2024 NAYGN Career Report

NAYGN

Table of Contents

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I. Executive Summary

Nuclear energy has a bright future. As a critical piece of the world's carbon free strategy, nuclear energy is a source of tremendous opportunity for individuals seeking productive and fulfilling careers. To achieve our goals, the nuclear energy industry must retain the existing nuclear workforce even as the industry seeks to grow exponentially for the future. The priorities of the industry must focus equally on attracting new talent as well as engaging and retaining existing talent.

The purpose of the 2024 NAYGN Career Report is to explore the perspective of the nuclear energy workforce in the following areas:

- What it will take to attract new talent to the industry
- What will engage the existing workforce
- What will retain the existing talent within the industry

Attracting New Talent

The nuclear industry has many unique qualities and expectations that set it apart from other industries. Finding the right people who can not only work, but also thrive, in this environment will be key to the long-term growth of the industry. Based on survey responses, the three most popular reasons for why people join the nuclear industry are:

- High paying salary
- Belief in the mission and purpose
- The long-term stability of the industry

While these findings are beneficial, NAYGN's Career Report also provides specific insights into what different demographic groups may prioritize in their job search. Understanding the motivations of a potential employee demographics and using those drivers as part of a deliberate recruiting strategy can greatly impact the decision to accept a job offer. Some of the more unique findings show:

1. Asian and Pacific Islander respondents are most likely to join the nuclear industry because it offers a positive mission and purpose. **Different ethnicities value different aspects of a job, so customizing recruitment strategies could result in a more diverse workforce.**
2. While mission and purpose are important to respondents with a GED, Bachelor's, or Master's degree, they are not as important to those with an Associate's degree or those with Trade/Vocational training. **To hire more people with an Associate's degree or Trade/Vocational training, companies should emphasize the long term stability of the nuclear industry and developmental opportunities.**
3. Students and individual contributors value mission and purpose more than any other organizational level. **To keep new students and individual contributors satisfied in their role, ensure they understand how their job duties contribute towards a positive and impactful mission and purpose.**

Engaging the Existing Workforce

Retaining the existing workforce is just as critical to the long-term success of the nuclear industry as attracting new talent. Overall, 74% of survey respondents were either satisfied or very satisfied with

their job. This satisfaction is considerably higher compared to job satisfaction of the overall U S. workforce. Recent employee studies show that job satisfaction has been increasing but currently averages around 65% for U.S. workers (Ref. A and B).

Satisfaction is inherently tied to employee retention. Seventy-four percent of respondents indicated they are satisfied or very satisfied with their jobs. **While salary, mission and purpose, and long-term stability of the industry are the overall primary motivators to join and stay in the industry, the strong alignment among better salary, better work-life balance, and better remote work opportunities as the top motivators for potentially leaving the nuclear energy industry highlight the key areas of focus for organizations seeking to retain their talent.**

While the top three reasons people stay in the industry are the same as why they join, there are key insights for certain demographics:

1. **If a company wants to prioritize keeping 18-25 year-olds in the nuclear industry, they should pay special attention to competitive salary structures and competitive salary increases for this demographic.** Because their top reason to be in the industry has changed *drastically*, 18-25 year-olds could be the most at risk of leaving as a result of a low raise.
2. **32% of the respondents who currently work at a utility would prefer to work with other areas of the nuclear industry if they were given the opportunity**.
3. For Black or African American respondents, long-term stability jumped from their fourth highest motivation to join the industry to their second highest motivation to stay. **This change could imply that Black or African American respondents tend to view nuclear as a long-term career only after they have experienced working in the industry.**

Attrition of the Nuclear Workforce

The nuclear industry requires a workforce with stringent training, knowledge, and practical experience. This expertise makes experienced nuclear employees incredibly attractive to other industries. Minimizing attrition of the nuclear workforce is essential to the long-term success of the industry.

This survey seeks to understand NAYGN perspectives on individuals looking for a new job as well as why individuals might choose to leave the industry. Survey results indicate:

1. The percentage of people actively looking for a new job has decreased. **In 2024, only 9% of survey respondents are actively looking for a new job.** This percentage was as high as 21% in 2022.
2. The number of hours worked per week provides insight into when someone may be considering a new job. **Nearly 1 in 5 respondents who worked more than 55 hours per week were actively looking for a new job.**
3. **The number of people with less than 2 years of experience has increased, potentially indicating positive influence from company recruiting strategies.** However, a comparison to NAYGN's 2020 and 2022 Career Reports shows that the number of survey respondents with 3-12 years of experience continues to decline. The retention of early to mid-career nuclear professionals is becoming more of a concern for the industry. **Respondents with 3-12 years of experience value salary and mission and purpose the most, so efforts to retain this demographic should emphasize these areas.**

The most consistent finding in 2024 is the importance of salary. Salary was the top motivation for survey respondents to join, stay, and leave the industry. An in-depth analysis of the salaries of survey respondents is provided later in this report.

Understanding the demographics of survey respondents provides insight into building a diverse nuclear workforce. Over the last two years, an increase in the percentage of white respondents, male respondents, and older respondents has been observed. NAYGN, and the larger nuclear industry, must continue to improve all efforts to diversify the nuclear workforce.

Finally, NAYGN is an organization of young people seeking to support other young professionals in the nuclear industry. Ensuring we meet the needs of our members is our highest priority. NAYGN members were asked several questions gauging their satisfaction with the NAYGN organization. Survey results show:

- The number of NAYGN respondents that reported having been to 10 or more events over the previous year went up from 4.7% in 2022 to 5.9%.
- Professional Development was the focus area most valued by NAYGN respondents, while Knowledge Transfer and Retention was the focus area least valued.
- NAYGN respondents are most interested in developing skills related to Leadership and Management, Job Specific Technical Training, and Public Speaking and Remote Presence.

This feedback will be used by NAYGN's Board of Directors to make improvements to the organization in 2024 and 2025.

II. Background

In the fall of 2023 at the United Nations Conference of the Parties, or COP28, the United States, Canada, and more than 20 other countries committed to tripling their nuclear capacity by 2050. To do this, more nuclear capacity must be added to the grid faster than it ever has before. While there are several challenges the nuclear industry must overcome, building a workforce to construct, operate, and maintain these new plants is one of the first steps. The Department of Energy's *Pathways to Commercial Liftoff: Advanced Nuclear*, estimates that an additional 375,000 people are needed to construct and operate the additional 200 GW of new nuclear energy production in the US.

Understanding the needs of the people in the industry is critical to building the necessary workforce. The nuclear energy industry must hire new people, of all ages. We must engage the existing workforce and ensure they continue to develop and learn. Finally, we must understand what causes people to leave nuclear energy and do our best to improve those sources of dissatisfaction.

NAYGN surveyed more than 1,200 people who support the nuclear industry, of which 70% were NAYGN members. This report highlights key trends that can be used to serve the workforce of today and of tomorrow.

III. Engagement, Retention, and Satisfaction

Aligned to the 2024 NAYGN Career Report purpose, survey participants were asked to identify their top motivators for joining the nuclear energy industry, the factors that motivate individuals to stay in the industry, and those factors that might motivate someone to leave the industry.

At a high level, survey results indicated:

- Salary, mission and purpose, and long-term stability of the industry were the top factors that motivated survey respondents to join the industry.
- These same factors motivated individuals to stay in the industry.
- Better salary, better work-life balance, and remote work opportunities were identified as the top factors that might motivate someone to leave the industry.

The Workforce of Tomorrow: Attracting Nuclear Talent

Overall, survey respondents identified salary as their top motivator to join the nuclear energy industry, followed by mission and purpose and long-term stability of the industry. (**FIGURE 1: TOP MOTIVATORS TO JOIN THE NUCLEAR INDUSTRY**)

It should come as no surprise to nuclear companies that if they want to recruit top talent, they must consistently offer top compensation packages. However, offering the highest salaries is not feasible for every company. Understanding that the nuclear workforce is also drawn to a clear mission and purpose and long-term stability can help companies increase the number of people they bring into the nuclear industry.

As a key part of the world's carbon elimination strategy, public perception of the success of nuclear energy is currently high. However, because the long-term stability of the industry is a key motivator for joining the industry, **instability, or perceived instability, could deter individuals from joining the nuclear industry.** As such, organizations should emphasize actions they are taking to ensure the long-term sustainability for themselves as well as that of the nuclear energy industry.

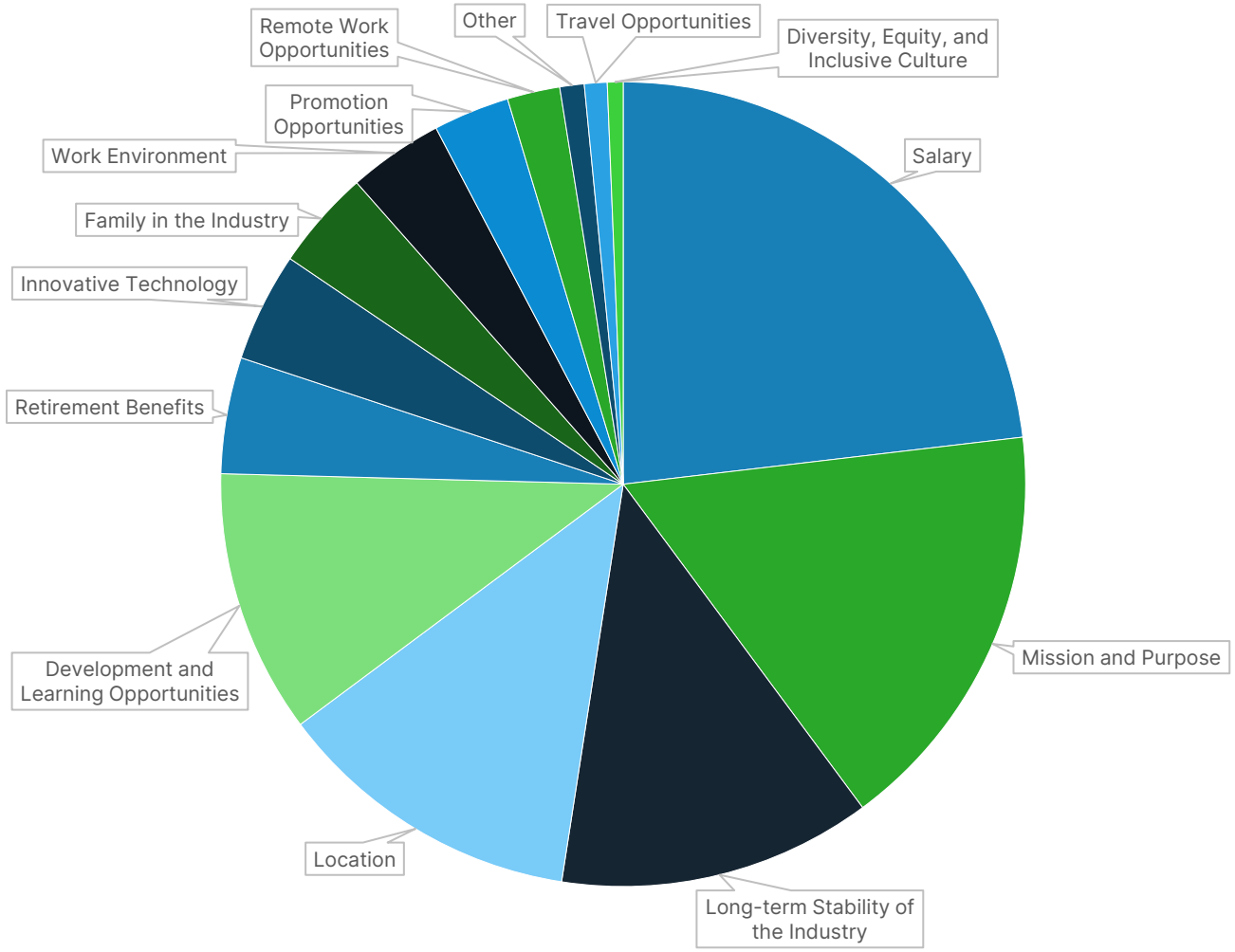

FIGURE 1: TOP MOTIVATORS TO JOIN THE NUCLEAR INDUSTRY[1]

While the top three motivators provide a high-level overview of the primary motivations to join the industry, additional conclusions can be drawn by examining the motivators against a variety of demographics. The following sections provide insights that are specific to age, ethnicity, gender, educational level, and organizational level.

1. Age and Attracting Nuclear Talent

Outside of salary, mission and purpose are the most important motivator to join the nuclear industry for respondents below the age of 26. It remains a key factor for respondents up to the age of 35, at which point location and long-term stability of the industry become more important factors. Those in the 18-25 age range also valued development and learning opportunities more highly than other age groups. This data reveals an important insight for organizations seeking to engage and retain individuals in younger age brackets. **Emphasizing the mission and purpose of the organization, connecting that mission to the individual's daily tasks, and emphasizing available development opportunities should be a critical part of an organization's engagement and retention strategy.**

[1] Percentages are not shown in **FIGURE 1** due to how this question was asked in the survey. Respondents could select up to three motivators, but they were not asked to rank the three selections. For example, salary appeared most often as a top three motivator to join the industry.

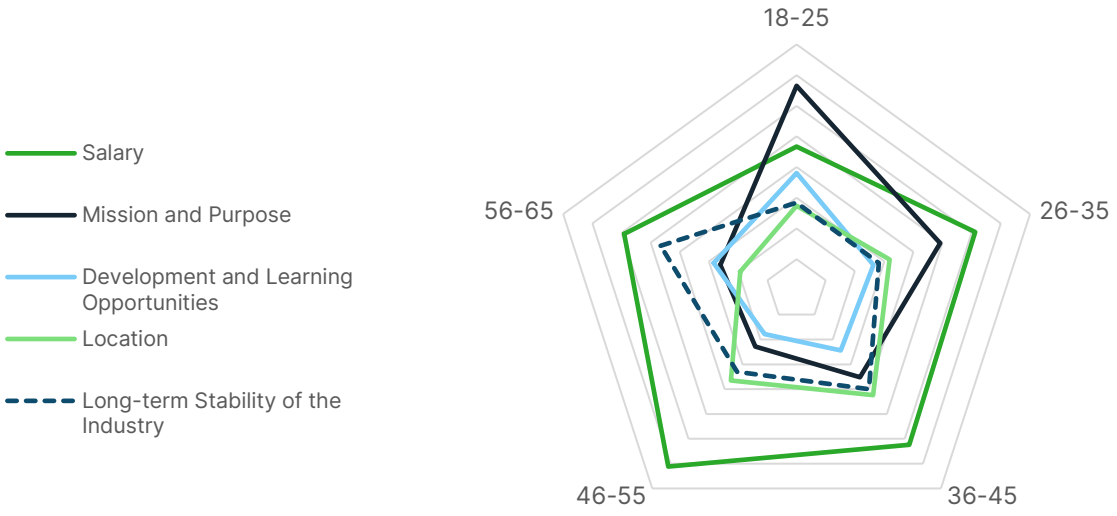

FIGURE 2: AGE OF RESPONDENTS AND REASONS TO JOIN THE NUCLEAR INDUSTRY[2]

2. Ethnicity and Attracting Nuclear Talent

Salary remains the highest motivating factor for those joining the nuclear industry for almost every ethnicity, with one notable exception. **Mission and Purpose is the primary motivator for Asian and Pacific Islander survey respondents to join the nuclear industry**. (**FIGURE 3: ETHNICITY AND MOTIVATORS TO JOIN THE NUCLEAR INDUSTRY**) Organizations interested in recruiting a more diverse workforce should take into consideration the highest motivating factors for each demographic.

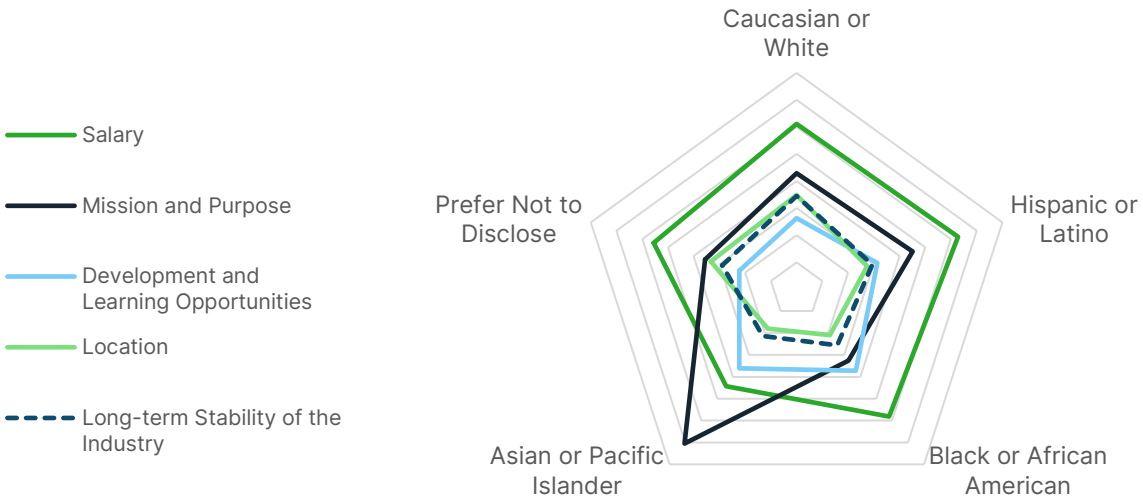

FIGURE 3: ETHNICITY AND MOTIVATORS TO JOIN THE NUCLEAR INDUSTRY[3]

[2] Due to a low number of survey responses, respondents over the age of 65 are not shown in this graph.
[3] Due to a low number of responses the following categories were not included on this graph - Middle Eastern or North African, Indigenous or Native American, Other.

3. Gender and Attracting Nuclear Talent

Survey data indicates that the top two reasons men and women join the industry are for salary and mission and purpose. (FIGURE 4: GENDER AND REASONS TO JOIN THE NUCLEAR INDUSTRY) **While men are most motivated by salary, women are almost equally motivated by salary and mission and purpose.** Those who prefer not to disclose their gender are most motivated to join because of salary, followed by long term stability. Note that women and those who prefer not to disclose each prioritize location as a top three reason to join.

TABLE 1: TOP THREE REASONS TO JOIN THE NUCLEAR INDUSTRY BY GENDER

	#1 Reason	#2 Reason	#3 Reason
Men	Salary	Mission and Purpose	Long-Term Stability
Women	Salary	Mission and Purpose	Location
Prefer Not to Disclose	Salary	Long-Term Stability	Location

For all three groups, having family in the industry was the least impactful reason to join, although women valued it more than the other demographic groups. Additionally, women value development opportunities more than the other groups. When deciding how to structure their recruitment efforts, employers should emphasize salary and mission and purpose, but they should consider the differences between each demographic to maximize the effectiveness of recruitment.

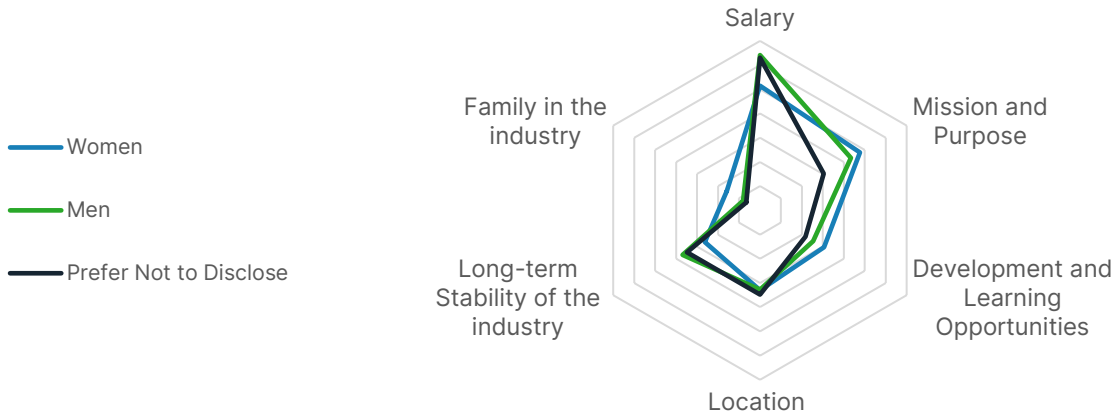

FIGURE 4: GENDER AND REASONS TO JOIN THE NUCLEAR INDUSTRY[4]

4. Educational Level and Attracting Nuclear Talent

With the number of new nuclear plants the world has committed to constructing, the need for skilled trades and others involved in construction is tremendous. For respondents with an associate degrees or technical or vocational training, salary was the biggest motivator. **In fact, those with vocational training and associates degrees value salary more than any other education level**. (FIGURE 5: LEVEL OF

[4] Due to a low number of responses the following categories were not included on this graph - Transgender, Non-Binary.

EDUCATION AND REASONS TO JOIN THE NUCLEAR INDUSTRY) Long-term stability was a distant second motivator for these groups, and mission and purpose was notably the *least* important consideration for this demographic.

Respondents with master's degrees valued salary the least of the educational groups, ranking it equal to mission and purpose. Respondents with bachelor's degrees valued salary and mission and purpose as their top two reasons to join. Respondents with high school diplomas or GEDs valued salary the most and valued all other reasons to join about equally. Again, this data reveals the importance of offering competitive salaries and emphasizing the mission, purpose, and long-term stability of a career in the nuclear industry to attract diverse new talent.

