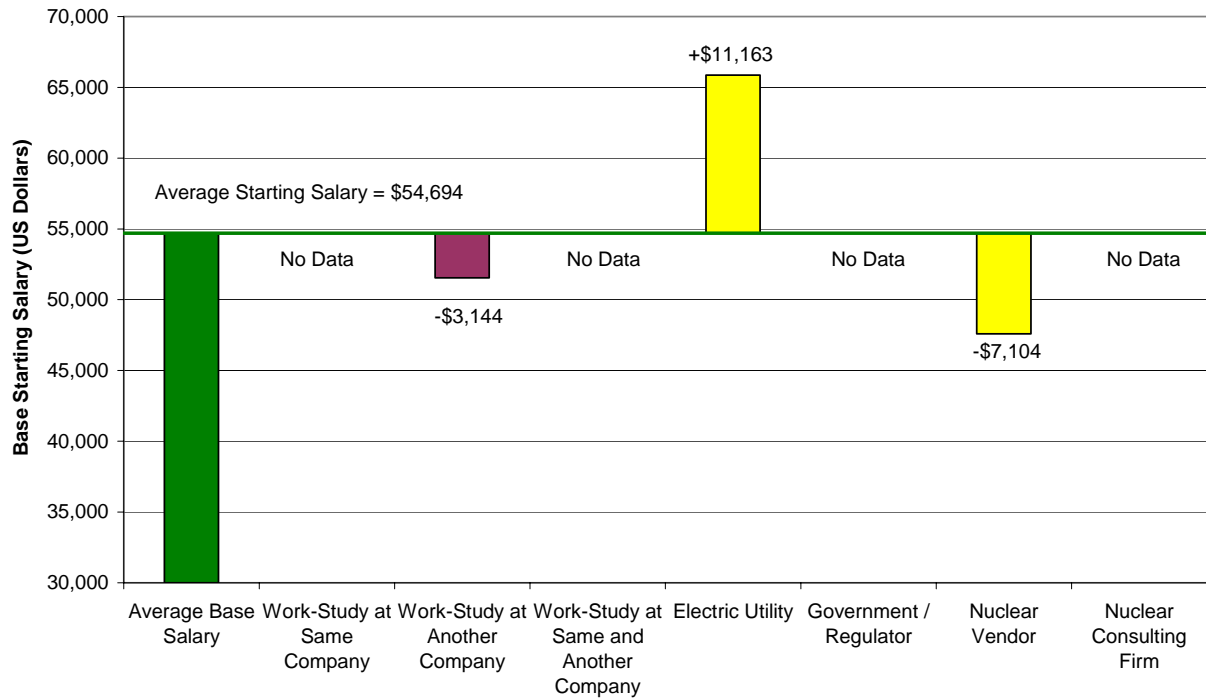
### Other Engineering

Figure 7: Other Engineering Average Starting Salary Differences



### Business

Figure 8: Business Average Starting Salary Differences



**Table 1: Results by Job Function**

	Nuclear Engineering	Mechanical Engineering	Electrical Engineering	Computer Engineering	Other Engineering	Business	Operations	Trades & Technical
Number of Respondents	81	100	37	12	70	28	13	14
Overall Average Starting Salary *	54,467	53,492	50,632	53,633	52,443	54,694	52,600	48,737
Standard Deviation *	5,314	7,240	5,565	9,599	5,428	16,701	4,879	4,178
<b>AVERAGE STARTING SALARIES BY EDUCATION LEVEL †</b>								
Bachelors Degree *	53,282	52,332	50,283	53,378	51,051	54,292	52,500	50,200
Standard Deviation *	4,628	4,797	5,772	10,490	5,615	18,573	3,536	3,960
Graduate Degree *	59,997	57,966	56,000	--	58,002	54,500	N/A	49,267
Standard Deviation *	4,996	12,214	2,828	--	5,964	15,143	N/A	4,100
Navy Nuclear School *	--	--	--	--	--	--	49,000	N/A
Standard Deviation *	--	--	--	--	--	--	1,414	N/A
<b>AVERAGE STARTING SALARIES BY COMPANY TYPE ‡</b>								
Utility *	53,678	52,314	51,915	55,006	50,860	65,857	52,600	48,737
Standard Deviation *	4,347	1,178	4,584	11,379	6,349	18,069	4,879	4,178
Nuclear Vendor *	54,422	52,701	N/A	50,200	53,986	47,591	--	--
Standard Deviation *	5,137	791	N/A	1,414	5,106	11,643	--	--
Nuclear Consulting Firm *	53,867	53,478	50,833	--	N/A	--	--	--
Standard Deviation *	5,292	14	2,843	--	N/A	--	--	--
Government or Regulatory *	63,500	--	N/A	--	53,256	--	--	--
Standard Deviation *	14,849	--	N/A	--	7,432	--	--	--
<b>AVERAGE STARTING SALARIES BY COMPANY SIZE</b>								
Less than 50 Employees *	N/A	65,000	--	--	--	--	--	--
Standard Deviation *	N/A	11,508	--	--	--	--	--	--
50-100 Employees *	--	51,600	--	--	--	--	--	--
Standard Deviation *	--	1,892	--	--	--	--	--	--
100-1000 Employees *	53,700	53,541	51,294	--	58,500	52,500	--	--
Standard Deviation *	5,076	49	3,952	--	12,021	10,607	--	--
1000-5000 Employees *	54,218	52,575	51,008	N/A	51,814	59,500	N/A	N/A
Standard Deviation *	4,467	917	7,770	N/A	3,022	9,192	N/A	N/A
5000-10,0000 Employees *	53,414	53,681	53,000	--	52,635	48,413	--	46,787
Standard Deviation *	4,968	190	4,254	--	5,345	12,706	--	4,511
Greater than 10,000 Employees *	55,247	50,752	48,833	50,846	52,523	66,000	53,250	48,933
Standard Deviation *	6,209	2,740	4,885	5,889	3,362	23,833	5,377	3,523

† Responses from 2-Year degree recipients were not statistically significant and are therefore not displayed here

‡ No responses from the research sector were collected

\* These results include only those individuals who began their careers within the past three years