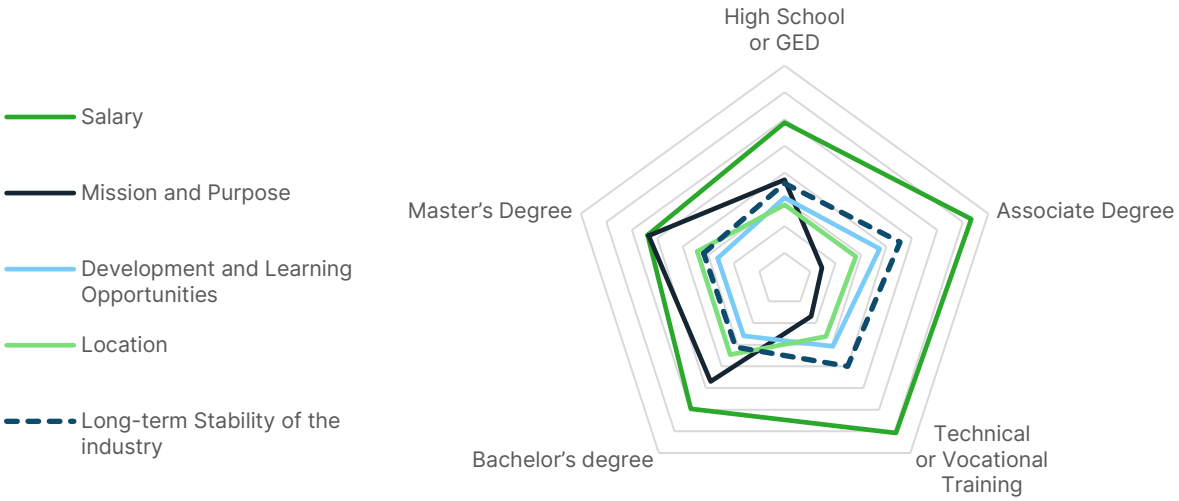

FIGURE 5: LEVEL OF EDUCATION AND REASONS TO JOIN THE NUCLEAR INDUSTRY[5]

5. Organizational Level and Attracting Nuclear Talent

As seen previously, salary is the top motivator for individuals joining the industry. (**FIGURE 6: LEVEL IN ORGANIZATION AND REASONS TO JOIN THE NUCLEAR INDUSTRY**) Recruitment of individual contributors, first line supervisors, and above should ensure a competitive salary is offered along with emphasizing a clear mission and purpose. **Interns and co-ops, however, are a notable exception. This group values mission and purpose and development opportunities more than anything else.** This data highlights the importance of emphasizing a company's commitment to climate change reduction, clean energy, and environmental, social, and governance (ESG) strategies when seeking to attract new talent.

[5] Due to a low number of responses, Doctoral Degrees are not included in this graph.

FIGURE 6: LEVEL IN ORGANIZATION AND REASONS TO JOIN THE NUCLEAR INDUSTRY[6]

With a few exceptions, the most effective way to grow the nuclear workforce is to offer an excellent salary, followed by emphasizing the organization's mission and purpose and the long-term stability of a career in the nuclear energy industry. Understanding what motivates individuals to join the nuclear energy industry and then ensuring recruitment materials emphasize those selling points such as competitive salaries and opportunities for career longevity are essential, both for the sake of staffing the organization with top talent as well as for the long-term sustainability of the nuclear energy industry.

The Workforce of Today: Retaining Nuclear Talent

While recruiting new talent to the nuclear industry is essential, growing the industry demands equal focus on meeting the needs of the existing nuclear workforce. Retaining talent currently employed in the nuclear industry is critical to the long-term success of the nuclear energy industry in North America.

As survey respondents were primarily from individuals currently working in the nuclear industry, the data for retaining nuclear talent is particularly insightful and can provide a glimpse into the motivations, priorities, and values of the current nuclear energy workforce.

Job Satisfaction of the Nuclear Workforce

Before exploring *why* people want to stay in the industry, examining satisfaction levels of current nuclear energy employees is warranted. Respondents were asked a series of questions regarding their satisfaction in their current role. overall

1. Overall Job Satisfaction

Seventy-four percent of respondents indicated they are satisfied or very satisfied with their jobs (**FIGURE 7: JOB SATISFACTION**). This is a slight increase from the 2022 Career Report, in which 72% of those surveyed reported satisfaction with their jobs. Only 9% say they are "dissatisfied" or "very dissatisfied," which shows continued progress in this area compared to the 12% dissatisfaction rate in the 2022 Career Report and the 14% dissatisfaction rate in the 2020 Career Report.

[6] Due to a low number of responses, Executive level respondents are not shown in this graph.

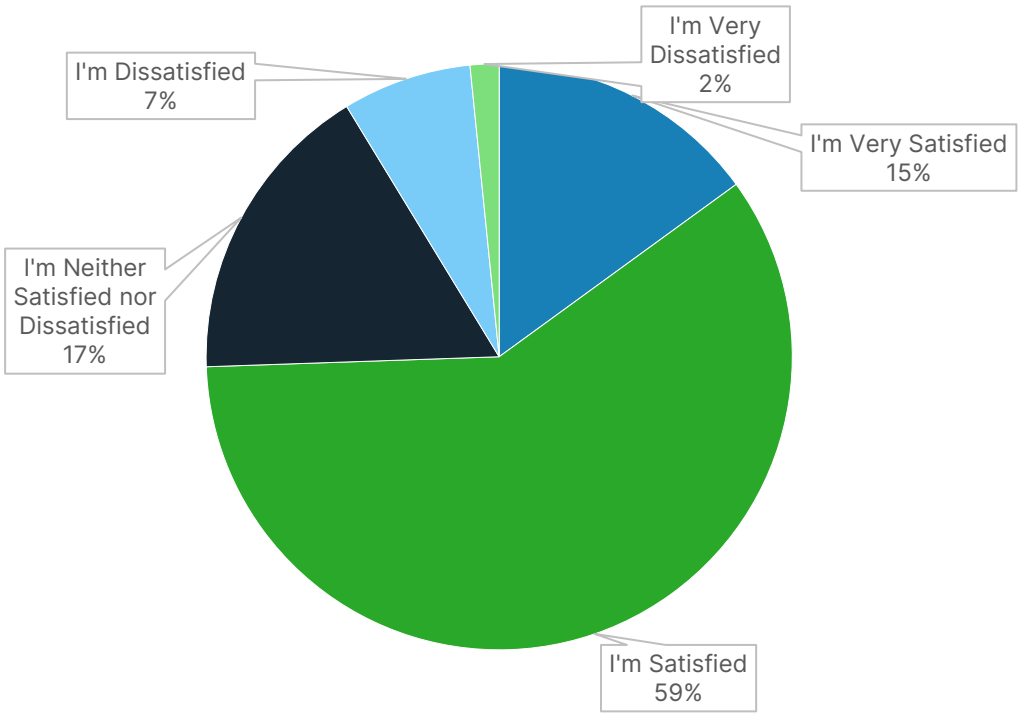

FIGURE 7: JOB SATISFACTION

2. Importance versus Satisfaction of Job Attributes

Job satisfaction is a broad term that should be broken down to better understand what employees value in their jobs. Survey respondents were asked to rank 10 job attributes based on how important those attributes are to them personally. They then ranked the same 10 job attributes based on how satisfied they are with those attributes in their current jobs.

High Job Importance + Low Job Satisfaction = Change is Needed

Comparing importance and satisfaction reveals important insights for organizations by highlighting the areas that require the most change.

The greatest disconnect between importance and satisfaction was employee morale (**FIGURE 8: COMPARE SATISFACTION AND IMPORTANCE OF JOB ATTRIBUTES**). Less than 41% of those surveyed are either very satisfied or satisfied with morale, while 85% of respondents marked it as very important or important.

Other job attributes with significant differences in importance and satisfaction are:

1. Staffing levels
2. Job flexibility
3. Career development/advancement opportunities

Companies should prioritize improving morale, staffing levels, job flexibility, and advancement opportunities if they want to significantly increase retention levels.

See Appendix L for a definition of work flexibility.

The dissatisfaction with career development/advancement opportunities is particularly noteworthy when considering that long-term stability of the industry is a top motivator for attracting talent. **People who join the industry for its long-term stability likely intend to make a career of it. But if they realize the opportunities for advancement are limited, this could cause them to leave prematurely.** For additional information on job attribute satisfaction, see Appendix A.

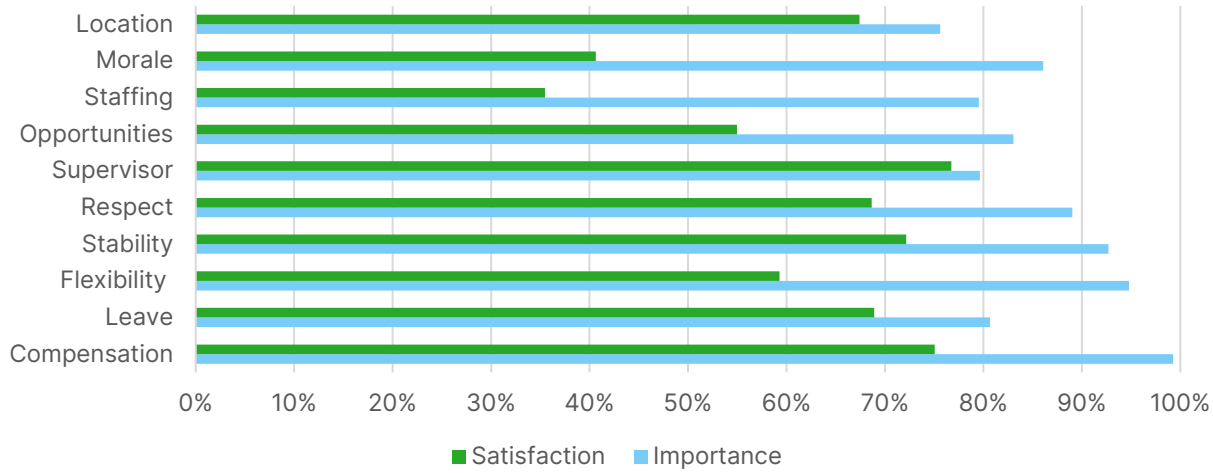

FIGURE 8: COMPARE SATISFACTION AND IMPORTANCE OF JOB ATTRIBUTES

3. Job Satisfaction by Working Hours

Survey respondents working greater than 55 hours per week have the highest levels of job dissatisfaction. 22% are either dissatisfied or very dissatisfied. About half of respondents working more than 55 hours per week are satisfied or very satisfied.

Respondents working less than 55 hours per week have noticeably higher job satisfaction, with 68-76% either satisfied or very satisfied. Those working 40-44 hours per week had the highest percentage of *very* satisfied responses at 16%.

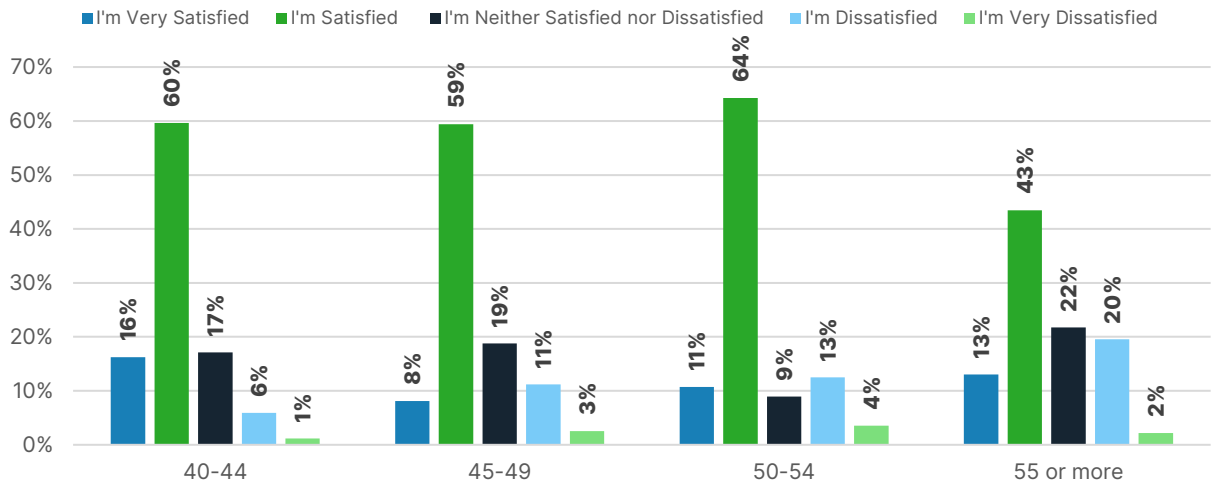

FIGURE 9: JOB SATISFACTION BY HOURS WORKED[7]

[7] Due to a low number of responses, respondents who worked less than 30 hours or 30-34 hours are not shown in this graph.

For a comparison of satisfaction ratings based on different company types, see Appendix B.

For a comparison of the number of hours worked per week in 2020, 2022, and 2024, see Appendix C. Hours worked in 2024 are comparable to those worked in 2020, and reduced from 2022 levels.

For a breakdown of how many hours per week are worked by each level in an organization, see Appendix D. **This appendix contains important insights for individuals considering promotions and advancing their careers.**

For a breakdown of how many hours per week are worked by each job type, see Appendix E. Interestingly, engineering does not average the most hours worked each week, whereas non-technical workers have a noticeable trend toward more than 45 hours compared to engineering or non-engineering technical.

Retention Motivators for Nuclear Talent

Just like the top motivators for joining the industry, **the major motivations for staying in the nuclear industry across all respondents are salary, mission and purpose, and long-term stability.** (**FIGURE 10: TOP MOTIVATORS FOR STAYING IN THE NUCLEAR INDUSTRY**) Because respondents stay in the industry for the same reasons they joined, companies can create consistent strategies that build on each other year-over-year, both attracting and retaining talent.

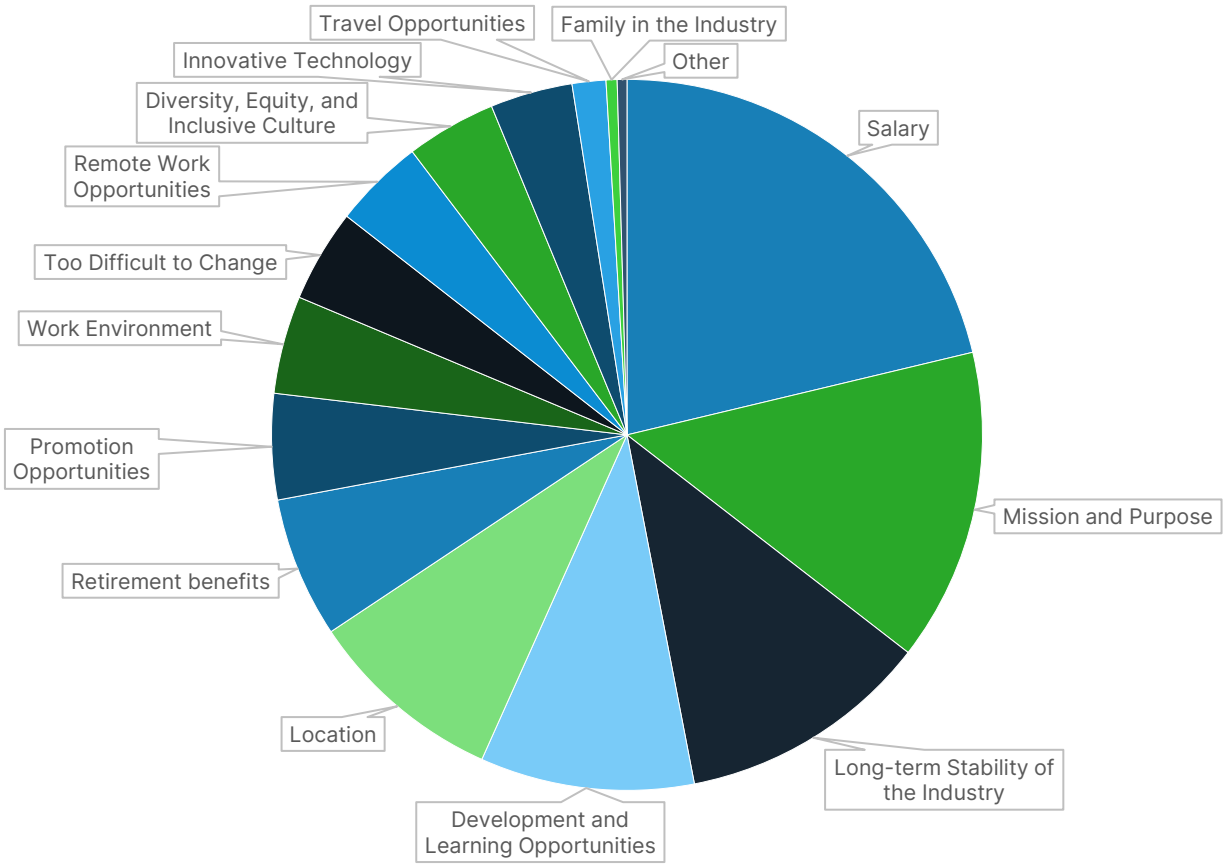

FIGURE 10: TOP MOTIVATORS FOR STAYING IN THE NUCLEAR INDUSTRY

The reasons to join the industry are extremely similar to each demographics' motivations to stay. Because of the similarities, the graphs generated for reasons to join are compared side by side with reasons to stay in the industry. Differences are discussed in the following demographic sections.

1. Age and Retaining Nuclear Talent

For those just beginning their careers aged 18-25, mission and purpose were the top motivators to join the industry. However, when considering reasons to stay, the top motivator for this age group changes to salary. (**FIGURE 2** vs **FIGURE 11**) **If a company wants to prioritize keeping 18-25 year olds in the nuclear industry, they should pay special attention to competitive salary structures and competitive salary increases for this demographic.** Because their top reason to be in the industry changes *drastically* from what first drew them to the industry, 18-25 year olds could be the most at risk of leaving as a result of no or low raises.

When considering motivations to join the industry, location was the second highest reason for those aged 36-45 and 46-55. However, when considering motivations to stay, location is the lowest priority for nearly every age group. (**FIGURE 2** vs **FIGURE 11**) This likely indicates that location is not a significant retention factor for most employees, at which point they rank other motivations as more important.

For those aged 56-65, long term stability was the second highest motivation to join. This same age group values mission and purpose as the second highest motivation to stay. (**FIGURE 2** vs **FIGURE 11**) This change indicates that an experienced employee may want the option of being able to retire from a new job, but once hired, they are motivated to stay in the industry with a clear mission and purpose.

For people more advanced in their career, survey data shows that salary increases in importance (**FIGURE 11**). Of all the age groups, salary is most important as a motivator to stay in the industry to those aged 56-65.

Interestingly, those aged 56-65 value development and learning opportunities as much as those aged 18-25 (**FIGURE 11**). These two groups value development opportunities more than any other age group. This indicates that **emphasizing development and learning opportunities may help retain new and experienced personnel**.

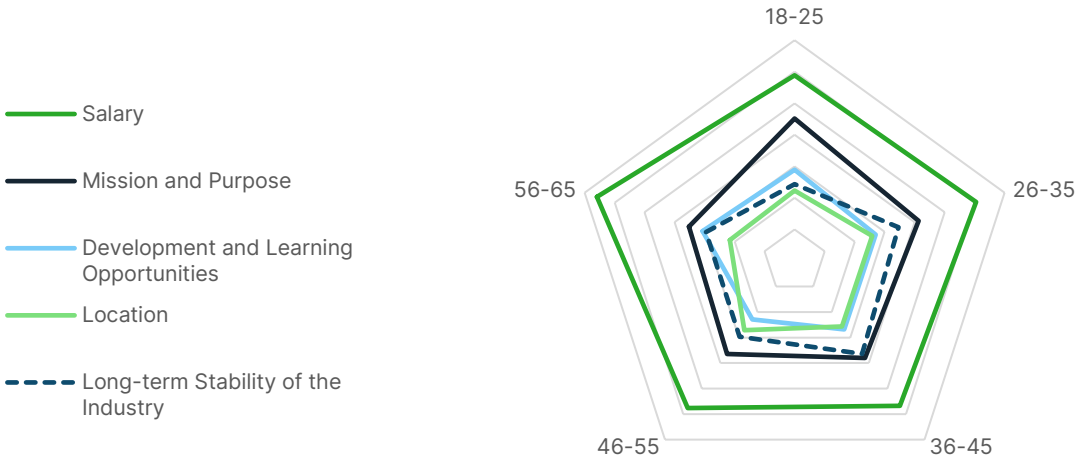

FIGURE 11: AGE AND TOP MOTIVATORS FOR STAYING IN THE NUCLEAR INDUSTRY[8]

[8] Due to a low number of responses, respondents over the age of 65 are not shown in this graph.

2. Ethnicity and Retaining Nuclear Talent

As noted previously, Asian or Pacific Islander respondents valued mission and purpose as the highest motivator to join the nuclear industry. This remains true for motivations to stay; however, the level of importance is noticeably reduced. **After joining the nuclear industry, Asian or Pacific Islander respondents demonstrate a sizable increase in how much they value salary as a motivator to stay in the industry.** (FIGURE 3 vs FIGURE 12) **Similarly, Black or African American respondents value salary significantly more after they join the nuclear industry.** Caucasian or White respondents and Hispanic or Latino respondents also saw an increase in how much they value salary as a retention factor, but not to the same degree as Asian or Pacific Islander and Black or African American respondents. It has been well established that salary is a primary motivator for attracting and retaining talent. **Knowing that some ethnicities see a larger change in the importance of salary compared to others can help companies make informed decisions on maintaining a competitive salary and communicating that salary position to employees.**

Caucasian or White respondents and Hispanic or Latino respondents did not change their top two reasons to join versus their top two reasons to stay. For both groups, salary was most important, followed by mission and purpose. Similarly, Asian or Pacific Islander respondents' reasons did not change from mission and purpose to salary, although the significance values changed as motivators to stay in the industry. For Black or African American respondents, long-term stability jumped from their top four motivation to join the industry to the top two motivation to stay. **This change could imply that Black or African American respondents tend to view nuclear as a long-term career only after they have experienced working in the industry.** This highlights the importance of using diverse recruiting teams in schools to demonstrate the accessibility and viability of nuclear energy as a career for diverse talent who may not have had as much exposure to the industry.

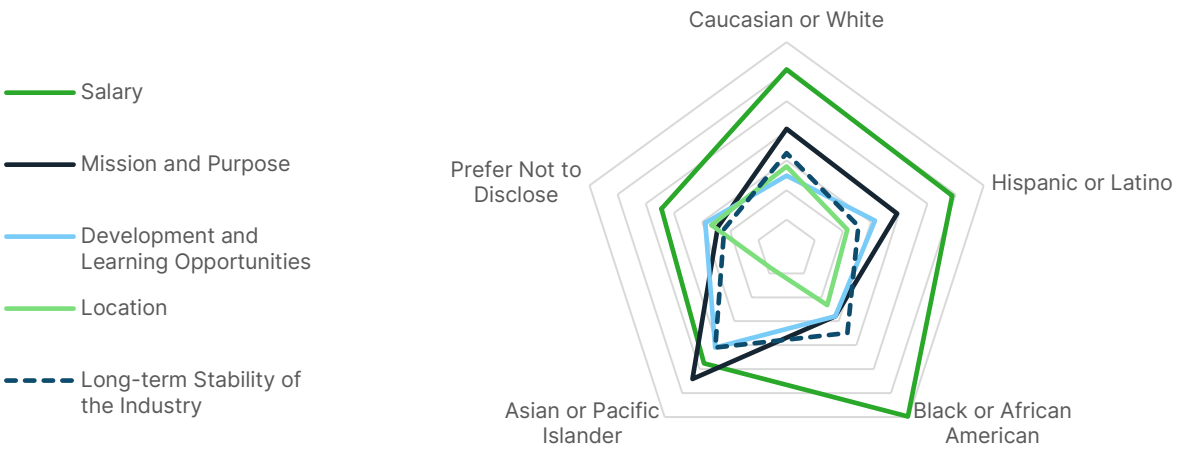

FIGURE 12: ETHNICITY AND REASONS TO STAY IN THE NUCLEAR INDUSTRY[9]

3. Gender and Retaining Nuclear Talent

While salary was the top motivator to join and stay in the industry for all genders, women valued salary more as a reason to stay than as a reason to join. When comparing how much men and women value long-term stability of the industry as a motivator to join versus a motivator to stay in the industry, a

[9] Due to a low number of responses the following categories were not included on this graph - Middle Eastern or North African, Indigenous or Native American, Other.

sizeable difference can be found. Men valued long-term stability more than women as a motivator to join the nuclear industry. But once working in the industry, men and women valued long term stability fairly evenly as a motivator to stay. (**FIGURE 4** vs **FIGURE 13**)

Retirement benefits were not a high motivation for any gender as a motivator to stay in the industry. Overall, the data indicates that emphasizing mission, purpose, industry stability, and development opportunities may help retain a more diverse population.

FIGURE 13: GENDER AND REASONS TO STAY IN THE NUCLEAR INDUSTRY[10]

4. Educational Level and Retaining Nuclear Talent

Respondents with a Master's Degree value salary as the top reason to stay in the nuclear industry. Both salary and mission and purpose were prioritized equally when those with a Master's Degree considered reasons to join. However while those with a Master's Degree are the only group to have a change in motivations, **all education levels prioritize salary even more as a reason to stay in the nuclear industry compared to joining the industry**.

With the addition of retirement benefits as a motivator to stay in the nuclear industry, the priorities of those with an Associate's Degree and Vocational Training shifted slightly. The top two motivators of salary and long-term stability remain unchanged, but retirement benefits become the third highest motivator, replacing development opportunities. Companies who want to retain their existing workforce with high school degrees, GEDs, associate degrees, or technical or vocational training should consider emphasizing the long-term stability of the industry and offering competitive retirement benefits, while emphasis on an organization's mission and purpose is more likely to retain individuals with bachelor's or and master's degrees.

[10] Due to a low number of responses the following categories were not included on this graph - Transgender, Non-Binary.

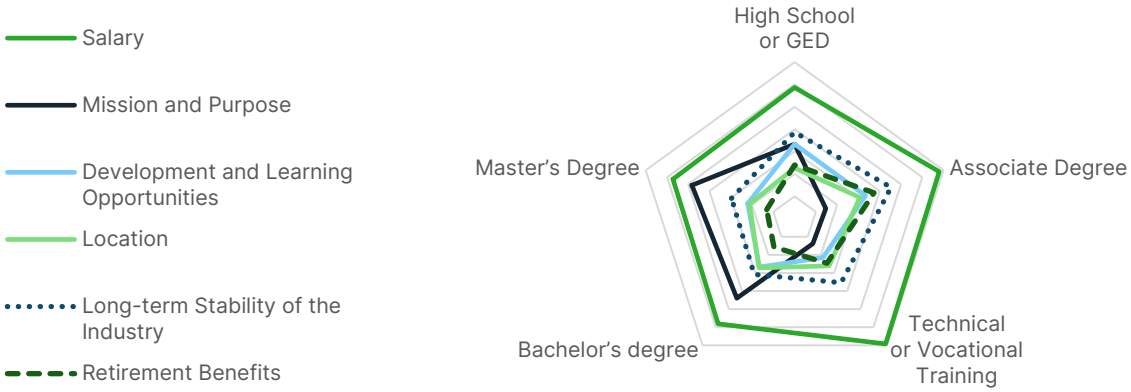

FIGURE 14: LEVEL OF EDUCATION AND REASONS TO STAY IN THE NUCLEAR INDUSTRY[11]

5. Organizational Level and Retaining Nuclear Talent

Salary remains the highest motivation to join and stay in the industry for all organizational levels. For those above first line managers, salary grows in significance as a motivator to stay in the nuclear industry. (**FIGURE 6** vs **FIGURE 15**)

Interns value mission and purpose and development opportunities more than any other level as reasons to join and stay in the industry. Interns also continue to value location the least out of any other level. Notably, long-term stability becomes much more important to interns as a reason to stay in the industry rather than a reason to join.

Retirement benefits emerged as an area of focus for retaining talent at the first-line supervisor and above levels. **Emphasis on retirement benefits could be considered as a strategy for retaining experienced talent, but will be less likely to motivate interns, co-ops, students or individual contributors to remain in the nuclear industry.**

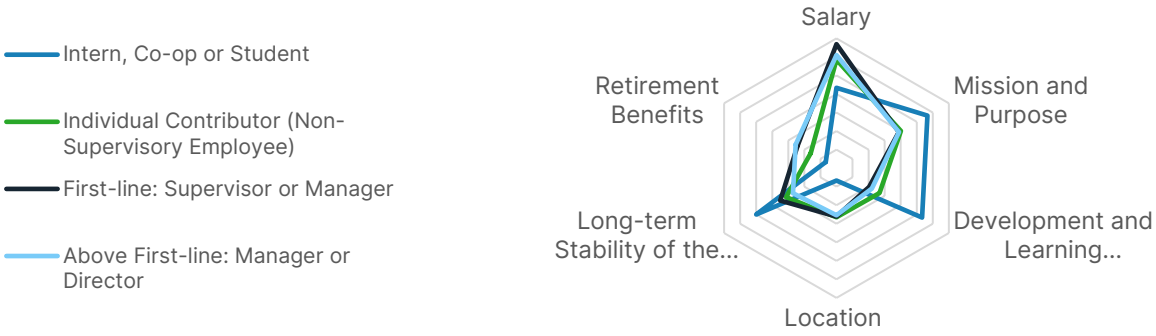

FIGURE 15 LEVEL IN ORGANIZATION AND REASONS TO STAY IN THE NUCLEAR INDUSTRY[12]

Additional retention factors are described in Appendix F.

[11] Due to a low number of responses, Doctoral Degrees are not included in this graph.
[12] Due to a low number of responses, Executive level respondents are not shown in this graph.

Attrition of Nuclear Talent

Respondents were asked to provide their motivations for leaving the nuclear industry if they were offered better options in other industries. It is important to note that not all respondents intend to leave the nuclear industry and may have answered this question with a hypothetical situation in mind. **For all respondents, salary was by far the top motivator selected as a reason to leave the nuclear industry**, followed by work-life balance and more flexibility in individual's working situations (i.e., remote work or working in a different location). (**FIGURE 16: TOP MOTIVATORS FOR LEAVING THE NUCLEAR INDUSTRY**)

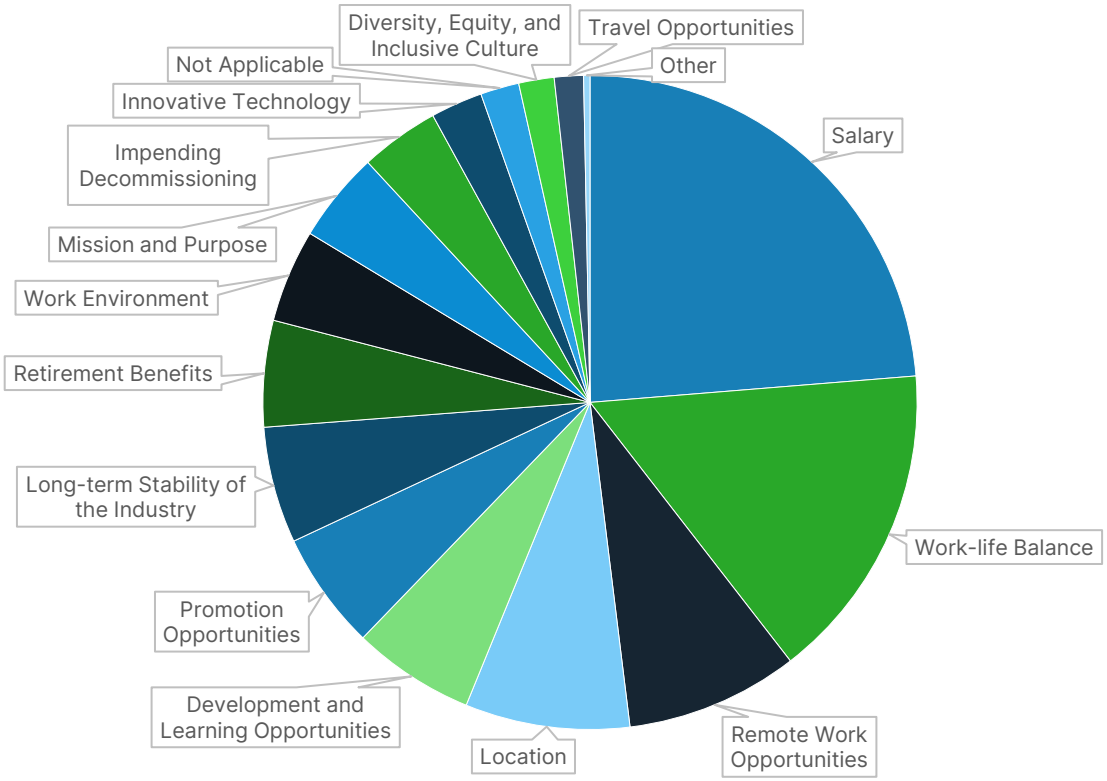

FIGURE 16: TOP MOTIVATORS FOR LEAVING THE NUCLEAR INDUSTRY

Note: For the following demographic comparison, the options presented to survey respondents regarding reasons to stay in the industry were slightly different than the options presented regarding leaving the industry. For this reason, the figures are not compared.

1. Age and Nuclear Talent Attrition

Motivators for leaving the nuclear industry were widely varied by age. **While salary is the highest motivator for leaving the nuclear industry for all age groups, its importance peaks in the 26-35 year-old group.** (**FIGURE 17: AGE OF RESPONDENTS AND REASONS FOR LEAVING THE NUCLEAR INDUSTRY**) This indicates that a desirable salary could be the key factor between retention and leaving the industry for 26-35 year-olds.

Work-life balance becomes increasingly important with age for respondents and peaks in the 36-45 year-old age group. For all respondents over the age of 25, this category is the second highest motivator for leaving the industry. **Organizations wishing to prevent their workforce from leaving the industry may desire to focus on creating a better work-life balance for employees as this category is ranked so highly.**

For those in the lowest age group (18-25), location was a key motivator for leaving the nuclear industry but remote work opportunities were not as important to this group, indicating that having a physical location in a desirable area may be more important for retaining younger individuals. 18-25 year-olds also rated location as the least important motivator to join or stay in the industry. This seeming contradiction indicates that **while location may not be a reason to join or stay in the nuclear energy industry, an opportunity to live and work in a more desirable location may be enough to entice talent to leave the industry.**

Individuals between the ages of 26-45 responded that they were more likely to leave the industry for better remote work opportunities, indicating that individuals in these demographics could potentially be retained if they were offered more remote work options.

Better retirement benefits are a key motivator for survey respondents above the age of 46, especially for those between the ages of 46-55, indicating that organizations who want to retain individuals in this age range should ensure they offer competitive benefits to reduce the likelihood of these personnel changing industries.

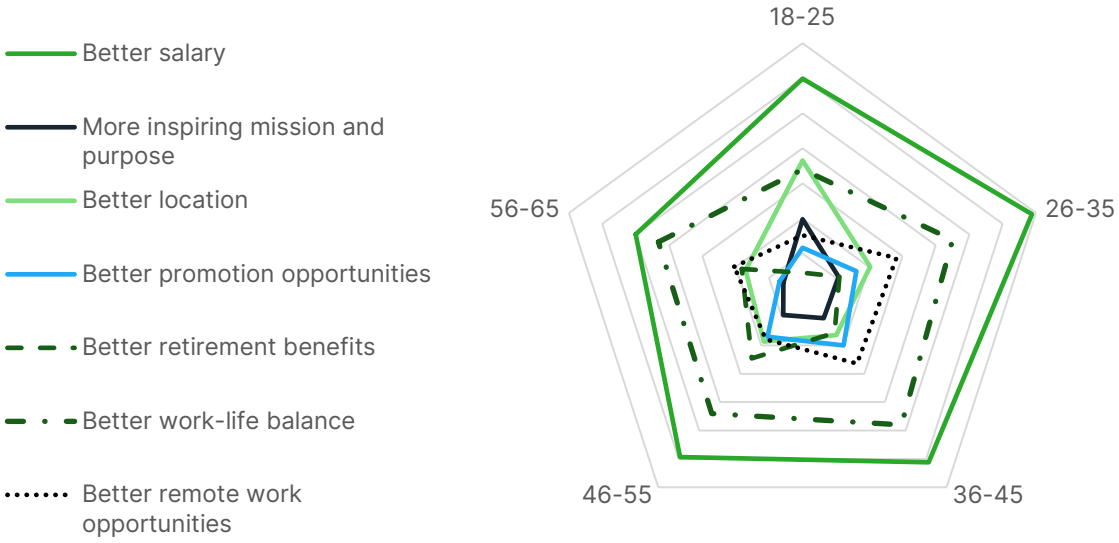

FIGURE 17: AGE OF RESPONDENTS AND REASONS FOR LEAVING THE NUCLEAR INDUSTRY[13]

2. Ethnicity and Nuclear Talent Attrition

Salary is the top motivator for leaving the nuclear industry for all ethnicities. (**FIGURE 18: ETHNICITY AND REASONS TO LEAVE THE NUCLEAR INDUSTRY**) After salary, a better work-life balance is the highest motivator to leave the nuclear industry for most ethnicities, with **White or Caucasian and Hispanic or Latino respondents valuing work life balance more than other ethnicities**. Asian or Pacific Islander respondents are the exception in that they were more motivated to leave by better development and learning opportunities. **Better location is more important to Hispanic or Latino respondents than any other ethnicity surveyed.** It is the third highest reason that a Hispanic or Latino respondent would leave the industry.

[13] Due to a low number of responses, respondents over the age of 65 are not shown in this graph.

Overall, better salary and better work life balance are the top reasons for individuals to leave the nuclear industry regardless of ethnicity, and organizations wishing to retain a diverse population of individuals should consider maintaining or increasing focus in these areas.

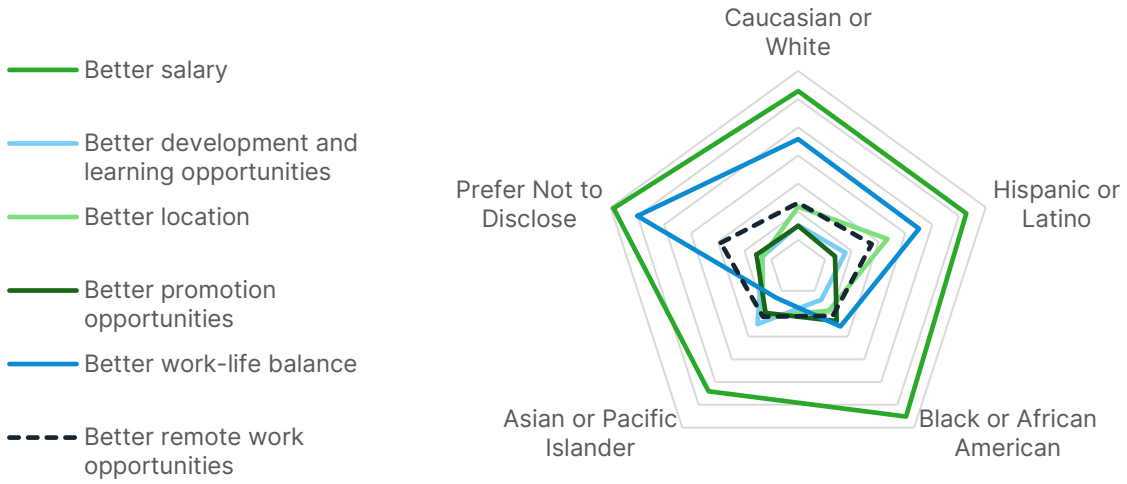

FIGURE 18: ETHNICITY AND REASONS TO LEAVE THE NUCLEAR INDUSTRY[14]

3. Gender and Nuclear Talent Attrition

Survey data shows that salary is the most important reason to leave the industry for those who identify as men, women, and those who prefer not to disclose their gender. **After salary, each gender views better work-life balance as the second highest reason to leave the industry** (**FIGURE 19: GENDER AND REASONS TO LEAVE THE NUCLEAR INDUSTRY**) Women also indicated that better remote work opportunities would be a top three motivator for their leaving the nuclear energy industry.

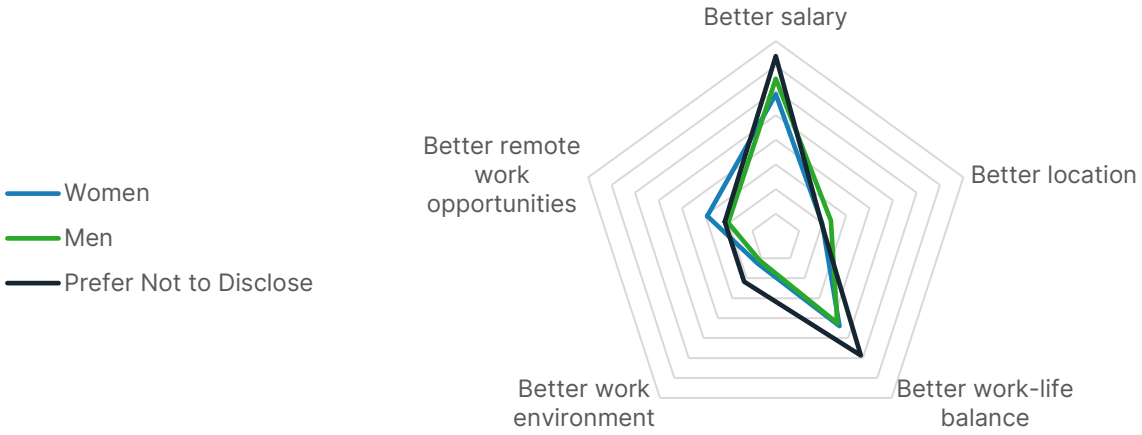

FIGURE 19: GENDER AND REASONS TO LEAVE THE NUCLEAR INDUSTRY[15]

[14] Due to a low number of responses the following categories were not included on this graph - Middle Eastern or North African, Indigenous or Native American, Other.
[15] Due to a low number of responses the following categories were not included on this graph - Transgender, Non-Binary.

4. Educational Level and Nuclear Talent Attrition

For all education levels, salary is the highest and work-life balance is the second highest motivator to leave the nuclear industry. (FIGURE 20: LEVEL OF EDUCATION AND REASONS TO LEAVE THE NUCLEAR INDUSTRY) However, those with a high school diploma or Associate's Degree value work life balance less than the other educational levels.

Respondents with vocational training were more likely to leave for better retirement benefits more than any other level. **Better remote work opportunities were important motivators to leave the industry for individuals with college experience (associate, bachelor's, or master's degrees)**, which may be related to the type of work that these individuals generally perform. Organizations wishing to retain individuals with this educational background may want to focus on maintaining competitive remote work policies.

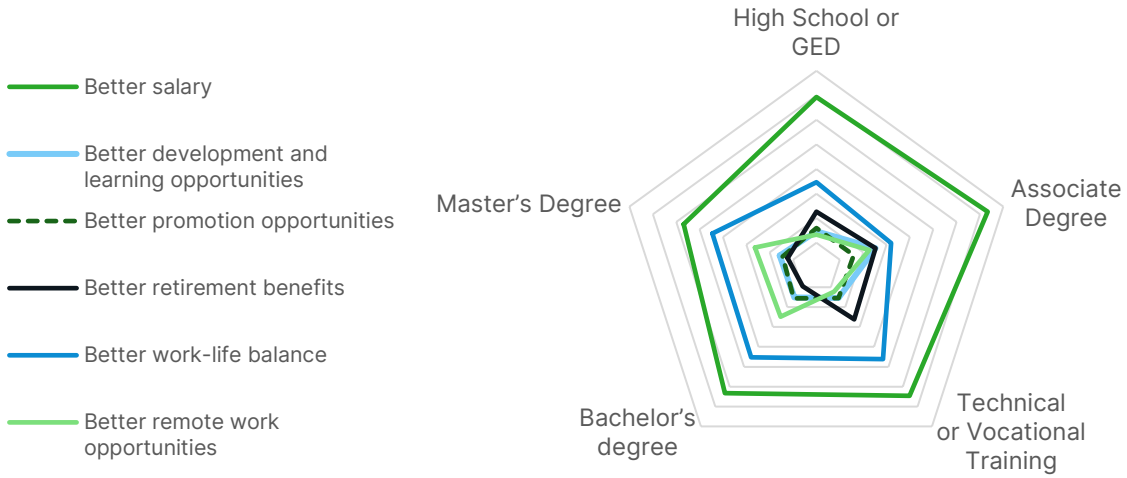

FIGURE 20: LEVEL OF EDUCATION AND REASONS TO LEAVE THE NUCLEAR INDUSTRY[16]

5. Organizational Level and Nuclear Talent Attrition

For all organizational levels, salary is the highest motivator to leave the nuclear industry, and work-life balance is the second highest motivator to leave for all except interns.