-- No results are available

N/A Results are not statistically significant

**Table 1 – Continued**

	<b>Nuclear Engineering</b>	<b>Mechanical Engineering</b>	<b>Electrical Engineering</b>	<b>Computer Engineering</b>	<b>Other Engineering</b>	<b>Business</b>	<b>Operations</b>	<b>Trades &amp; Technical</b>
<b>SALARY INCREASES</b>								
Ratio of Overall Average One Year Salary to Overall Average Starting Salary *	1.06	1.05	1.09	1.03	1.09	1.05	1.16	1.10
Ratio of Overall Average Five Year Salary to Overall Average Starting Salary	1.54	1.45	1.39	1.48	1.40	2.03	1.56	1.80
<b>PROMOTIONS</b>								
Fraction of respondents who received their first promotion after:								
1-2 Years	0.35	0.31	0.35	0.17	0.46	0.39	0.54	0.57
<i>Respondents' Opinion of Promotion Time:</i>								
This Length of Time is Too Short	0.00	0.03	0.00	0.50	0.00	0.09	0.00	0.00
This Length of Time is Just Right	0.82	0.94	0.92	0.50	1.00	0.82	1.00	0.63
This Length of Time is Too Long	0.18	0.03	0.08	0.00	0.00	0.09	0.00	0.38
2-3 Years	0.07	0.12	0.24	0.08	0.16	0.11	0.23	0.07
<i>Respondents' Opinion of Promotion Time:</i>								
This Length of Time is Too Short	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
This Length of Time is Just Right	0.50	0.83	0.56	1.00	0.91	1.00	1.00	1.00
This Length of Time is Too Long	0.50	0.17	0.44	0.00	0.09	0.00	0.00	0.00
3-4 Years	0.01	0.03	0.03	0.00	0.07	0.00	0.00	0.07
<i>Respondents' Opinion of Promotion Time:</i>								
This Length of Time is Too Short	0.00	0.00	0.00	--	0.00	--	--	0.00
This Length of Time is Just Right	1.00	0.00	1.00	--	0.60	--	--	1.00
This Length of Time is Too Long	0.00	1.00	0.00	--	0.40	--	--	0.00
Greater Than 4 Years	0.04	0.02	0.00	0.00	0.04	0.00	0.00	0.00
<i>Respondents' Opinion of Promotion Time:</i>								
This Length of Time is Too Short	0.00	0.00	--	--	0.00	--	--	--
This Length of Time is Just Right	0.67	0.00	--	--	0.00	--	--	--
This Length of Time is Too Long	0.33	1.00	--	--	1.00	--	--	--
Have Not Yet Been Promoted	0.53	0.52	0.38	0.75	0.27	0.50	0.23	0.29
Years at Company Before Three or More Promotions of Individuals who have been Promoted	3-4	4	1-2	N/A	> 5	> 5	> 5	> 5
<b>TURNOVER</b>								
Fraction of Respondents Who Previously Held a Permanent Job in the Nuclear Industry	0.15	0.10	0.03	0.00	0.13	0.04	0.23	0.07
Average Years of Experience in the Nuclear Industry Prior to Turnover	3.5	4.9	3.5	--	6.7	5.0	4.7	4.0

\* These results include only those individuals who began their careers within the past three years

-- No results are available

N/A Results are not statistically significant



**Table 1 – Continued**

	<b>Nuclear Engineering</b>	<b>Mechanical Engineering</b>	<b>Electrical Engineering</b>	<b>Computer Engineering</b>	<b>Other Engineering</b>	<b>Business</b>	<b>Operations</b>	<b>Trades &amp; Technical</b>