For respondents at the manager or director level (above first-line managers), a better work-life balance was a more compelling reason to leave the nuclear industry than salary. (FIGURE 20: LEVEL OF EDUCATION AND REASONS TO LEAVE THE NUCLEAR INDUSTRY) **Behind salary, better work-life balance is the second highest ranked motivator for leaving the nuclear industry by all respondents,** suggesting that organizations that address work-life balance have more of a chance of retaining individuals at higher levels.

Individual contributors and first-line managers were more likely to list remote work opportunities as a key motivator for leaving the industry, indicating that organizations that provide more remote work options have a higher chance of retaining personnel at those levels. **Respondents at the manager or director level also selected promotion opportunities as a key motivator for leaving the nuclear industry, indicating that individuals at this level may feel that other industries offer more opportunities for**

[16] Due to a low number of responses, Doctoral Degrees are not included in this graph.

promotion. Organizations wishing to keep managers and directors should consider ways to offer more promotion opportunities to retain talent at that level.

For interns, co-ops, and students, a better location was the second highest motivator to leave the nuclear industry while it was a very low motivation to stay in the nuclear industry. This same trend was observed with those aged 18-25 years old, and it indicates that students may not be interested in the current locations of available jobs in the nuclear industry. (**FIGURE 21: ORGANIZATIONAL LEVEL AND REASONS TO LEAVE THE NUCLEAR INDUSTRY**)

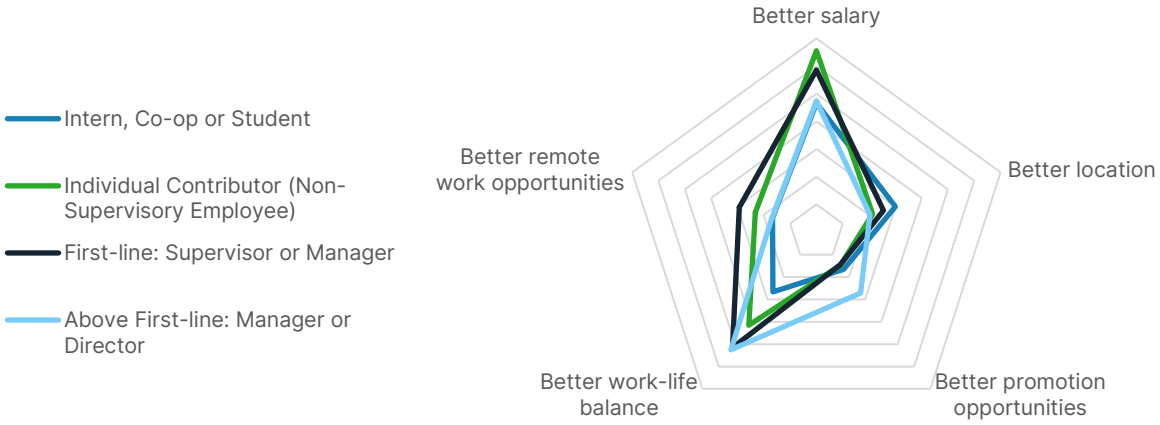

FIGURE 21: ORGANIZATIONAL LEVEL AND REASONS TO LEAVE THE NUCLEAR INDUSTRY[17]

The strong alignment among better salary, better work-life balance, and better remote work opportunities as the top motivators for leaving the nuclear energy industry highlight the key areas of focus for organizations seeking to retain their talent.

6. How Hours Worked Impacts Attrition

Survey respondents were asked how many hours they worked in an average week. For those who worked up to 54 hours, salary would be their highest motivator for leaving the nuclear industry. (**FIGURE 22: HOURS WORKED AND REASONS TO LEAVE THE NUCLEAR INDUSTRY**) However, **at 55 or more hours worked, work-life balance becomes the highest reason to leave the industry, with salary becoming much less important.** Other things to note are that remote work opportunities are less important to those working more than 55 hours, and that **the desire for a better work environment increases as the number of hours worked increases.**

Organizations wishing to prevent employees from leaving the nuclear industry should understand that **after more than 54 hours worked, increasing salary is unlikely to retain individuals who can find a better work-life balance in another industry**. Similarly, **providing more remote work opportunities may retain individuals working fewer hours, but is less likely to appeal to those already working long hours or motivate them to remain in the nuclear industry**.

[17] Due to a low number of responses, Executive level respondents are not shown in this graph.

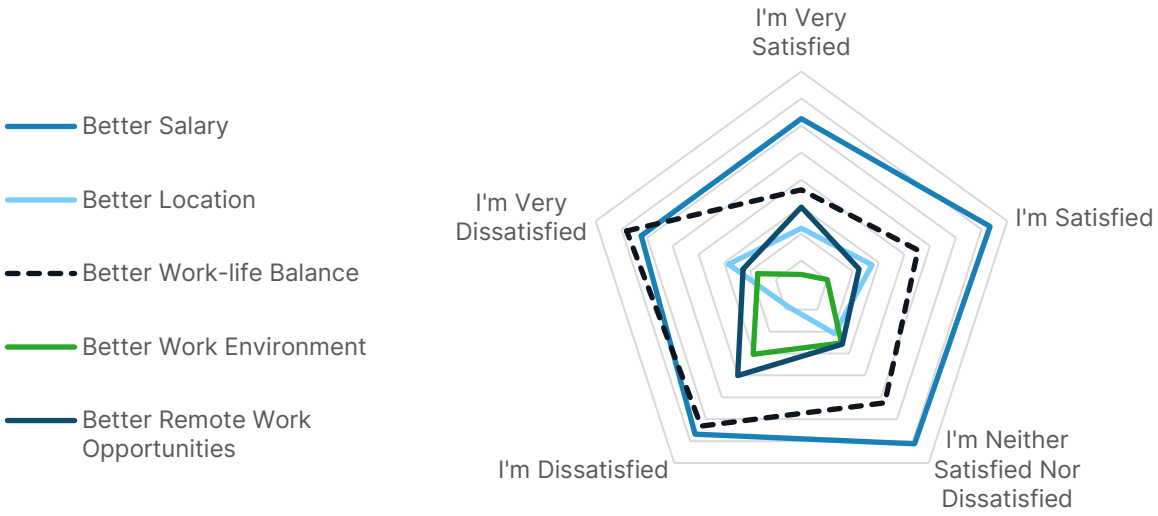

FIGURE 22: HOURS WORKED AND REASONS TO LEAVE THE NUCLEAR INDUSTRY

7. Insights on Current Job Searching

According to the 2024 Career Report results, 46% of respondents are actively or passively looking for a job, which is slightly less than the 2022 Career Report results of 49% (**FIGURE 23: JOB SEARCH STATUS**). However, **only 9% of respondents are actively looking for a job, whereas the 2020 Career Report showed 20% of actively looking**. See Appendix H for additional insights into motivations for those looking for a new job.

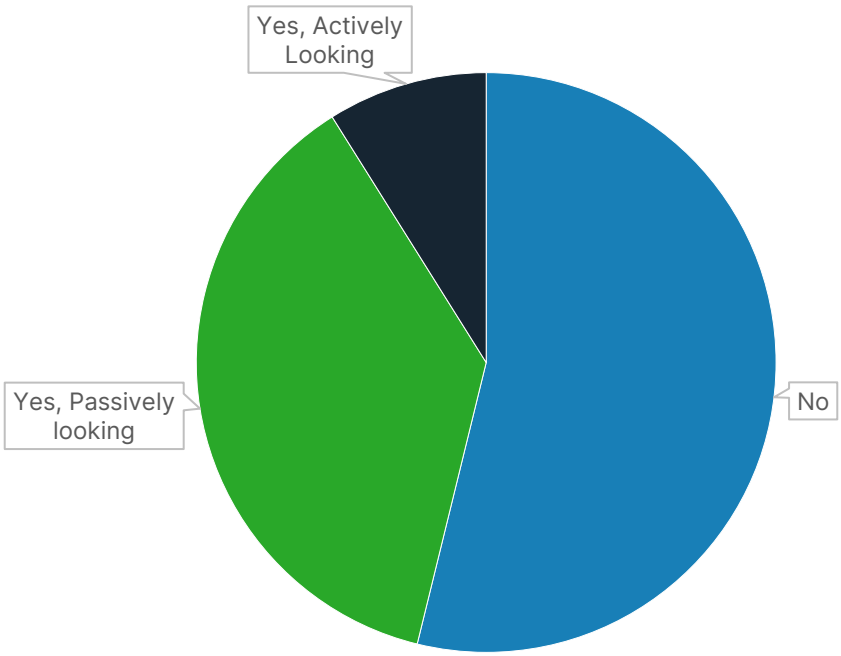

FIGURE 23: JOB SEARCH STATUS

8. Insights on Key Demographics

When reviewing data from this survey, along with other publications, **there is a negative trend in retention specifically looking at those with 3 to 12 years' experience in the nuclear industry. More than 50% of respondents are actively or passively looking to change jobs** (FIGURE 24: JOB SEARCH STATUS VS YEARS OF EXPERIENCE).

See Appendix G for evaluation of motivations for those with 3 to 12 years' experience.

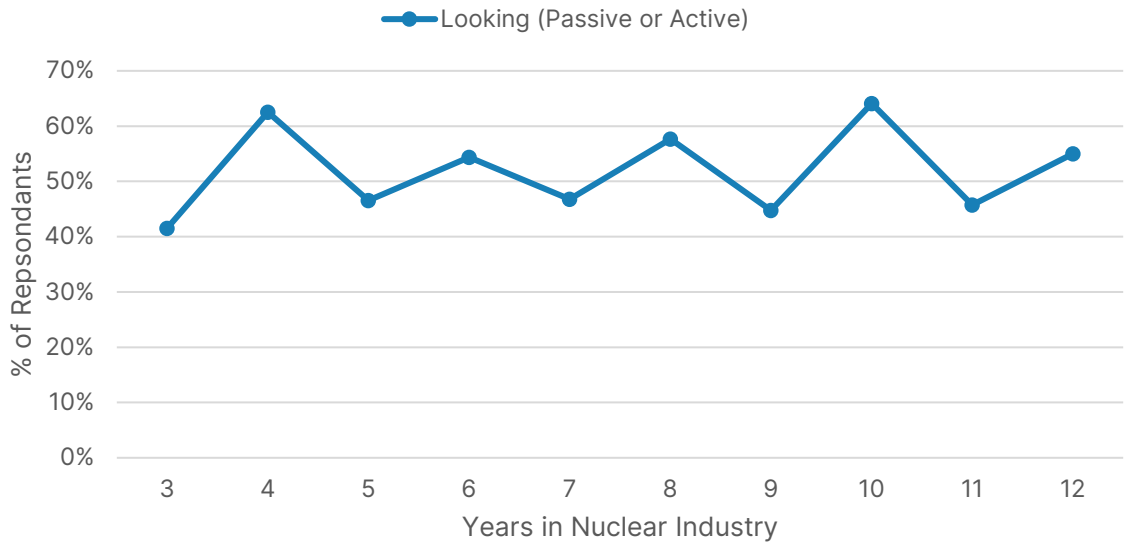

FIGURE 24: JOB SEARCH STATUS VS YEARS OF EXPERIENCE

IV. Compensation

Survey results consistently identify salary as a top motivator for individuals choosing to join and stay in the nuclear energy industry as well as serving as a top motivator for choosing to leave the industry when better salary options are available. This section examines the average salary and salary trends of NAYGN members. The remainder of the section examines salary in relation to tenure, organizational level, job function, job experience, demographics, and other relevant job factors.

Key Insights include:

- Recent relatively high inflation has likely been compensated throughout the industry via the common practice of inflation-adjusted bonuses. Additional pay has made up the larger portion of the total compensation increase across data comparisons to 2022.
- There is still a difference in compensation for men and women that needs to be addressed by the industry. Some job functions, such as engineering, appear to have done a better job of addressing it than others.
- Compensation disparities for different ethnicities is less of an issue than prior surveys. Differences are still notable in 11+ years of experience (YoE), but hires in the last decade (0-4 and 5-10 YoE) are nearly identical.

Total Compensation

For perspective, the 2024 compensation survey results are compared with the results from 2022:

TABLE 2: 2022 VS 2024 SALARY COMPARISON

	2022	2024
Base Salary Mode	$100K-110k	$120K-130K
Base Salary Average	$104,862	$118,810
Base Salary Median	$103,000	$115,702
Additional Pay Average	$15,638	$29,846
Additional Pay Median	$10,000	$19,476
Total Compensation Average	$120,500	$148,656
Total Compensation Median	$118,000	$139,488

It is worth noting that the increases between 2022 and 2024 outpace inflation for all of these compared values, with more of the difference coming from increased additional pay, indicating that companies are competing for talent retention and/or with inflation via supplemental pay rather than base salary increases (inflation adjustments based on Bureau of Labor Statistic Calculator: https://data.bls.gov/cgi-bin/cpicalc.pl).

FIGURE 25 shows the annual base salary and annual additional pay grouped by YoE in the nuclear industry. Both base salary and additional pay are highly dependent on years of experience.

- Additional pay was approximately 13% of base salary for individuals with 0-1 years of experience in nuclear. It was approximately 26% for those with 2-3 years of experience in nuclear. This is an increase from the 2022 report, where all early career individuals (0-3 years) had bonuses at approximately 8% of their base.
- Individuals with 14+ years of experience had bonus pay of approximately 31%, up from 19% in 2022.

Overall, base salary and additional pay has increased since 2022 for all levels of experience, with additional pay making up the larger portion of the total compensation increase. This observation suggests employers may be compensating for inflation via additional pay rather than direct salary increase, which has been reflected in other industries and in the common practice of inflation-adjusted bonuses.

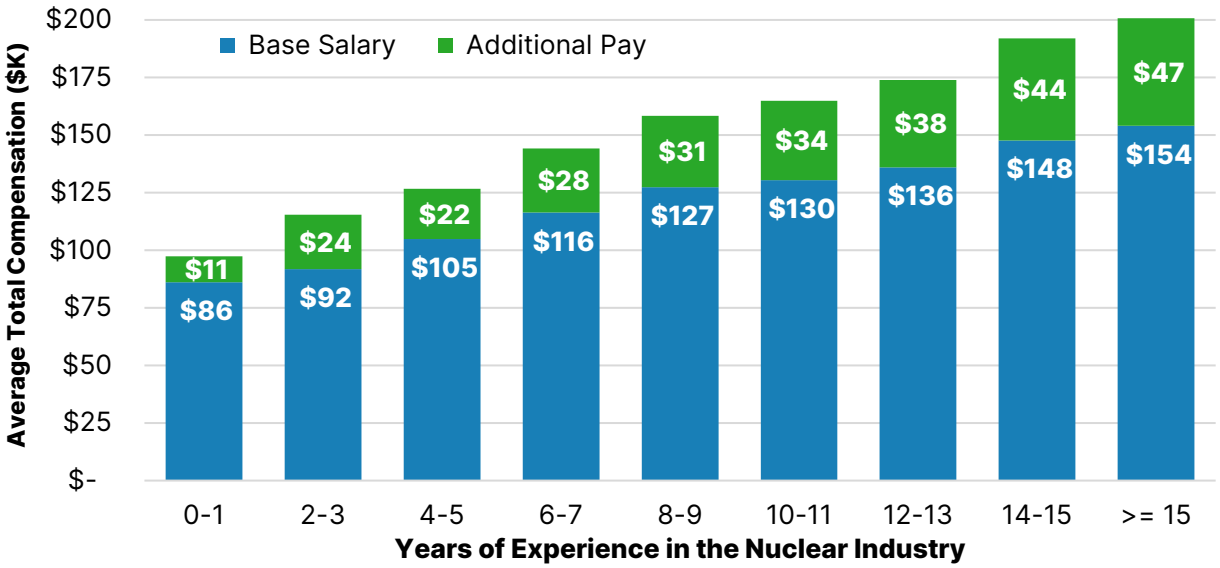

FIGURE 25: TOTAL COMPENSATION (BASE SALARY AND ADDITIONAL PAY)[18]

FIGURE 26 continues to show total compensation, but compares the overall average with the two largest response categories: Engineering job function and Individual Contributor role.

- Engineering compensation lags behind the overall average for most YoE, and Engineering compensation is only above average for those with 12-15 years of experience.
- Individual Contributor compensation is roughly equivalent to the overall average for 0-3 YoE, but begins lagging behind starting about four years in. The gap only widens as experience increases, suggesting that **remaining an individual contributor with more experience and not moving into managerial roles may limit overall earnings**.

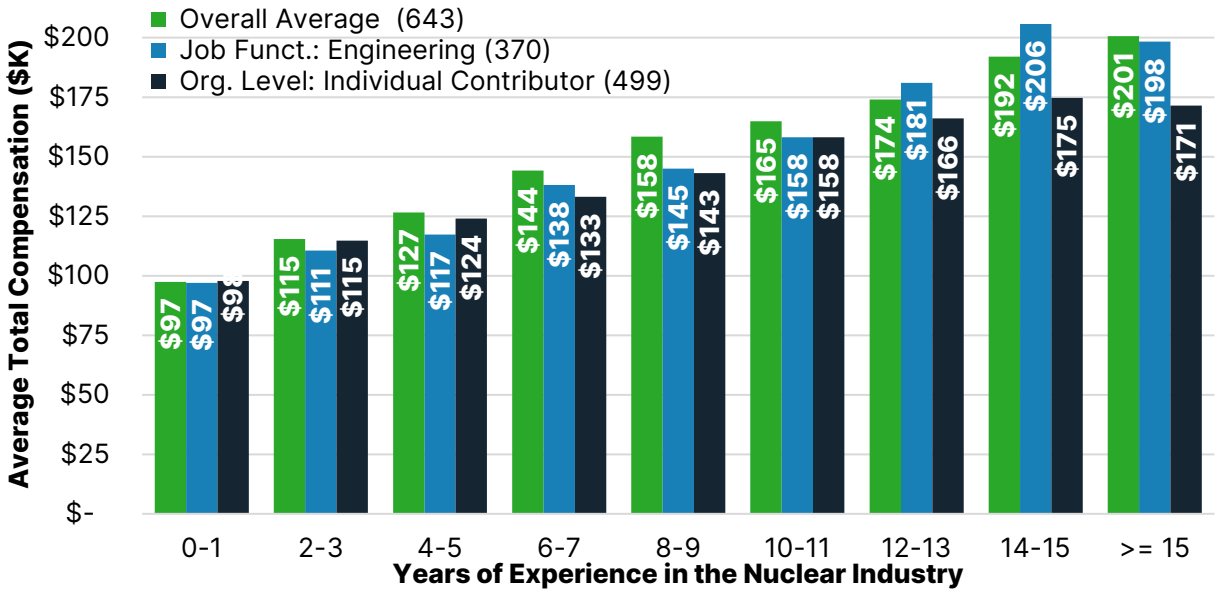

FIGURE 26: TOTAL COMPENSATION FOR LARGE RESPONSE CATEGORIES

[18] Base Salary is the cost-of-living adjusted Current Annual Base Salary. Additional Pay is the cost-of-living adjusted sum of Current Target Annual Bonus, Company Paid Benefits, & Additional Pay. Total Compensation = Base Salary + Additional Pay

FIGURE 27 shows the distribution of base salaries and total compensation, with the average compensation satisfaction score overlaid. **For the total compensation range of $80K-$170K, respondents were generally satisfied with their compensation.** After $170K, satisfaction trends consistently upward.

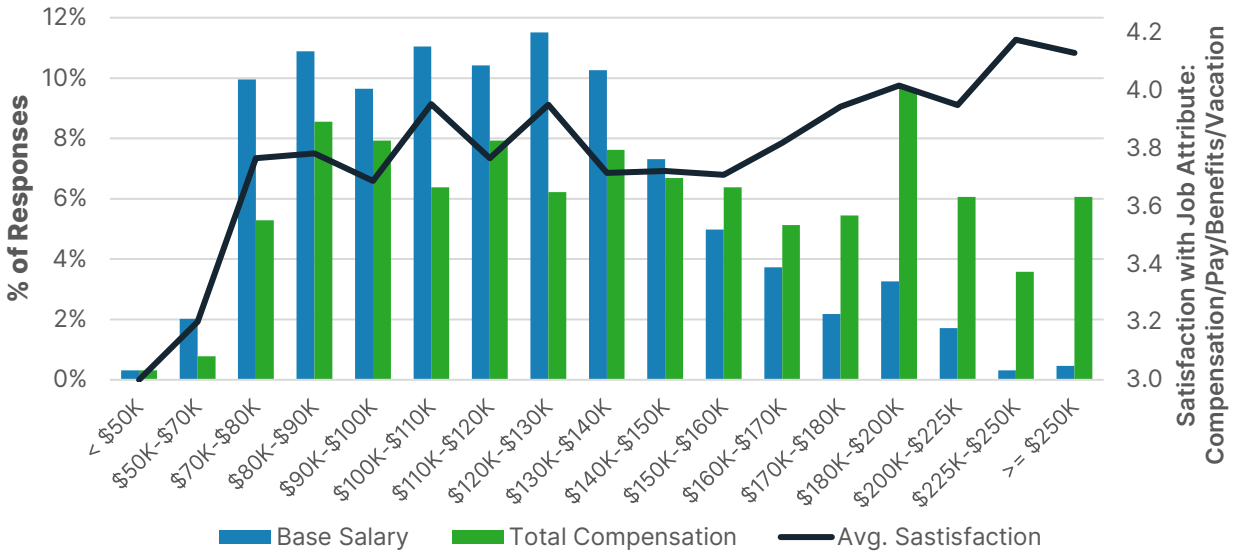

FIGURE 27: COMPENSATION DISTRIBUTION IN THE NUCLEAR INDUSTRY[19]

FIGURE 28 shows the compensation for wage-based responses grouped by years of experience in the nuclear industry. Hourly wage response is displayed as a bar while the average total annualized compensation is shown as a line. Of note is that **higher hourly wages are not a direct corollary to higher total annual compensation, and hourly wage does not experience a significant increase with years of experience.**

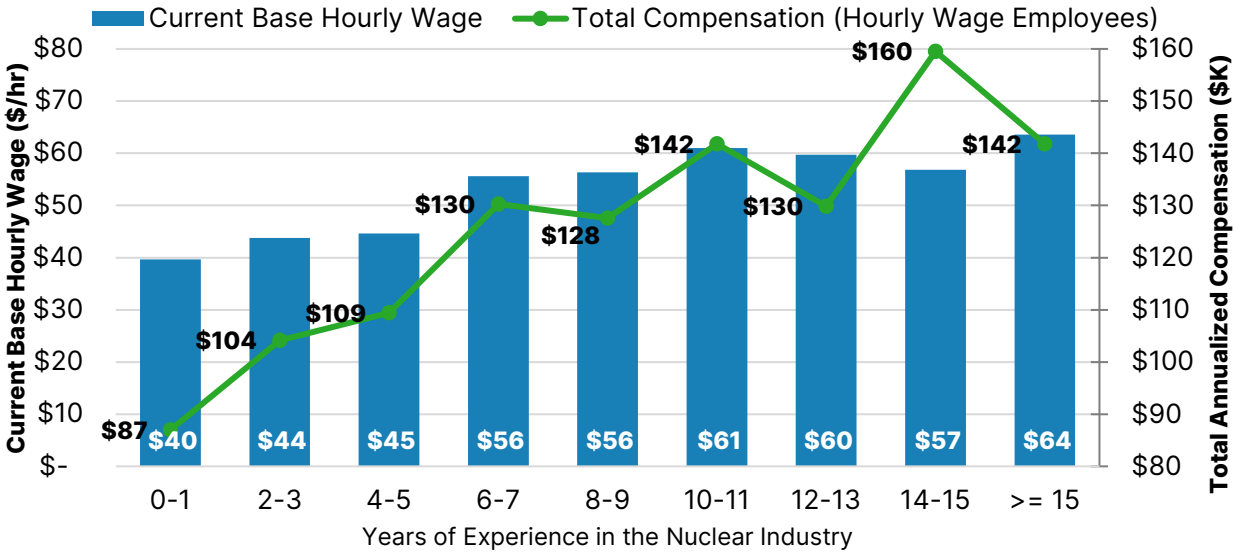

FIGURE 28: COMPENSATION BY YEARS OF NUCLEAR EXPERIENCE FOR HOURLY WAGE EMPLOYEES[20]

[19] Satisfaction scores range from 1 for very dissatisfied to 5 for very satisfied.
[20] Total Compensation (Hourly Wage) is an annualized equivalent (assuming 1900h/y) for hourly wage employees. It is equal to: Cost-of-Living-adjusted{Current Base Hourly Wage*1900h/y + Estimated Annual Overtime Pay}

See Appendix J for compensation calculation notes.

Compensation and Job Function

FIGURE 29 shows base salary and additional pay by job function arranged in descending order of Total Compensation.

- As is typical for this survey and for nuclear compensation overall, the compensation for those in Operations is high relative to other job types, and the years of experience is about average compared to other job functions.
- Despite having the highest years of experience, Training does not have a corresponding amount of compensation, based on survey responses.
- Engineering, which had the highest number of responses, is the fourth lowest average compensation, but this is likely due to a large number of new hires composing the sample. See **FIGURE 30** for additional insights.

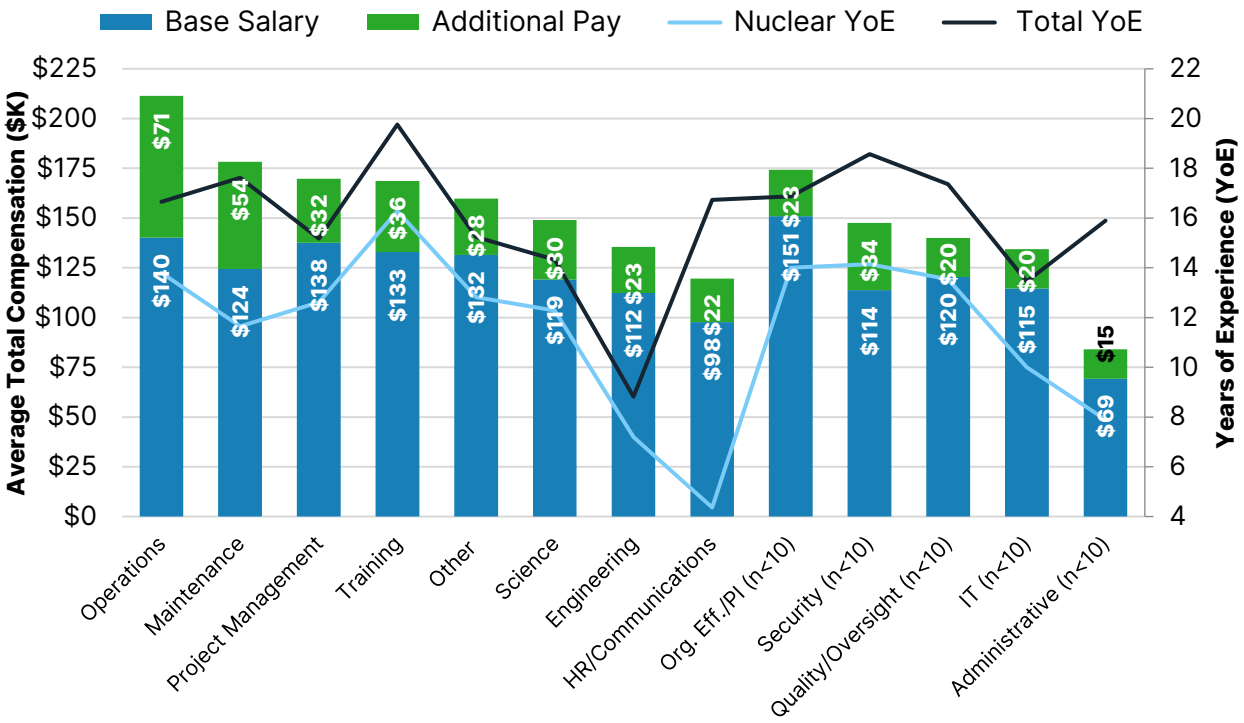

FIGURE 29: COMPENSATION AND EXPERIENCE BY JOB FUNCTION[21]

Because years of experience and hours worked per week are critical factors affecting salary, **FIGURE 30** examines different job functions specifically for respondents with 6-14 years of experience and 40-44 hours worked per week. With this normalization applied, **FIGURE 30** shows that **for mid-career professionals, engineering is the 4th highest paying group**, rather than the 4th lowest as shown in **FIGURE 29**. All compensation is lower than average for 40-44 hours worked per week, with a much narrower distribution, which suggests that there are large financial benefits to working more than the standard 40-hour work week.

[21] There are several job functions shown that had less than 10 survey respondents. No conclusions should be drawn for Org. Eff/PI, Security, IT, and Administrative job functions.

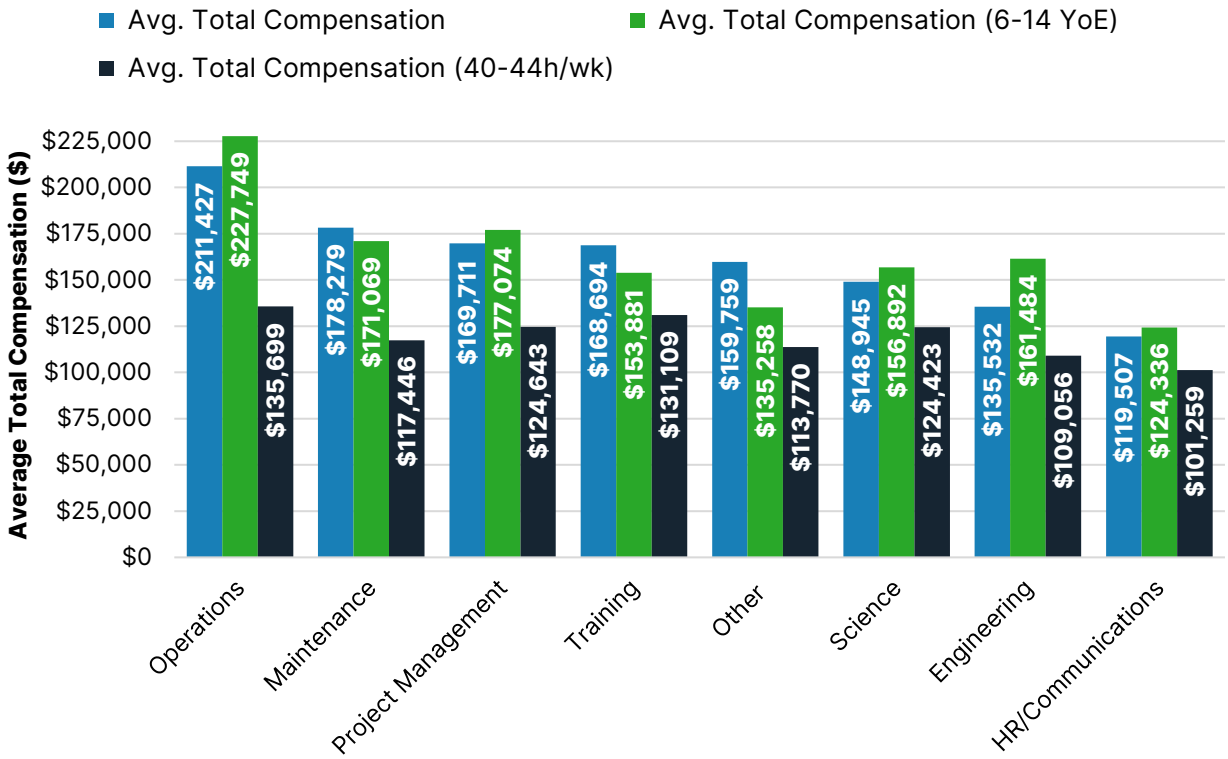

FIGURE 30: COMPENSATION FILTERED COMPARISON BY JOB FUNCTION[22]

Compensation and Job Satisfaction

FIGURE 31 indicates that working more hours per week results in higher total compensation, as expected. The 2022 report indicated that respondents working less than 40 hours a week had higher compensation than those that worked 40-45 hours per week (this was due to a small sample of <40h/wk skewed by a few highly experienced part-time responses). This is no longer the case with the 2024 responses. Most respondents work 40-44 hours per week.

To examine some of the trade-offs, if any, to working more hours, a few key job satisfaction metrics are included in **FIGURE 31**.

- Satisfaction with compensation is steady between 35 to 49 hours worked per week. **Starting at 50 hours worked per week, satisfaction with compensation decreases.** If companies want to improve employee salary satisfaction, they either need to reduce the number of hours worked by these employees or consider increasing their salary. As stated earlier in this report, survey respondents working greater than 55 hours per week have the highest levels of overall job dissatisfaction.
- Satisfaction with job flexibility and staffing levels experiences a much sharper decrease as the hours worked each week increases. Staffing levels start with a neutral satisfaction level and decrease as hours worked increase. However, **satisfaction with flexibility is relatively high from 35-44 hours worked per week**. Satisfaction with flexibility experiences a severe drop at 45-49 hours and then a second severe drop at more than 55 hours worked each week.

[22] Only job functions with greater than 10 survey respondents are shown.

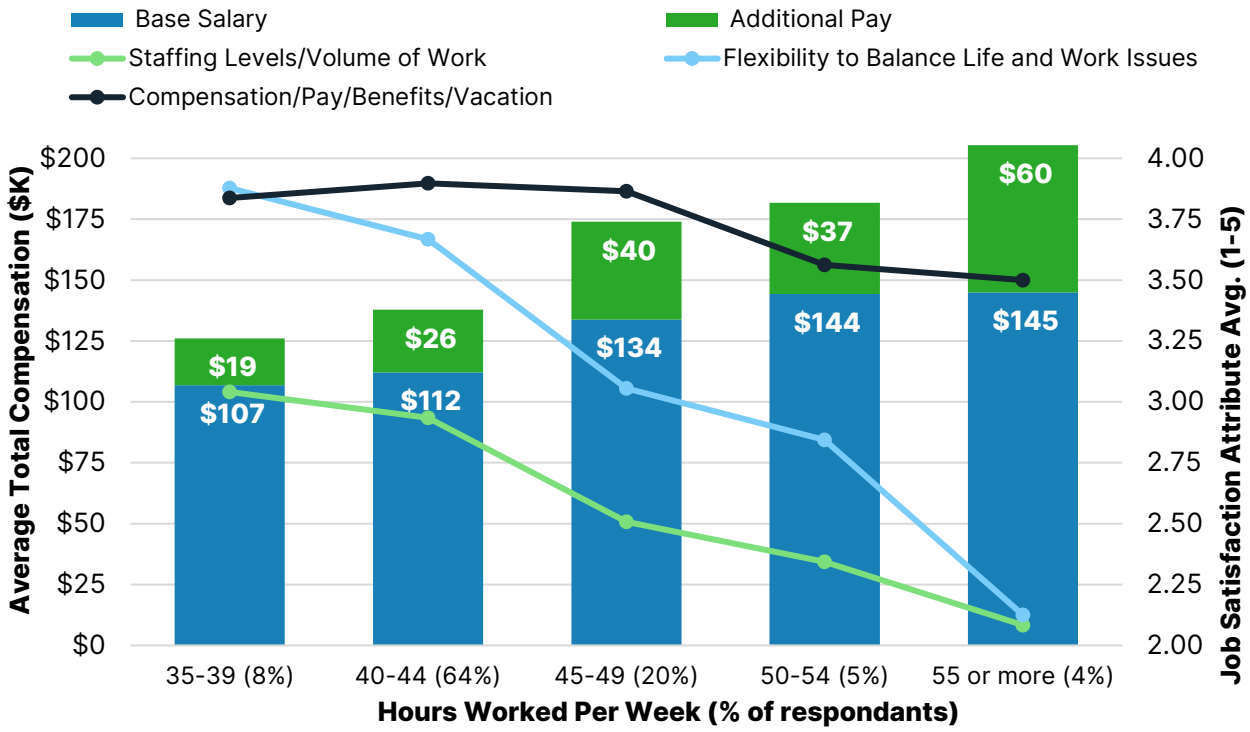

FIGURE 31: SALARIED WORKER COMPENSATION AND JOB SATISFACTION

FIGURE 32 shows similar satisfaction trends for staffing and flexibility for an hourly wage.

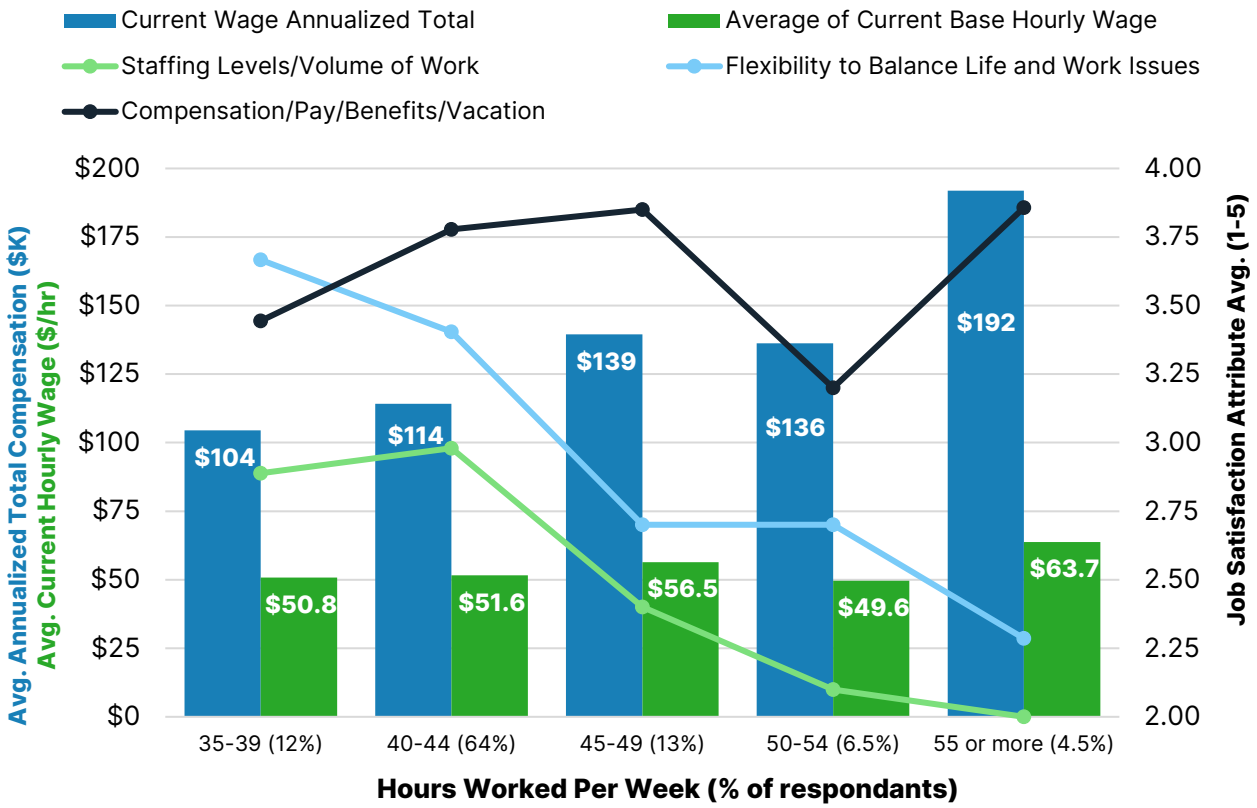

FIGURE 32: HOURLY WORKER COMPENSATION, WAGE, AND JOB SATISFACTION

Compensation and Ethnicity

The NAYGN survey data also uncovered a potential pay gap based on ethnicity in more experienced employees, as seen in **FIGURE 33**. Based on survey results, **Caucasian/White respondents are paid more than their minority peers at experience levels of 10+ years.** At 9 or less years, the compensation is equal. Additional surveys are needed to validate what the current data may be indicating and understand why the pay gap only appears at 10+ years of experience.

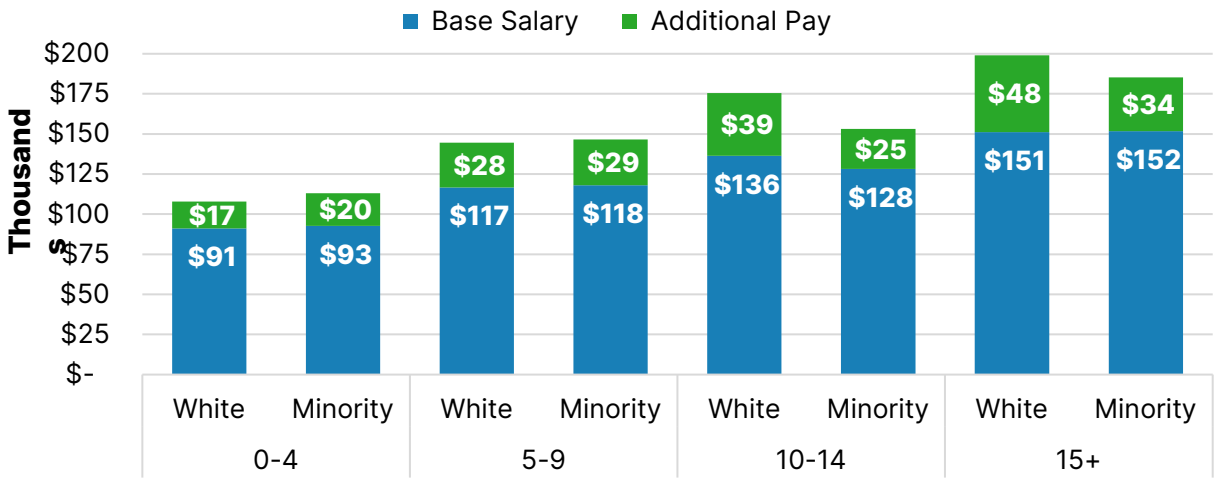

FIGURE 33: COMPENSATION BY ETHNICITY AND YEARS OF EXPERIENCE

Compensation and Gender

As seen in **FIGURE 34**, **men consistently make more than women at every level of experience** based on survey responses. The gap is most apparent in mid-level employees with 5-9 years of experience, as well as in employees with 15+ years of experience. **It is worth noting this gap has also widened for every group except 0-4 YoE when compared to data taken for the 2022 survey.** One trend that is consistent between 2022 and 2024 data is that the gender pay gap is at its highest among employees with the most experience (15+ years).

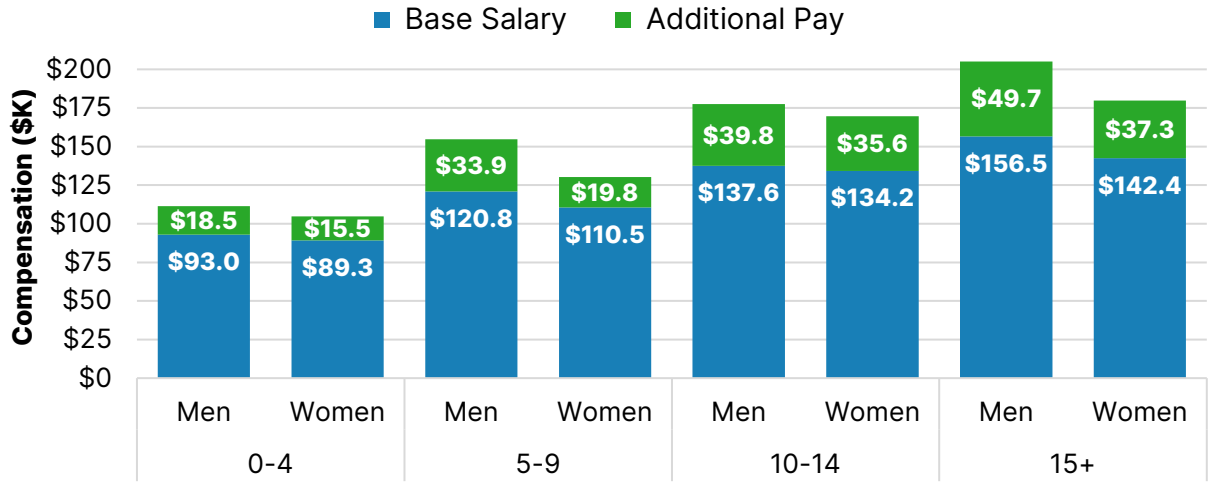

FIGURE 34: COMPENSATION BY GENDER AND NUCLEAR YEARS OF EXPERIENCE

This discrepancy by gender may be at least partially due to gender-make up of certain job functions. **FIGURE 35**, can be used as a reference for the percent of men and women in each job function.