<b>BENEFITS</b>								
Fraction of respondents who receive:								
Medical Insurance	0.98	0.99	0.95	0.92	0.99	0.89	1.00	1.00
Dental Insurance	0.98	0.96	0.92	0.92	0.97	0.89	0.92	1.00
Life Insurance	0.88	0.93	0.89	0.75	0.84	0.89	1.00	0.93
401(k) or Retirement Savings Plan	0.98	0.97	1.00	0.92	0.96	0.93	1.00	0.93
Signing Bonus	0.44	0.55	0.32	0.33	0.31	0.43	0.31	0.07
Relocation Expenses	0.75	0.70	0.62	0.50	0.74	0.57	0.85	0.43
Annual Bonus	0.57	0.58	0.51	0.75	0.62	0.68	0.85	0.71
Performance-Based Incentive Pay	0.46	0.54	0.60	0.67	0.53	0.43	0.54	0.57
<b>WORK-STUDY PROGRAMS</b>								
Fraction of Respondents Who Participated in Work-Study Programs *	0.67	0.53	0.62	0.50	0.62	0.30	0.40	0.14
<i>Work-Study at Current Company *</i>	<i>0.18</i>	<i>0.12</i>	<i>0.30</i>	<i>0.17</i>	<i>0.26</i>	<i>0.10</i>	<i>0.20</i>	<i>0.14</i>
<i>Work-Study at Another Company *</i>	<i>0.45</i>	<i>0.38</i>	<i>0.61</i>	<i>0.33</i>	<i>0.68</i>	<i>0.19</i>	<i>0.00</i>	<i>0.00</i>
<i>Work-Study at Current and Another Company *</i>	<i>0.04</i>	<i>0.03</i>	<i>0.09</i>	<i>0.00</i>	<i>0.06</i>	<i>0.00</i>	<i>0.20</i>	<i>0.00</i>
Average Starting Salary with Work-Study at the Current Company *	53,587	52,228	49,125	53,934	49,418	N/A	N/A	N/A
<i>Standard Deviation *</i>	<i>1,671</i>	<i>1,264</i>	<i>1,059</i>	<i>8,877</i>	<i>5,538</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
Average Starting Salary with Work-Study at a Company Other than the Current Company *	53,615	50,962	52,333	54,091	50,957	51,550	--	--
<i>Standard Deviation *</i>	<i>5,229</i>	<i>2,530</i>	<i>1,209</i>	<i>13,470</i>	<i>5,476</i>	<i>7,430</i>	<i>--</i>	<i>--</i>
Average Starting Salary with Work-Study at the Current Company and Another Company *	58,500	63,300	N/A	--	53,225	--	N/A	--
<i>Standard Deviation *</i>	<i>707</i>	<i>9,808</i>	<i>N/A</i>	<i>--</i>	<i>1,096</i>	<i>--</i>	<i>N/A</i>	<i>--</i>
<b>PROFESSIONAL SOCIETY MEMBERSHIP</b>								
North Am. Young Generation in Nuclear (NA-YGN)	0.91	1.00	0.89	0.83	0.86	0.86	0.85	0.86
American Nuclear Society (ANS)	0.49	0.08	0.05	0.00	0.23	0.14	0.08	0.21
Health Physics Society (HPS)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Women In Nuclear (WIN)	0.19	0.19	0.08	0.08	0.17	0.25	0.08	0.14
Society of Women Engineers (SWE)	0.06	0.13	0.08	0.08	0.14	0.04	0.08	0.00
American Society of Mechanical Engineers (ASME)	0.14	0.49	0.03	0.00	0.17	0.04	0.08	0.07
Institute of Electrical and Electronics Engrs. (IEEE)	0.00	0.00	0.27	0.25	0.00	0.00	0.00	0.00
Professional Reactor Operators Society (PROS)	0.00	0.02	0.00	0.00	0.00	0.00	0.15	0.00
Other	0.09	0.05	0.14	0.00	0.00	0.11	0.15	0.00