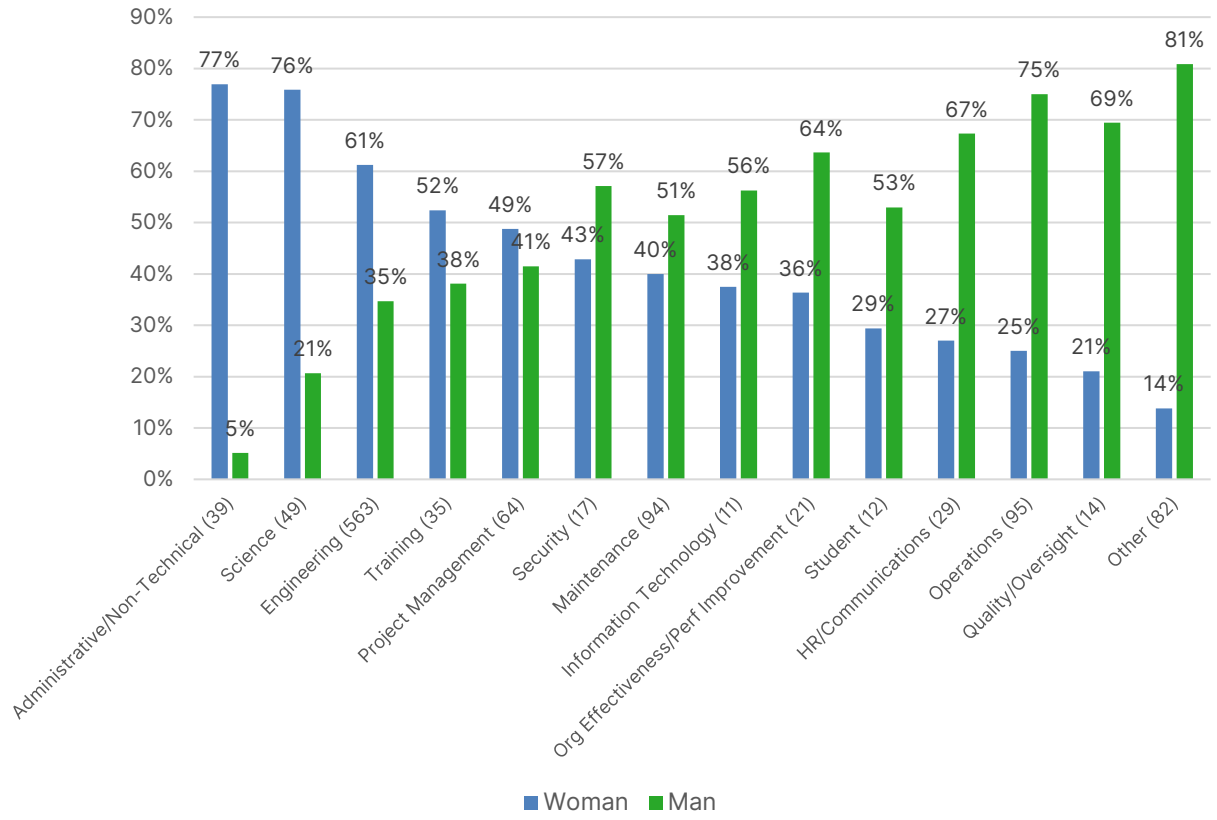

FIGURE 35: JOB FUNCTION BY GENDER

To remove any bias related to job function, the largest job function group, Engineering, is selected to create **FIGURE 36** which shows that **the gender pay gap is more of an issue for those with 10+ YoE, based on survey data. For those who started in engineering roles in the last decade, wages have been relatively even by gender.** There were not enough survey responses for the other job functions to be meaningfully examined. But the examination of engineering offers some insight that pay gaps within each job function may be less skewed than **FIGURE 34** implies. Each job function should examine their internal pay data to ensure fair compensation.

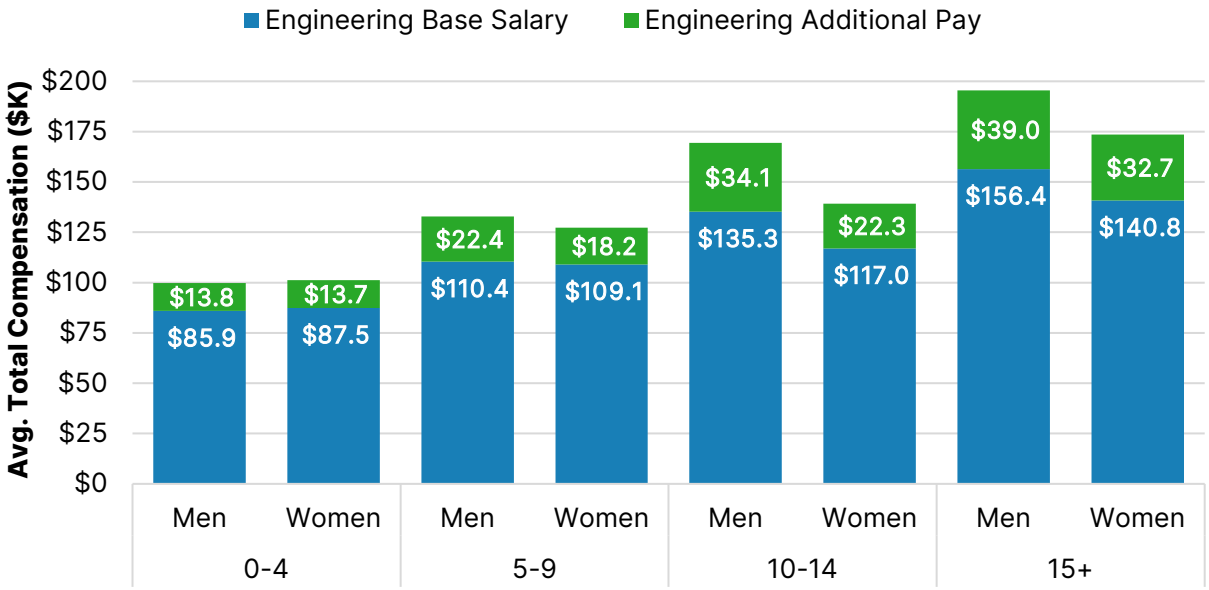

FIGURE 36: COMPENSATION BY GENDER AND NUCLEAR YEARS OF EXPERIENCE FOR ENGINEERING

See Appendix I for a comparison of starting base salaries by gender.

Compensation and Level of Education

Based on **FIGURE 37**, total compensation increases from Bachelor's degree to Master's degree. However, respondents with High School/GED degrees earned nearly as much as respondents with Bachelor's degrees, and those with Associate's Degrees or Trade/Technical degrees/certificates made more total compensation than those with Bachelor's degrees. It is important to note that for the largest category, "Bachelor's Degree" (65% of respondents), the average years of experience (9.9y) is much lower when contrasted with High School/GED (19.4y) or Trade/Technical (21.5y) degree responses. Therefore, it is important to compare compensation and education using years of experience as well.

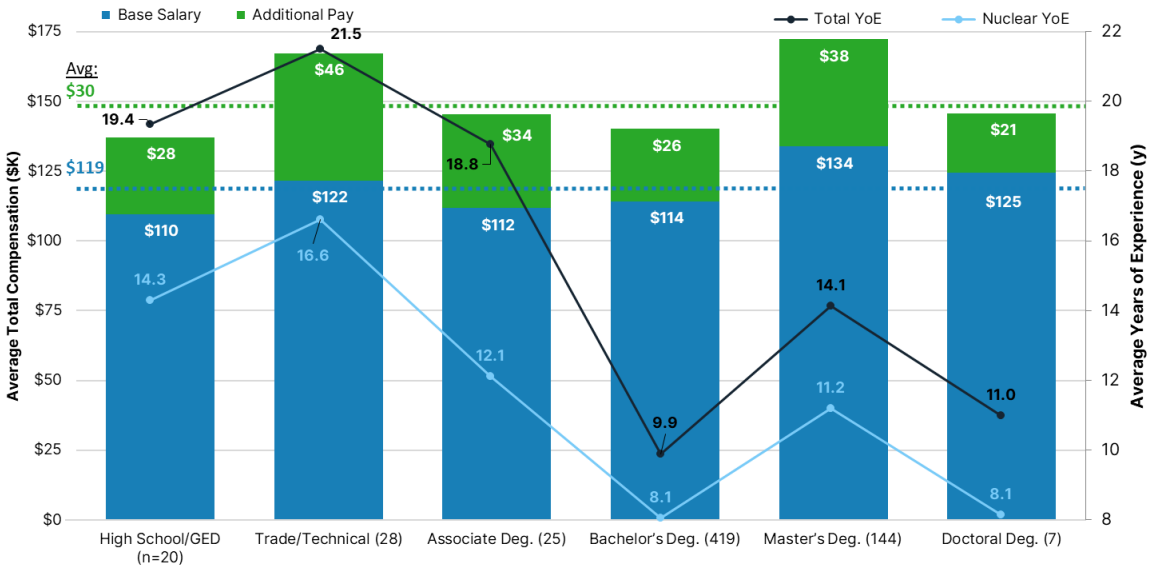

FIGURE 37: COMPENSATION AND YEARS OF EXPERIENCE

To best explore a comparison of education levels with the combined impact of years of experience and education, **FIGURE 38** examines the respondents' current salary relative to their projected earnings if their salary rose according to the population average. This allows for a better examination of the trajectory of years of experience on wage growth of particular demographics.

To better understand **FIGURE 38**, consider an example comparing two 30-year-olds who currently work in the nuclear industry, one who entered the professional workforce right after high school (~12 YoE), and the other who got a master's degree and then entered the workforce (~6 YoE). They are both in the same experience band (5-14 YoE), yet the person with the master's degree makes $164K, ~$14K more than the average survey respondent in that experience band; while the person with the high school degree makes $136K, ~$14K less than the survey average.

FIGURE 38 shows that **respondents with bachelor's degrees or higher earn more than high school, trade/technical, and associates' education levels**.

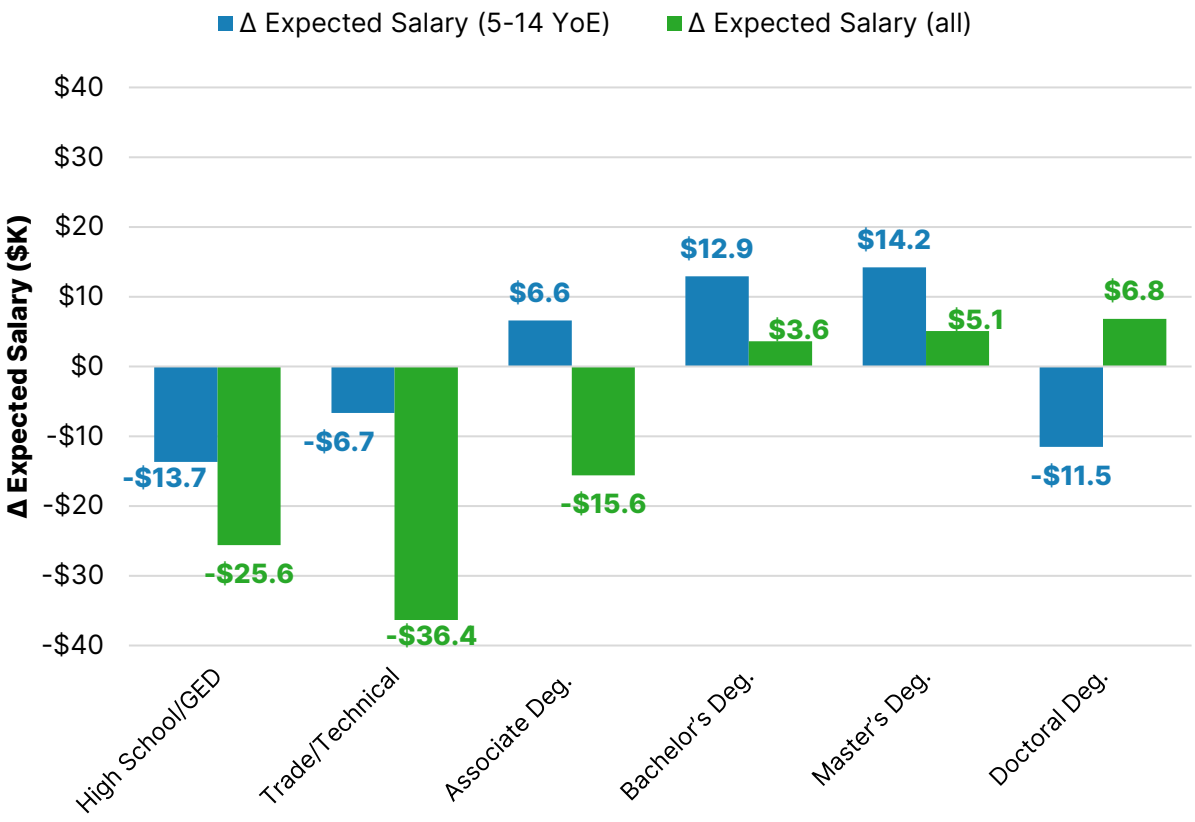

FIGURE 38: EXPECTED SALARY DIFFERENCE[23, 24]

[23] $\Delta\ Expected\ Salary_i = Base\ Salary_i - Starting\ Salary_i - (Nuclear\ YoE_i)(ESIR_n)$
Where i refers to an individual data point
Where n refers to the average of the sampled population

$$ESIR_n = Expected\ Salary\ Increase\ Rate_n = \frac{Base\ Salary_n - Starting\ Salary_n}{Nuclear\ YoE_n} = \$5343.61/year$$

[24] The sample sizefor High School/GED & Doctoral Deg. Responses is too small to determine validity, but it is displayed for completeness.

Compensation and Organizational Level

FIGURE 39 shows the compensation by organization level. In the 2022 report, the categories were broken down into "Individual Contributor", "Supervisor", and "Manager/Director." The 2022 data unexpectedly had managers making less pay than supervisors. This is potentially due to a lack of alignment in the industry related to job titles as compared to previous survey categories. With the 2024 survey, survey response categories were clarified to indicate first-line and above first-line leadership positions. With this clarification, as expected, survey results indicate that the further one advances into leadership positions, the higher the total compensation.

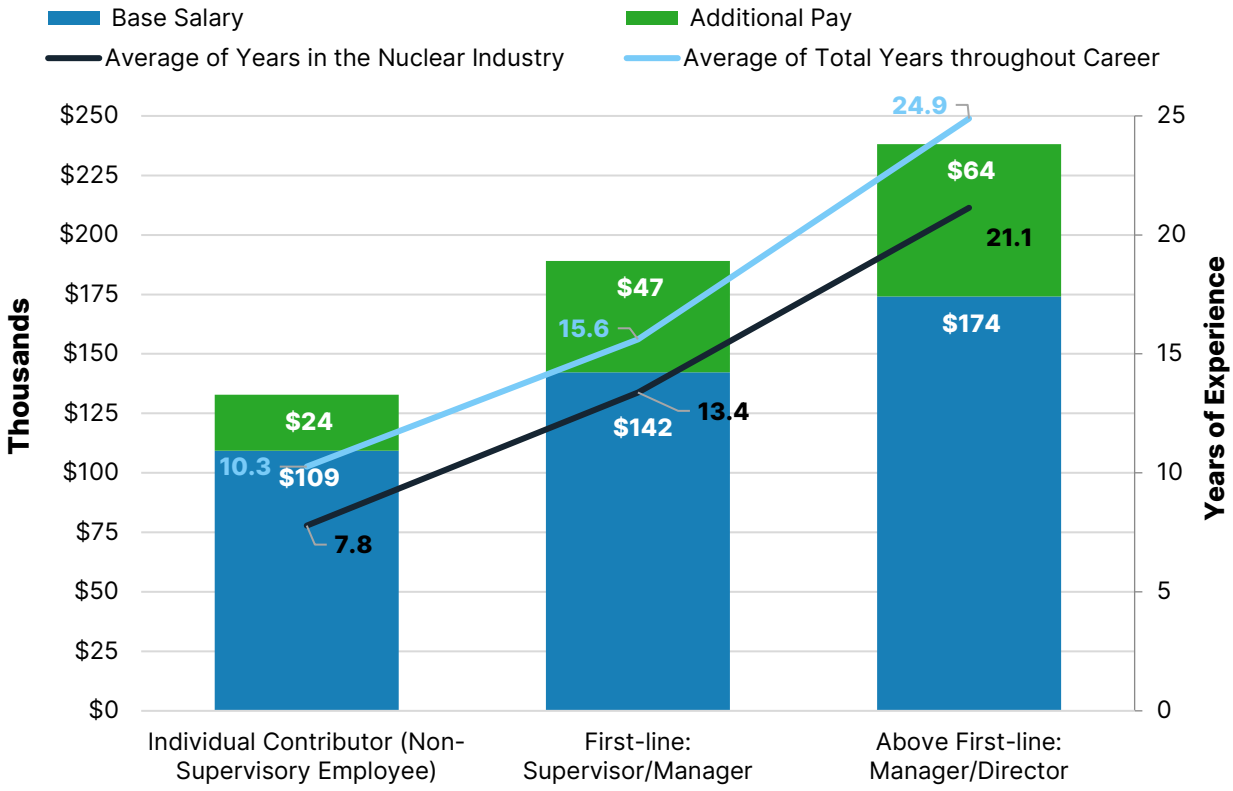

FIGURE 39: COMPENSATION AND YEARS OF EXPERIENCE BY ORGANIZATIONAL LEVEL

When examining compensation by organizational level and gender as shown in **FIGURE 40**, survey data again shows women consistently make less than men in terms of total compensation. It is important to examine this in terms of years of experience as well. To that end, Years of Experience and Difference (Δ) from Expected Salary are shown.

For Individual Contributors, men and women are roughly equal in difference from expected compensation, and indeed the years of experience are relatively similar. At the first-line and above first-line leadership levels, women are receiving salaries well above the expected salary, while men tend to be more in line with the expected salary. An examination of the difference in experience between genders shows the average men/women experience gap is about 5 years at first line, and 9 years for above first line. The years of experience explains much of the pay discrepancy, but it could also indicate women are being promoted more quickly than men.

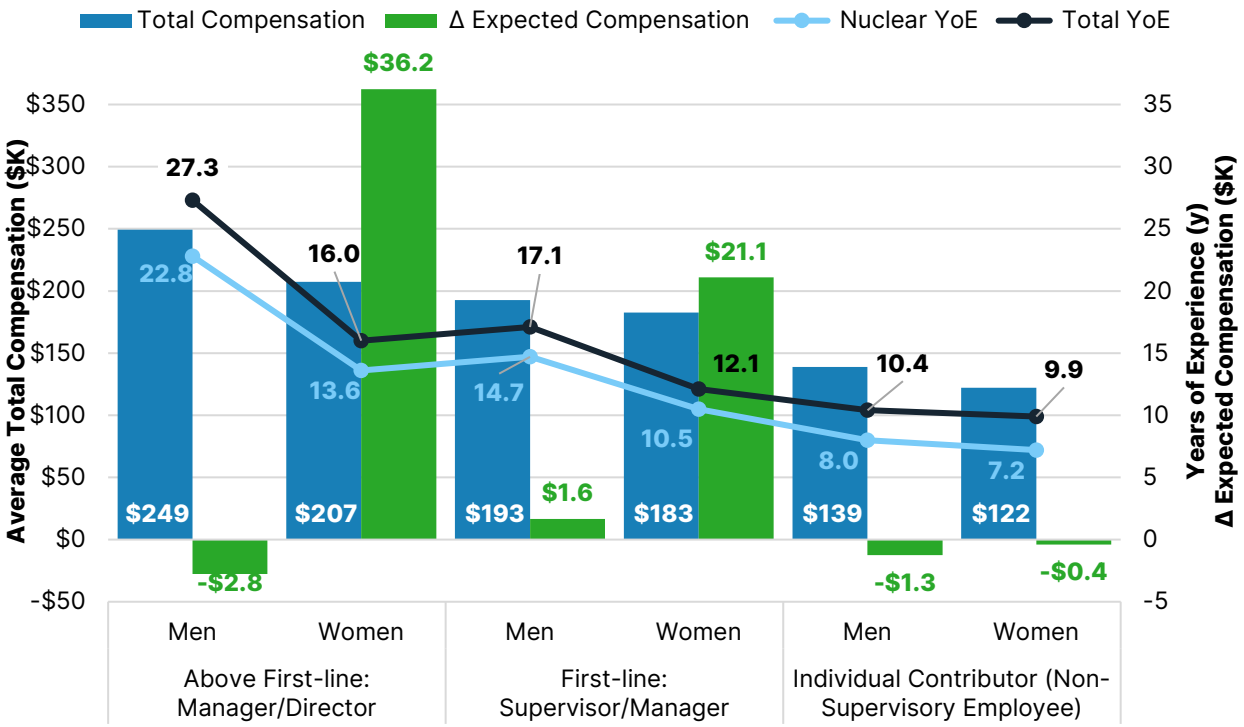

FIGURE 40: COMPENSATION, EXPECTED SALARY DIFFERENCE, AND YEARS OF EXPERIENCE

Compensation and Company Type

In FIGURE 41, company types are compared in terms of total compensation and experience. Normalization was essential for this comparison as the cost-of-living tends to be lower for utility employees working in rural locations compared to industry group employees working in larger cities. **Utility employees report highest total compensation when accounting for cost-of-living.**

Further examination by years of experience shows a few noteworthy items.

- The largest average Total YoE and second largest average of Nuclear YoE is in the industry groups, which is reasonable since these positions often require prior nuclear experience.
- Utilities, the largest group of respondents, also have the largest average Nuclear and Current Company YoE, indicating relatively good long-term employee retention by utilities.
- Vendors currently have the best retention, as shown by the small difference between Total YoE and Current Company YoE.
- New Reactor companies have the lowest YoE average at current company, which is reasonable since these are more likely to be relatively new companies themselves.

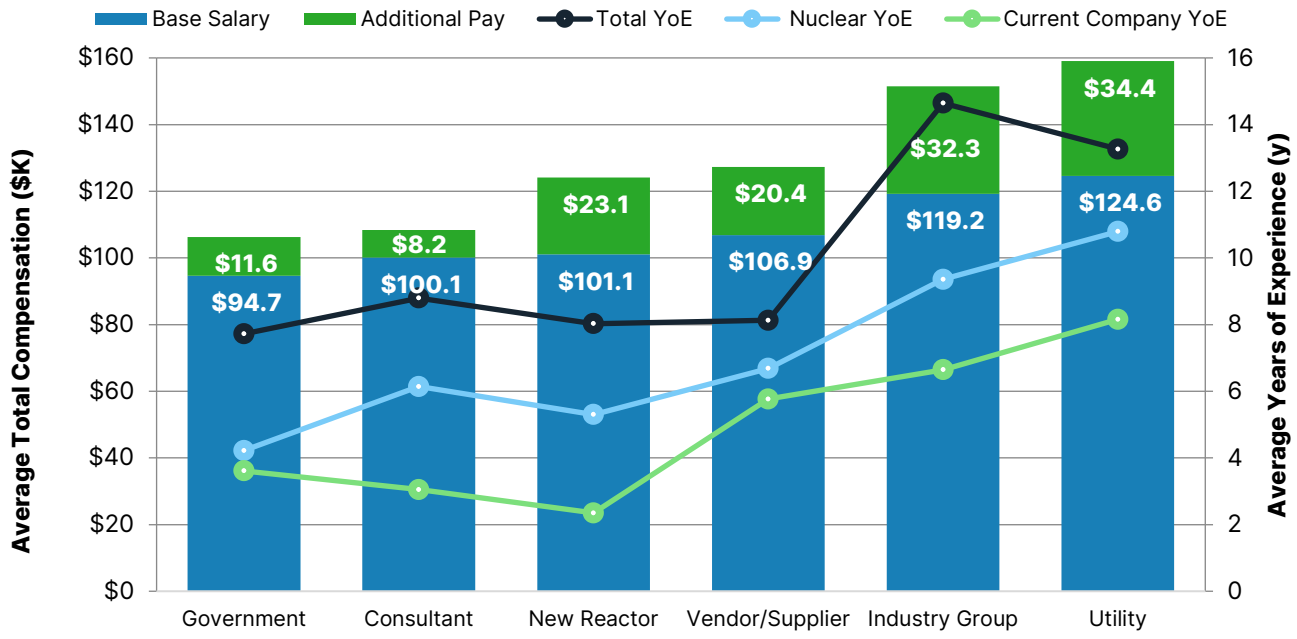

FIGURE 41: COMPENSATION AND EXPERIENCE BY COMPANY TYPE

No correlation for increased compensation was seen between employees that changed jobs versus those that remained at their company when comparing among responses with the same job level, company type, total experience, but varied years at the current company. This provides some counterevidence to the common narrative that changing companies is needed to keep competitive wages. There was also no clear correlation with the difference from expected salary by company type when examined for the population, for mid-career, or for various years at the same company[25].

V. Demographics

This section presents the demographics of the survey respondents. Note that 70% of survey respondents identified themselves as NAYGN members. The total number of responses in the 2024 survey was 1206, as compared to 864 in the 2022 report.

Age

The average age of survey respondents increased from 33.9 years old to 35.9 years old from the 2022 survey, as seen in TABLE 3: AGE SUMMARY.

TABLE 3: AGE SUMMARY

	2024	2022
Average Age	35.9	33.8
Median Age	34	33
Max Age	73	80
Min Age	18	19

[25] It is worth noting that the responses are heavily skewed towards utilities, but this skew is less present when looking at less-experienced respondents (<~5y), indicating relative age of chapters at various company types, as NAYGN started in utilities only.

With data going back to 2020 as seen in **TABLE 4: AGE DISTRIBUTION**, an increase in survey response can be seen for those above age 40.

TABLE 4: AGE DISTRIBUTION

Age Range	2024	2022	2020
<20	1.2%	0.2%	1.0%
20-29	34.2%	32.5%	39.0%
30-39	34.1%	47.9%	45.0%
40-49	16.0%	13.9%	9.0%
50-59	9.1%	3.6%	4.0%
60-69	5.3%	1.7%	2.0%
>70	0.2%	0.1%	1.0%

NAYGN has been able to maintain participation from its members even beyond the age of 36 upon which they are no longer qualified to be nominated for a continental Board of Directors position. While this experience is invaluable to furthering the missions of NAYGN, it is also vital to drive recruiting efforts to bring in young nuclear industry members.

Comparing the 2024 survey data to industry sources, NAYGN is still significantly younger than the Electric Power Generation group as well as the nuclear industry at large (per USEER, 2023). The percentage of 18 to 29 year olds that responded to the NAYGN survey was 34% whereas the percentile for the aforementioned groups was 29% and 23% respectively. This demonstrates that NAYGN is still an outlet for the younger members of the nuclear industry.

Ethnicity

The ethnicity of NAYGN career survey respondents trended in a less diverse direction in 2024 with the percentile of Caucasian/White respondents going up from 77% to 82% from the 2022 survey. This drop is seen in all tracked ethnicity groups with the biggest change being Black or African American respondents dropping from 7.1% to 4.1% as seen in **FIGURE 42: ETHNICITY DISTRIBUTION**.

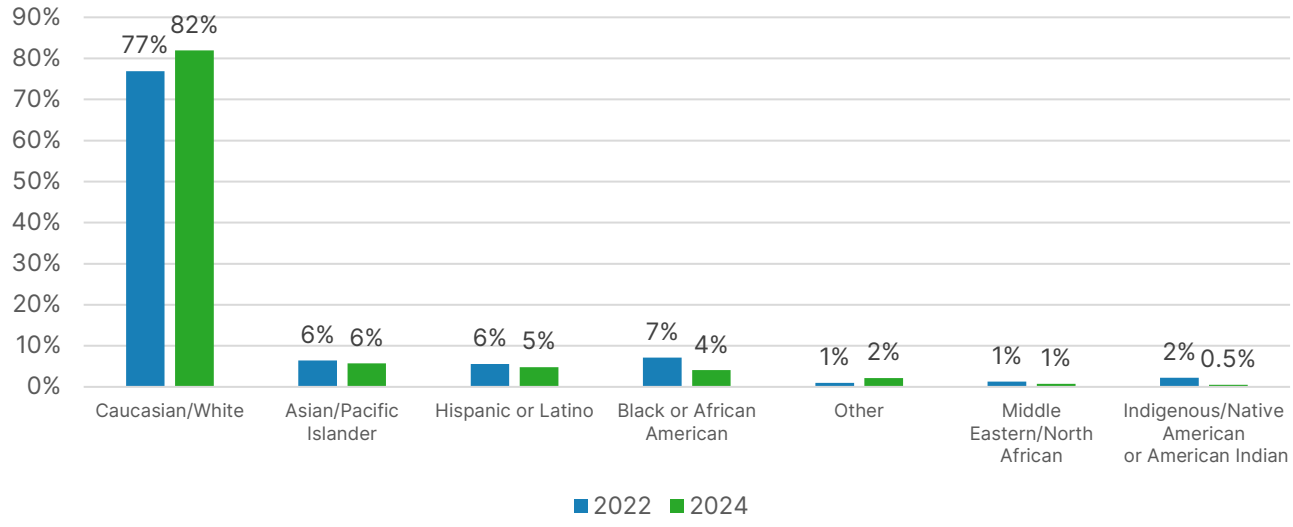

FIGURE 42: ETHNICITY DISTRIBUTION

The diversity of NAYGN survey respondent diversity lagged all comparable industry groups with non-white respondent membership of NAYGN at 18% in 2024 compared to 33% in the nuclear industry (per USEER, 2023) and in the Electric Power Generation Workforce at 25% (per GETI, 2023).

Ethnic diversity is critical to advancing NAYGN missions. It is important to champion Diversity, Equity, and Inclusion perspectives to create a culture for members of all backgrounds to feel comfortable and thrive. There is a current gap between NAYGN's intent to push diversity initiatives and succeeding in recruiting and retaining an ethnically diverse membership. This is an important takeaway from the survey.

It was asked for the first time in the 2024 survey what the respondent's country (or countries) of citizenship was. As seen in **FIGURE 43: COUNTRIES OF CITIZENSHIP**, NAYGN membership is still largely from the United States, however, there has been a significant increase in separately tracked Canadian member metric hours indicating growth in NAYGN Canadian activity.

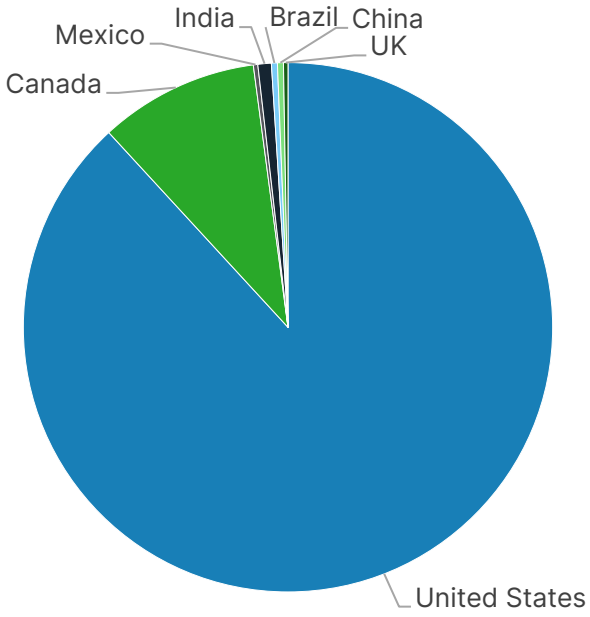

FIGURE 43: COUNTRIES OF CITIZENSHIP

There were an additional 17 countries of citizenship identified, but none had more than 2 responses.

Gender

The percentile of survey respondents identifying as women dropped slightly from the 2022 survey from 40% to 34%. Comparing this response rate to two common industry workforce studies, the rate of female respondents is higher than the Electric Power Generation percentile (32%) and the Energy Workforce Average (26%) as shared in the 2023 Global Energy Talent Index (GETI) report. It is slightly less than the Nuclear Power Industry woman percentage as shared in the 2023 United States Energy and Employment (USEER) report (36%).

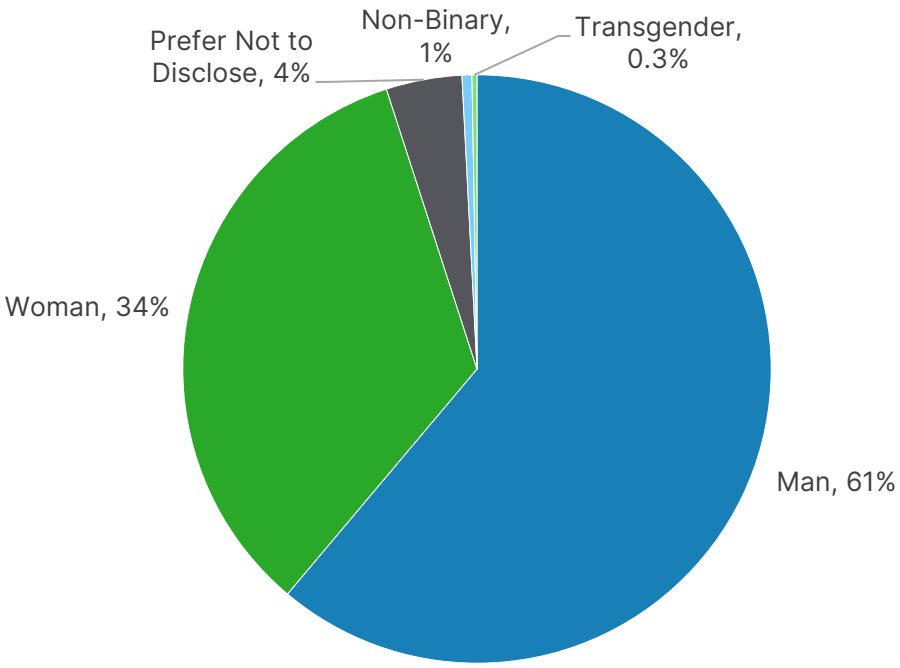

FIGURE 44: GENDER DISTRIBUTION

NAYGN continually works to maintain a diverse gender distribution among its members. Based on 2024 survey results, some ground was lost from 2022 to 2024, even if the organization is outpacing the gender diversity of some of the larger industry groups. The addition of 'Non-Binary' and 'Transgender' options to this question was new for the 2024 survey and can be tracked in future years.

Education

For educational background considerations, survey respondents were asked for their highest level of education. (**TABLE 5: EDUCATION RESULTS**)

TABLE 5: EDUCATION RESULTS

Highest Level of Education	2024	2022	2020
Associate Degree	6.7%	5.7%	5.0%
Bachelor's degree	58.8%	57.2%	64.0%
Doctoral Degree	1.1%	2.2%	4.0%
High School / GED	6.7%	6.1%	5.0%
Master's Degree	21.0%	25.0%	18.0%
Trade/Technical/Vocational Training	5.8%	3.8%	4.0%

Notable in this figure is the increase in Trade/Technical/Vocational Training. It has been an initiative to diversify the educational and job role backgrounds among NAYGN members, and incremental gains can be seen in this data.

For the first time, survey respondents indicated their undergraduate degree, if applicable. 639 survey respondents answered, with a total of 171 different majors (or combination of majors) identified in the free entry response.

Engineering was the most common undergraduate degree selected. **TABLE 6: JOB FUNCTIONS FOR ENGINEERING VS NON-ENGINEERING DEGREES** shows what percentage of engineering degrees work in various job functions. For this figure, all undergraduate degrees are classified as either engineering or non-engineering.

Unsurprisingly, 74% of those that studied engineering are in an engineering role. The second most likely role for someone that studied engineering is Operations. The most common job function for those that did not study engineering is the Sciences. Selecting Other allowed respondents to enter their job function but resulted in scattered responses far beyond the 13 tracked job functions.

The degrees were then binned into three categories: technical (such as engineering or accounting), non-technical (such as communications, political science, architecture), or sciences (such as chemistry, biology, or physics).

In **TABLE 7: JOB FUNCTIONS FOR TECHNICAL, NON-TECHNICAL, AND SCIENCE FOCUSED MAJORS** trends in what degrees are drawn to each job function are observed.

- Technical degrees, which include engineering, overwhelmingly working in an engineering job function.
- Non-technical degrees most commonly work in HR/Communications and Administrative/Non-technical job functions.
- Science-focused degrees most commonly work in the Science job functions, but the second most common job role has been engineering.

It is important for NAYGN to recruit technically focused majors, where 91% of the survey respondents studied, but their job functions may vary beyond engineering and the sciences. It is also important to keep professional development topics versatile beyond technical specialties.

Table 6: Job Functions for Engineering vs Non-Engineering Degrees

	Engineering	Operations	Project Management	Other	Maintenance	Science (Health Physics, Radiation Protection, Chemistry, Environmental, etc.)	Training
Engineering	74%	7%	5%	5%	3%	1%	2%
Non-engineering	10%	7%	8%	15%	8%	14%	4%
	Student	**Administrative/ Non-Technical**	**Information Technology**	**Quality/ Oversight**	**HR/ Communications**	**Organizational Effectiveness/ Performance Improvement**	**Security**
Engineering	1%	0%	1%	1%	0%	1%	0%
Non-engineering	1%	8%	3%	3%	9%	6%	3%

Table 7: Job Functions for Technical, Non-Technical, and Science Focused Majors

	Engineering	Operations	Project Management	Other	Maintenance	Science (Health Physics, Radiation Protection, Chemistry, Environmental, etc.)	Training
Technical	71%	7%	5%	5%	4%	1%	2%
Non-technical	4%	4%	12%	17%	4%	6%	5%
Sciences	16%	9%	4%	10%	6%	28%	6%
	Student	**Administrative/ Non-Technical**	**Information Technology**	**Quality/ Oversight**	**HR/ Communications**	**Organizational Effectiveness/ Performance Improvement**	**Security**
Technical	1%	0%	1%	1%	0%	1%	0%
Non-technical	0%	15%	0%	1%	19%	10%	5%
Sciences	1%	1%	4%	6%	0%	3%	3%

Job Function

The job function of NAYGN survey respondents has also been closely tracked for several years. NAYGN has a history of being heavily engineering focused and has worked to diversify its membership into other job roles in the industry. The percentile of engineering respondents decreased in 2022 from 56% to 50%, but it remained steady at 50% in 2024, as seen in **TABLE 8: JOB FUNCTION**.

There was a notable increase in percentile of Maintenance group respondents, indicating some success in NAYGN initiatives to outreach more into the bargaining units of the nuclear industry.

TABLE 8: JOB FUNCTION

Job Function	2024	2022
Engineering	50.0%	50.0%
Operations	8.4%	9.9%
Maintenance	8.4%	3.3%
Other (please specify)	7.3%	5.7%
Project Management	5.7%	6.4%
Science (Health Physics, Radiation Protection, Chemistry, Environmental, etc.)	4.4%	6.1%
Administrative/Non-Technical	3.5%	4.0%
Training	3.1%	2.1%
HR/Communications	2.6%	1.8%
Organizational Effectiveness/ Performance Improvement	1.9%	3.3%
Security	1.5%	1.0%
Quality/Oversight	1.2%	1.8%
Student	1.1%	1.2%
Information Technology	1.0%	3.4%

Company Type

The percentage of survey respondents from a utility organization had the largest increase, from 63% to 69%, as seen in **FIGURE 45: COMPANY TYPE**. This is still lower than in 2020 when the Utility percentile of NAYGN survey respondents was 78%. With the projected growth of the nuclear industry in the coming years, NAYGN will look to increase our membership at nuclear vendors and suppliers and new reactor companies.

Note that startup and new reactor were new company options added to this year's survey. NAYGN is sponsored in large part by Utility organizations. It is important for NAYGN to remain focused on its membership's priorities which can vary by organization type. As will be seen in later figures, there are significant differences in employee priorities and satisfaction by company type.

The nuclear industry has more diverse opportunities for company type than ever before as illustrated by the ability of NAYGN to drive membership in these diverse sectors.

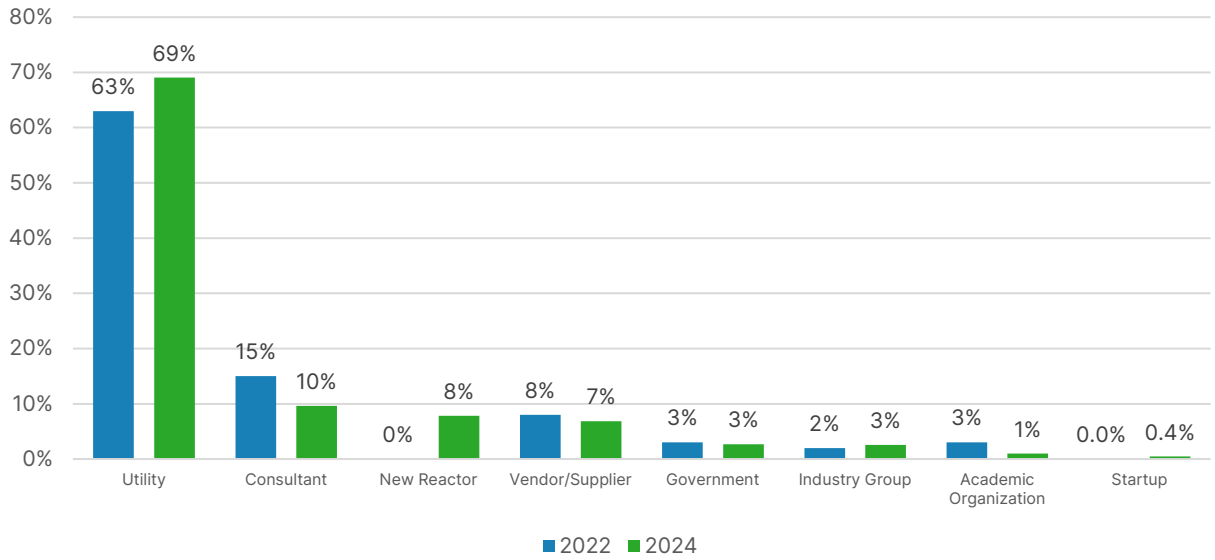

FIGURE 45: COMPANY TYPE

Organization Level

The rate of Individual Contributors among survey respondents increased from 69% to 78%, nearly identical to the 2020 percentile of 79%, as seen in **TABLE 9: ORGANIZATIONAL LEVEL**.

The definitions of these organizational levels in the survey have changed over the years, but it is notable that the percentile of above first line managers/directors decreased from 11% to 5%. It is important to NAYGN to have industry leadership involved in NAYGN activities to ensure the mission of NAYGN is aligned with the rest of the industry.

TABLE 9: ORGANIZATIONAL LEVEL

Level	2024	2022	2020
Individual Contributor (Non-Supervisory Employee)	78%	69%	79%
First-line: Supervisor/Manager	14%	14%	10%
Above First-line: Manager/Director	5%	11%	6%
Intern/Co-op/Student	3%	6%	3%
Executive	1%	2%	2%

Disability Status

The rate of NAYGN survey respondents indicating that they do not have a disability increased from the 2022 survey, as seen in **TABLE 10: DISABILITY STATUS**, from 87% to 92%. The question was asked slightly differently for the 2024 survey. It is important for NAYGN to be mindful of persons with disabilities when planning events and driving initiatives to be inclusive for all abilities.