\* These results include only those individuals who began their careers within the past three years

-- No results are available

N/A Results are not statistically significant

**Table 1 – Continued**

	<b>Nuclear Engineering</b>	<b>Mechanical Engineering</b>	<b>Electrical Engineering</b>	<b>Computer Engineering</b>	<b>Other Engineering</b>	<b>Business</b>	<b>Operations</b>	<b>Trades &amp; Technical</b>
<b>COMPANY-SPONSORED PROGRAMS</b>								
Fraction of Respondents whose Companies Offer:								
Mentoring Programs	0.68	0.75	0.89	0.44	0.61	0.39	0.92	0.71
<i>Influence in Accepting Employment</i>								
Strongly Influenced	0.04	0.06	0.05	0.00	0.01	0.11	0.00	0.07
Moderately Influenced	0.26	0.29	0.32	0.08	0.19	0.14	0.23	0.14
Did Not Influence	0.69	0.65	0.62	0.92	0.81	0.71	0.77	0.79
Technical Training	0.88	0.92	0.52	1.00	0.90	0.79	1.00	0.86
<i>Influence in Accepting Employment</i>								
Strongly Influenced	0.20	0.17	0.08	0.08	0.16	0.07	0.23	0.21
Moderately Influenced	0.31	0.47	0.49	0.42	0.44	0.39	0.46	0.43
Did Not Influence	0.47	0.65	0.14	0.50	0.39	0.54	0.31	0.36
Non-Technical Training	0.81	0.77	0.49	0.83	0.86	0.96	0.69	0.64
<i>Influence in Accepting Employment</i>								
Strongly Influenced	0.06	0.03	0.03	0.08	0.10	0.04	0.00	0.14
Moderately Influenced	0.25	0.32	0.24	0.33	0.33	0.46	0.15	0.43
Did Not Influence	0.69	0.62	0.73	0.58	0.54	0.50	0.85	0.43
<i>Types of Non-Technical Training Offered</i>								
Business	0.48	0.44	0.49	0.67	0.60	0.64	0.15	0.43
Leadership	0.58	0.57	0.68	0.75	0.64	0.89	0.54	0.57
Communications	0.67	0.63	0.62	0.67	0.74	0.79	0.62	0.57
Educational Reimbursement	0.94	0.96	0.92	0.92	0.93	0.96	1.00	0.79
<i>Influence in Accepting Employment</i>								
Strongly Influenced	0.28	0.24	0.16	0.25	0.24	0.18	0.00	0.21
Moderately Influenced	0.32	0.43	0.51	0.33	0.33	0.39	0.38	0.21
Did Not Influence	0.40	0.33	0.32	0.42	0.41	0.43	0.62	0.57
Fraction of Respondents Who Have or Plan to Participate in Educational Reimbursement	0.60	0.54	0.60	0.50	0.53	0.61	0.62	0.50

\* These results include only those individuals who began their careers within the past three years

-- No results are available

N/A Results are not statistically significant

**Table 2: Results by Employer Type**

	<b>Electric Utility</b>	<b>Government or Regulator</b>	<b>Nuclear Vendor</b>	<b>Nuclear Consulting</b>
Number of Respondents	232	7	119	18
<b>PROMOTIONS</b>				
Fraction of respondents who received their first promotion after:				
1-2 Years	0.44	0.71	0.22	0.33
<i>Respondents' Opinion of Promotion Time:</i>				
This Length of Time is Too Short	0.03	0.00	0.00	0.17
This Length of Time is Just Right	0.84	0.86	0.96	0.83
This Length of Time is Too Long	0.13	0.14	0.04	0.00
2-3 Years	0.16	0.14	0.09	0.06
<i>Respondents' Opinion of Promotion Time:</i>				
This Length of Time is Too Short	0.03	0.00	0.00	0.00
This Length of Time is Just Right	0.73	1.00	0.82	0.00
This Length of Time is Too Long	0.24	0.00	0.18	1.00
3-4 Years	0.03	0.00	0.03	0.00
<i>Respondents' Opinion of Promotion Time:</i>				
This Length of Time is Too Short	0.00	--	0.00	--
This Length of Time is Just Right	0.71	--	0.25	--
This Length of Time is Too Long	0.29	--	0.75	--
Greater Than 4 Years	0.03	0.00	0.00	0.00
<i>Respondents' Opinion of Promotion Time:</i>				
This Length of Time is Too Short	0.00	--	--	--
This Length of Time is Just Right	0.14	--	--	--
This Length of Time is Too Long	0.86	--	--	--
Have Not Yet Been Promoted	0.33	0.14	0.64	0.56
Average Years at Company Before Receiving Three or More Promotions	> 5	> 5	2 to 3	4 to 5
<b>TURNOVER</b>				
Fraction of Respondents Who Previously Held a Permanent Job in the Nuclear Industry	0.12	0.00	0.10	0.00
Average Years of Experience in the Nuclear Industry Prior to Turnover	4.5	--	4.5	--
<b>BENEFITS</b>				
Fraction of respondents who receive:				
Medical Insurance	0.99	1.00	0.95	0.94
Dental Insurance	0.97	0.86	0.94	0.89
Life Insurance	0.94	0.71	0.81	0.94
401(k) or Retirement Savings Plan	0.97	0.86	0.96	0.94
Signing Bonus	0.21	0.43	0.72	0.56
Relocation Expenses	0.66	0.86	0.71	0.78
Annual Bonus	0.69	0.14	0.51	0.56
Performance-Based Incentive Pay	0.59	0.57	0.42	0.28
Other	0.05	0.00	0.03	0.17

-- No results are available

**Table 2 – Continued**

	<b>Electric Utility</b>	<b>Government or Regulator</b>	<b>Nuclear Vendor</b>	<b>Nuclear Consulting</b>
<b>WORK-STUDY PROGRAMS</b>				
Fraction of Respondents Who Participated in Work-Study Programs	0.51	0.57	0.58	0.39
<i>Work-Study at Current Company</i>	0.34	0.00	0.14	0.00
<i>Work-Study at a Company Other than Current Company</i>	0.60	0.75	0.81	0.86
<i>Work-Study at Current Company and Another Company</i>	0.06	0.25	0.04	0.14
<b>COMPANY-SPONSORED PROGRAMS</b>				
Fraction of Respondents whose Companies Offer:				
Mentoring Programs	0.66	0.86	0.68	0.78
<i>Influence in Accepting Employment</i>				
Strongly Influenced	0.05	0.33	0.05	0.00
Moderately Influenced	0.27	0.50	0.30	0.43
Did Not Influence	0.68	0.17	0.65	0.57
Technical Training	0.93	0.86	0.88	0.89
<i>Influence in Accepting Employment</i>				
Strongly Influenced	0.15	0.67	0.17	0.00
Moderately Influenced	0.42	0.17	0.49	0.63
Did Not Influence	0.42	0.17	0.33	0.38
Non-Technical Training	0.81	0.71	0.84	0.67
<i>Influence in Accepting Employment</i>				
Strongly Influenced	0.06	0.20	0.07	0.00
Moderately Influenced	0.32	0.80	0.37	0.25
Did Not Influence	0.61	0.00	0.55	0.75
<i>Types of Non-Technical Training Offered</i>				
Business	0.56	0.40	0.68	0.75
Leadership	0.74	0.80	0.79	0.67
Communications	0.81	0.80	0.85	0.67
Educational Reimbursement	0.95	0.71	0.94	0.89
<i>Influence in Accepting Employment</i>				
Strongly Influenced	0.17	0.00	0.37	0.19
Moderately Influenced	0.38	0.60	0.41	0.56
Did Not Influence	0.47	0.40	0.22	0.25
Fraction of Respondents Who Have or Plan to Participate in Educational Reimbursement	0.58	0.00	0.68	0.69
<b>PROFESSIONAL SOCIETY MEMBERSHIP</b>				
North Am. Young Generation in Nuclear (NA-YGN)	0.85	1.00	0.91	0.94
American Nuclear Society (ANS)	0.14	0.43	0.29	0.71
Health Physics Society (HPS)	0.02	0.14	0.00	0.00
Women In Nuclear (WIN)	0.16	0.14	0.21	0.06
Society of Women Engineers (SWE)	0.09	0.43	0.09	0.06
American Society of Mechanical Engineers (ASME)	0.13	0.14	0.31	0.33
Institute of Electrical and Electronics Engrs. (IEEE)	0.03	0.14	0.04	0.11
Professional Reactor Operators Society (PROS)	0.02	0.00	0.00	0.11
Other	0.14	0.00	0.05	0.11

## Written Comments

The benchmarking survey contained four short-answer questions in addition to the quantitative results presented in the preceding tables and figures. Some of the written responses are shown below. These responses were selected for inclusion in this report because they encompass the most common responses to the short-answer questions. Some responses have been edited for brevity and so as not to identify any individual or company.

### QUESTION ONE

**Is there anything else (unique, or that was not covered in the questions above) your organization does to recruit, retain, and/or develop you and other young professionals?**

*"We have a rotational program for new engineers fresh out of college. The program combines mentoring, training, job function checklists, and rotations throughout the various engineering departments. The program is top-notch. I think every facility needs something like this. When we complete 25% of the program, we get a 4% raise. At 50%, we get another 4% raise. Same for 75%. When we're 100% complete, we're promoted to Engineer II and placed in our final engineering group, which is determined based on company needs and personal preference."*

*"I was attracted to the company due to its strong 'new hire' program. The program had a dedicated supervisor and an organized structure that made the introduction to nuclear power as easy as possible. Unfortunately for the next round of new hires, that program has now dissolved."*

*"The answers to the survey questions make it seem like the retention and development programs are working. The truth is that all these programs exist, but are not utilized to their full potential. Despite these programs, the company IS having trouble retaining and developing the younger generation. Even if the people do not actually leave, there is a lot of job dissatisfaction. The company is also not doing well at placing the right talent with the right positions."*

*"We have an intern/co-op program, but it is weak in identifying and retaining high performers."*

*"My company has a 2-year program that formalizes the training courses and provides some cohesiveness to new graduates (at all levels). There are set criteria and qualifications needed for graduation. A mentoring relationship is also required."*

*"We have a referral program that pays a finder's fee."*

*"Our organization uses NA-YGN as a means of retention. The company supplies a budget to the local chapter with the intention that a portion goes towards social activities."*

*"In my work group, supervisors assign a mentor (experienced engineer) to a new hire. This has been helpful, as it provided me with someone I was comfortable with from the get-go."*

## QUESTION TWO

**What was the biggest deciding factor in your decision to accept employment at your current company?**

Number of respondents who named the following factors:

Location	0.23	Work Schedule/Flexibility	0.02
Salary	0.18	Training Program	0.01
Job Description/Type of Work	0.09	Rotational Program	0.01
Company Reputation/Stability	0.09	Wanted to Leave Previous Job	0.01
Professional Opportunity/Advancement	0.07	Travel Opportunities	0.01
Atmosphere/People	0.05	Wanted to Work in Nuclear Industry	0.01
Only Offer/Needed Job	0.05	Family in Nuclear Industry	0.01
Previous Internship Experience	0.03	Other	0.02
Educational Reimbursement	0.02		

*"I worked here as an intern. Through my two internships I got to know my group very well and loved working with them and loved the type of work they did. It is also the closest nuclear plant to my family."*

*"My employer seemed to offer the most potential for growth in any area I decide to pursue, either managerial or technical. I liked the idea that my career path does not need to be so narrow."*

*"Quality of life through scheduling was very important (I do not have to work more than 40 hours a week, unless I want to accrue extra time that I can take leave with). The professional development program with rotational assignments and training were also important. I also felt valued and wanted by the people who were interviewing me."*

*"Salary and a mentoring program. However, the mentoring program no longer exists and left much to be desired."*

*"The biggest factor for me was the fact that I had accumulated approximately 5 years of service time with my employer as a co-op student. I got to keep all of that time and the benefits that went along with it once I hired on full time."*

*"The biggest factor in accepting employment was the proximity to a major university at which I could pursue a graduate education, along with the education reimbursement program."*

*"The large number of diverse groups that are available. Working for a large vendor gives a new engineer the opportunity to find the niche that is right for them."*

*"The size of the company was a big factor as I felt that I would be able to move laterally or vertically to expand my skill set. In addition, my current company offers an excellent trainee program which I thought was a great transition from school to work."*

*"They promised to pay for continuing education, but upon hiring, I found out that the scope of what they will pay for is extremely limited and far different from advertised."*

### QUESTION THREE

**What motivated you to work in the nuclear industry and what do you like most about your career?**

*"I live in an area where the nuclear industry is prevalent and I had 4 years experience at other nuclear facilities, so nuclear was a natural choice that fit my background. Some of the things I enjoy most about my job are gaining a breadth of plant and component experience, general problem solving, working with teams to resolve emergent plant issues, and knowing that my work produces a useful commodity to the public."*

*"The nuclear industry is in the beginning of a renaissance and I wanted to be on the forefront of technology and engineering."*

*"The business of power generation is what motivated me. I like that my career covers a much broader range of engineering than I ever thought possible. I like the combination of technical work and field work that I get in this company and I like to know that I can help make a difference in everyday life."*

*"The opportunity to do different things throughout my career without having to find a new employer. There are many opportunities to try new things but still be able to work for the same company. Because of the aging workforce, there will also be plenty of opportunity for upward advancement."*

*"My career path is one that utilizes several of my skills well, as well as posing new challenges on a regular basis."*

*"The nuclear industry is very training-oriented, and I knew that there would be continuous learning involved, which keeps the job interesting. I like the fact that the industry is in a revival period and that there will be lots of opportunities in the future to contribute to the success."*

*"The challenge and uniqueness of the field was, and remains, very appealing. I have been fortunate enough to travel around the world and interact with customers from many different countries, which has been great. There are always new challenges to meet and overcome. I was also given the opportunity to manage large testing programs within the first two years of graduation."*

*"As a college student my university required 3 semesters of co-op experience as an engineer for the completion of my degree. I found out about co-op positions at a nearby nuclear power plant and not only gained useful experience, but was introduced to an industry that I had never previously considered. I like the fact that within the industry many people are nearing retirement age, clearing the path for young engineers to quickly step in and take their places with the hopes of quickly climbing the corporate ladder."*

## QUESTION FOUR

### What one thing do you wish you could change about your career in the nuclear industry?

*"There are too few opportunities for promotion. There is a huge population of 40's and 50's folks who are very competitive with any leadership positions. The new folks are told to 'just wait until they all retire, then you'll be running the place.' For a young person with strong aspirations to 'go somewhere' with their career, this can be very frustrating."*

*"Plants in high cost of living areas need to do more to offset that burden for newer employees. This will encourage them to invest more of their careers in the organization. My plant has been hurt by high turnover among young engineers, and this problem seems to be getting worse."*

*"Although pay raises are called 'merit increases,' the typical raise in my area is 3% (or less). If an employer provides a 'merit' increase, it should be split into two components: one based on the appropriate inflationary indices, and the other component based on merit."*

*"I wish I could benefit from established and clearly outlined professional development and mentoring programs. In my workplace, training is left to the individual. If you do not pursue any opportunities to refine your existing skills and develop new ones, no one will provide those opportunities for you. As a result, it takes longer for a new employee to become acclimated to their new environment and maximize their productivity."*

*"My current company's educational reimbursement program does not provide anywhere near enough compensation for a degree. The current amount is based off of school prices many years ago, and it will probably be many years until a new study is underway."*

*"I wish that my company had a rotational program that allowed us to cycle through a few different jobs in my first year or two. I am happy with my current job, but I would like to be exposed to other careers that my company has to offer. This would do two things: make me appreciate the work other groups do, and not put me in a group I don't like."*

*"My company has no opportunities for young employees to shine above the average. When someone comes in who doesn't want to just be mediocre, they are greatly underestimated. The environment is stifling to ambitious young employees—the company would rather they settle for average instead of develop their potential."*

*"The one thing I would change is to eradicate the old bureaucratic salary banding system and instead pay and reward individuals for their current contributions. This would go a long way towards improving respect in the workplace. To elaborate, I wish my contributions were valued more than time of service with my company. Because I've been here less than 5 years (actually because it's not 25), the perception is that I don't know enough to contribute anything meaningful. Promotions have even been blocked in my company due to lack of 'time in grade' although the person was doing a higher level job function that clearly warranted a promotion. My company is scared of any new idea, and middle management actively works to block progress in favor of maintaining the status quo. My perception is that the abilities of most young people in my company are SEVERELY underestimated. We also have a pay system that rewards years with the company over how much you contribute. The company wants me to have the attitude of being an employee for life and as a result will reward me with a 'pot of gold' at the very end of my career. It's a catch-22 where the company wants to reward current performance with future benefits but expects me to deliver the maximum value NOW. Bottom line is I may not be staying in this industry much longer and will look to find a career where the value I add is matched by the compensation and respect I'll receive back."*

*"Better opportunity for advancement. If I would like to develop and get promotions, I must go into a different department in our company. That leaves departments weak and unstable."*



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