TABLE 10: DISABILITY STATUS

Disability Status	2024	2022
I do not and have not had a disability.	92%	87%
I had a disability in the past.	1%	9%
I have a disability.	7%	

Household

Survey respondents were asked what languages are spoken in their home, with multiple responses being allowed. This led to an increase in Spanish speaking household responses, as seen in **FIGURE 46: HOUSEHOLD LANGUAGES**.

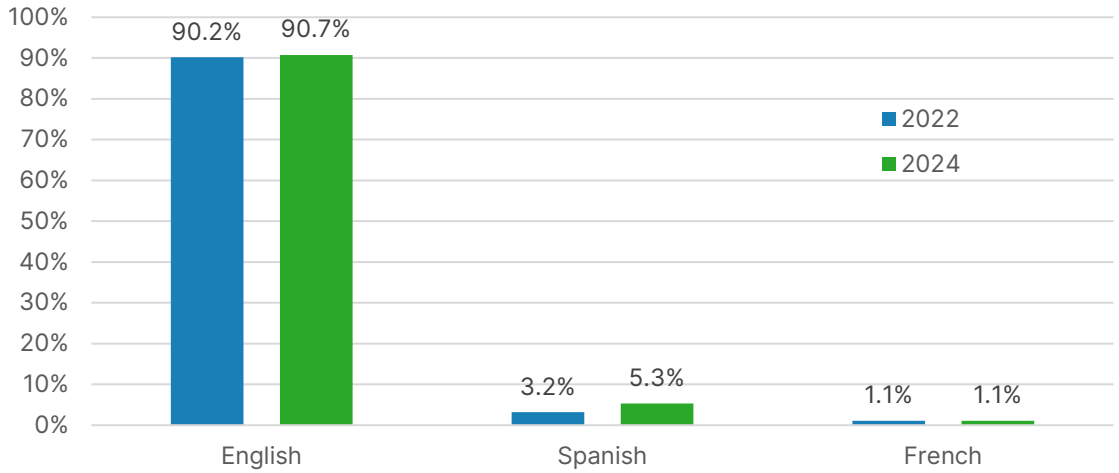

FIGURE 46: HOUSEHOLD LANGUAGES

While ethnic diversity may have decreased since the last career survey, it is important for NAYGN to be mindful of their Spanish speaking members when planning events.

Household demographics were examined as well in the survey. The percentage of survey respondents that are married or have a partner decreased from 62% to 60% as seen in **TABLE 11: HOUSEHOLD DEMOGRAPHICS**. Note that this question was required to be answered in the survey, but there was an option to not disclose an answer, leading to percentages that do not add up to 100%. The rate of respondents choosing to identify as single has decreased for two consecutive surveys.

TABLE 11: HOUSEHOLD DEMOGRAPHICS

	2024	2022	2020
Single	28%	33%	40%
Married/Partner	60%	62%	57%

Regarding parenting status, the percentage of Married/Partner respondents that have children decreased from 72% in 2022 to 66% in 2024. Single parents among all respondents increased to a slightly higher rate, up from 3% in 2022 to 4% in 2024.

VI. NAYGN-Specific Engagement

NAYGN provides opportunities for young nuclear professionals to develop strong leadership skills and create lifelong connections. Professional development opportunities are offered in the form of webinars, NAYGN's NucLeaders program, NAYGN's Atomic Mentoring Program (AMP), leadership positions, and speaking opportunities at conferences and other special events. Networking opportunities are provided at local chapters events, regional conferences, and NAYGN's continental conference, and they include networking with peers as well as executive management.

To continue to grow and improve these opportunities, survey respondents were asked questions about their level of involvement with NAYGN activities. NAYGN's Board of Directors will use this feedback to best align future opportunities with the needs of our members.

Survey respondents were first asked how many NAYGN events (in person or remote) they had attended over the last 12 months, and how many hours per month they have spent on NAYGN activities. Most of these numbers were relatively flat from 2022; however, **the most active group of NAYGN members became even more active**. The number of NAYGN members that reported having been to 10 or more events over the previous year increased from 4.7% in 2022 to 5.9%. Similar results were published in NAYGN's end of year report where the total number of metric hours significantly increased in 2023 from 2021 and 2022. NAYGN's most active members continue to move the organization and the industry forward.

NAYGN encourages chapters to host a variety of events in core areas, which range from building their network to community outreach. Survey respondents were asked to rank NAYGN's core areas in terms of their importance.

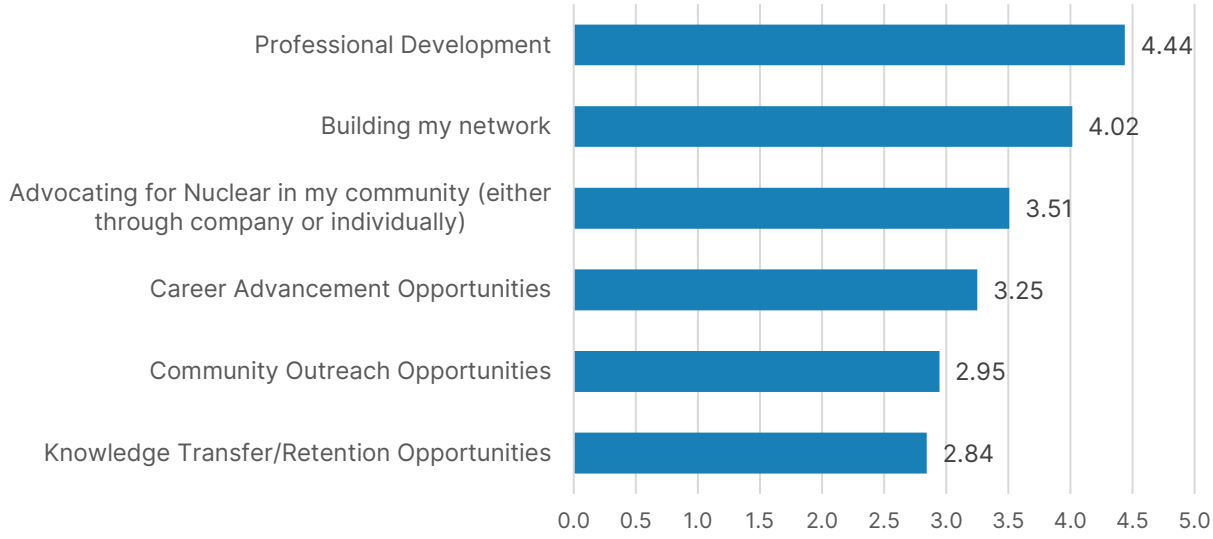

FIGURE 47: IMPORTANCE OF NAYGN FOCUS AREAS[26]

Professional Development opportunities have always been a priority for NAYGN. In 2023, members logged 38,000 hours in professional development, which is a 40% increase from 2022. This is the highest number of professional development hours in NAYGN's 25-year history.

[26] Respondents could score each focus area on a scale of 1 to 5, with 5 being the most satisfied.

While already a priority, **NAYGN will work to improve Professional Development opportunities to best meet the needs of our members**. Specific skills that NAYGN members are most interested in developing are listed later in this section. In the 2022 Career Report, Building My Network was the area in which survey respondents believed that NAYGN had helped their career the most. As the second most important focus area, new initiatives to build our members networks will be considered.

After ranking focus areas in terms of importance, respondents were then asked how satisfied they were with the events organized by the continental NAYGN organization. Membership and Networking had the highest satisfaction, while Public Information had the lowest satisfaction; however, all six areas had similar average scores.

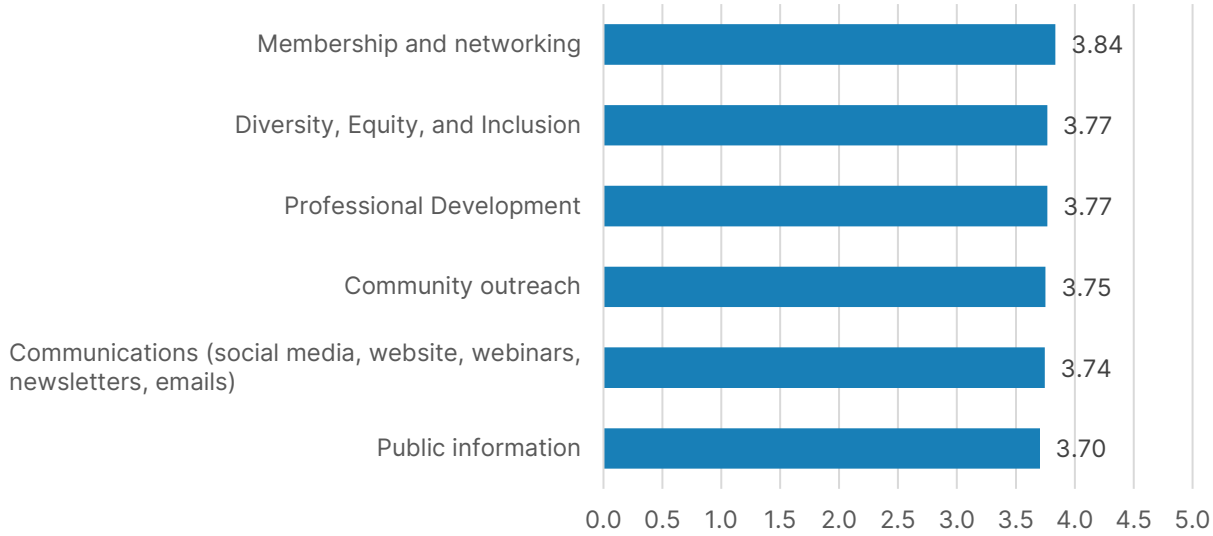

FIGURE 48: SATISFACTION WITH EVENTS ORGANIZED BY THE CONTINENTAL NAYGN ORGANIZATION[27, 28]

Overall, respondents are more satisfied with events offered by NAYGN when compared to 2022. In 2022, the average satisfaction across all 6 areas was 3.61, while in 2024, the average satisfaction is 3.76. NAYGN members are satisfied relatively equally across the six focus areas, but are not very satisfied with any focus NAYGN offers. A goal for NAYGN in the coming years is to improve one focus area to the point where it is higher than 4.00. **NAYGN will continue to invest in professional development and networking activities as they are the top two most important focus areas for NAYGN members.**

As discussed previously, younger survey respondents value developmental opportunities as a reason to join and remain in the nuclear industry. Understanding what skills are most important to NAYGN members is key to creating opportunities that best meet their needs. **Survey respondents were asked what types of skills they would like to develop[29], and the top three selections were: (1) Leadership/Management, (2) Job-Specific Technical, (3) Public Speaking/Remote Presence.** NAYGN's Board of Directors will specifically target development opportunities in these areas.

[27] Respondents could score each focus area on a scale of 1 to 5, with 5 being the most satisfied.
[28] Communications is defined as NAYGN's social media presence, official website, webinars, newsletter, and emails.
[29] Survey data was first sorted to show only NAYGN Member responses. Respondents were able to select up to three options. FIGURE 49 shows how often each option was selected.

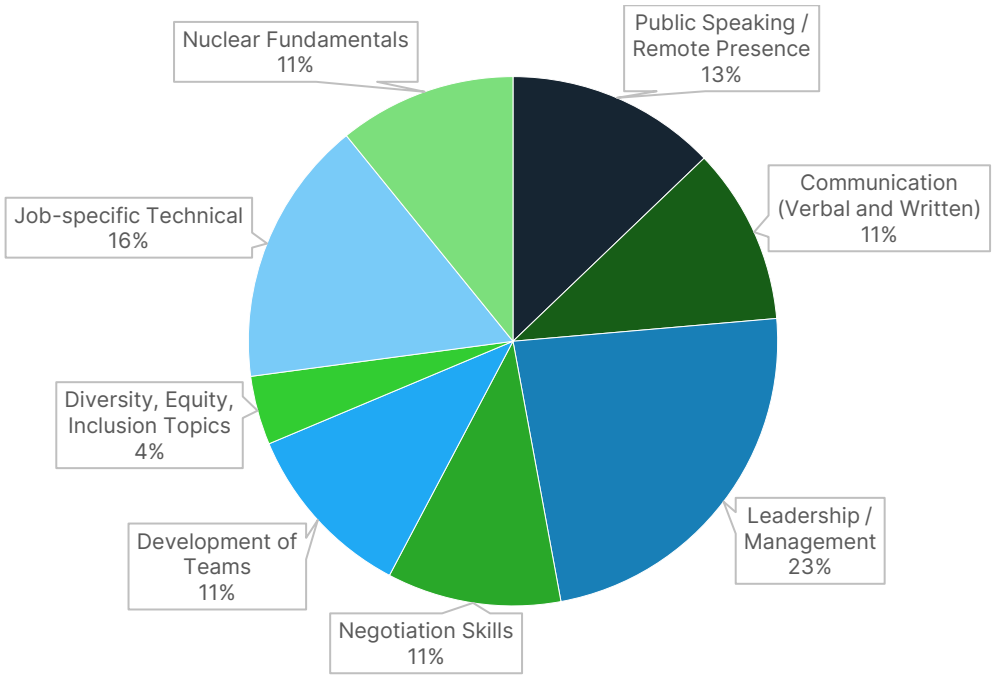

FIGURE 49: PROFESSIONAL DEVELOPMENT SKILLS TO PRIORITIZE

In addition to specific focus areas, survey respondents were asked how satisfied they were with NAYGN's impact on their career advancement and career opportunities, their company culture, and their intent to stay in the nuclear industry.

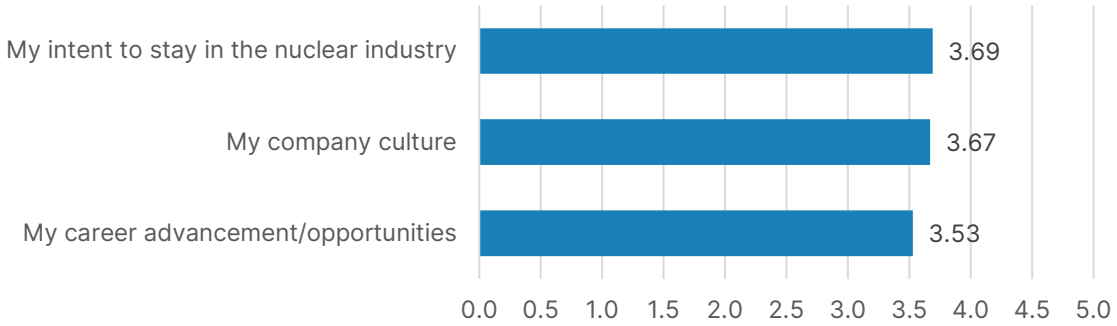

FIGURE 50: MEMBER SATISFACTION IN KEY AREAS[30, 31]

Respondents were most satisfied with how NAYGN is encouraging them to stay in the nuclear industry. NAYGN's impact on company culture is very close to this level of satisfaction. There is ground to be gained in driving NAYGN members' satisfaction in career advancement/opportunities.

In 2022, NAYGN's impact on company culture was the most positive attribute (60% of respondents viewed NAYGN's impact as 'positive')[31]. While this is the second highest attribute in 2024, NAYGN is currently emphasizing growth of the nuclear workforce. The NAYGN Board of Directors is satisfied with this change from 2022.

See Appendix K for additional feedback for NAYGN.

[30] Respondents could score each focus area on a scale of 1 to 5, with 5 being the most satisfied.
[31] In 2022, respondents were asked the same questions, but the only response options were Positive, Negative, and No Impact.

VII. Recommendations

Recommendations for Growing the Nuclear Workforce

As previously stated, the top reason people join, stay, and leave the nuclear industry is salary. It comes as no surprise that if companies want to ensure top talent, they should offer highly competitive salaries.

However, there are numerous other recommendations unrelated to salary.

1. **Companies should have a clear mission and purpose.** While each company will have a unique mission and purpose, this is a key component to attracting and retaining talent. Also, **ensure that each employee is aware of how their job function contributes to the mission and purpose.** Understanding how you are contributing can help employee morale during some of the more demanding times in the industry.
2. **Manage employee workloads to ensure the right amount of hours per week.** Working 55 hours per week is the point at which many employees are more likely to start actively looking for a new job, based on survey data.
3. For both the 2022 and 2024 Career Reports, respondents identified that morale is important but that they are dissatisfied with morale in the workplace. **Company leaders should work with their employees to identify ways to improve morale.** NAYGN will probe deeper into employee morale in the 2026 Career report.
4. **If a company wants to prioritize keeping 18-25 year-olds in the nuclear industry, they should pay special attention to competitive salary structures and competitive salary increases for this demographic.** Because their top reason to be in the industry has changed *drastically* from mission and purpose to salary, 18-25 year-olds could be the most at risk of leaving as a result of a low raise.
5. After joining the nuclear industry, Asian or Pacific Islander respondents have a sizable increase in how much they value salary. Similarly, Black or African American respondents value salary significantly more after they join the nuclear industry. **Knowing that some ethnicities see a larger change in the importance of salary compared to others can help companies make informed decisions on diversifying their workforce.**
6. **32% of the respondents who currently work at a utility would prefer to work with other areas of the nuclear industry if they were given the opportunity.** This data indicates that as newer technologies grow within the nuclear industry, workers may be drawn away from the current operating fleet. To retain top talent, utilities may have to consider fairly drastic methods, such as paying a high-end salary.

Recommendations for NAYGN

1. To get more young people involved in NAYGN, mission and purpose should be emphasized in future initiatives.
2. Continue to invest in professional development and networking activities. NAYGN's Board of Directors will consider improving existing opportunities as well as offering new ones.
3. NAYGN will prioritize development opportunities in the areas of Leadership/ Management, Job-Specific Technical, Public Speaking/Remote Presence.

VIII. Acknowledgements

First and foremost, thank you to the NAYGN members who took the time to complete this survey. We had a record number of people who participated, and this report would not exist without you all.

Thank you to all the local chapter leads for encouraging your members to take this survey. Thank you for sending reminders, creating lunch and learns, and doing whatever it took to ensure good representation from your chapter.

Thank you to the NAYGN Board of Directors for your support throughout the survey and report writing process. Special shoutout to Brian Holman for support in purchasing prizes for winning chapters and assisting in directing the financial evaluations, Sarah Davis for direction in inclusive language, Ivey Wilson for promoting the survey on all social media channels, and Amanda Lang for doing such an amazing job leading the 2022 team. The 2022 Career Report was the foundation for everything completed in 2024.

Thank you to Jody Porter for your invaluable guidance throughout this process. You made sure we had strong survey questions, which ensured the team was set up for success while writing the report. You also gave so much of your time to the report itself. From identifying key insights to challenging how data was presented, the report would not be the same without you.

Most importantly, thank you to the Benchmarking Committee. You've supported this project for nearly a year, sacrificing your evenings, weekends, and every Wednesday at 4 pm. Thank you, Paula Rusenovich for leading the most important section of this year's report. The insights you found could change the future of the industry. Thank you, Keith Anderson for peer checking Paula every step along the way. Thank you, Michael Smyth for helping the team understand key considerations from past reports as well as preparing multiple sections while undergoing a career shift. Thank you, CJ Markum for challenging the team and making sure we considered issues from multiple angles before making a decision. Your findings were also crucial for the future of the industry. Thank you, Tim Crook for continuing to dig into financial trends. Your efforts resulted in the most insightful salary and financial section this report has ever had. Thank you, Ryan Ruff for being willing to support wherever there was a need. Your flexibility and quick turnarounds greatly helped the team. Thank you, William Lee for helping organize and execute the career report survey.

IX. References

1. Tracy Brower, PhD. “Job Satisfaction Is Rising: What’s behind the Surprising Tend.” *Forbes*, Forbes Magazine, 4 June 2023, www.forbes.com/sites/tracybrower/2023/06/04/job-satisfaction-is-rising-whats-behind-the-surprising-tend/?sh=10f79631453b.
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X. Appendices

Appendix A: Additional Evaluation on Job Attribute Satisfaction

Over 50% of respondents marked compensation package, flexibility to balance work/life, respectful treatment of employees, and job security as very important (**FIGURE A 1: IMPORTANCE OF JOB ATTRIBUTES**). However, they reported the most satisfaction ("satisfied" or "very satisfied") for relationship with immediate supervisor and compensation (**FIGURE A 2: SATISFACTION OF JOB ATTRIBUTES**).

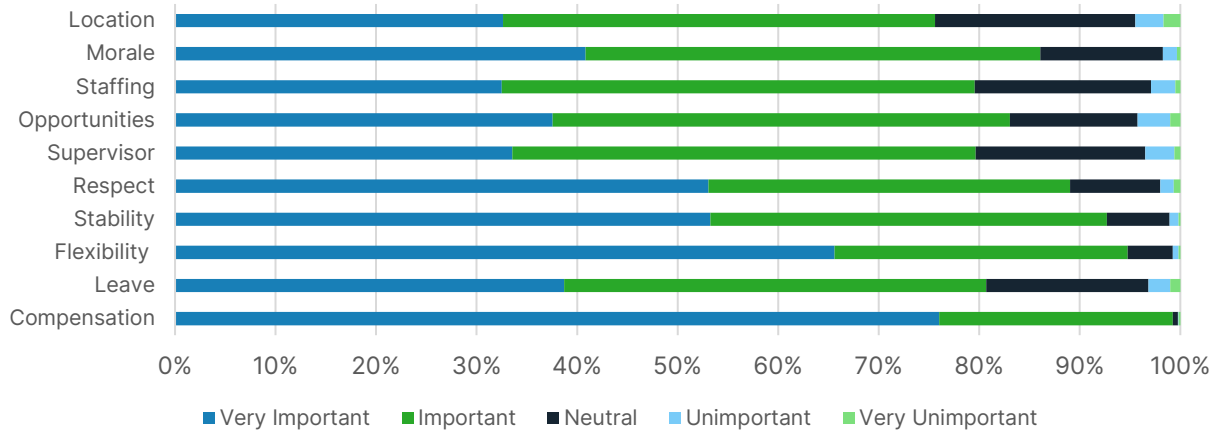

FIGURE A 1: IMPORTANCE OF JOB ATTRIBUTES

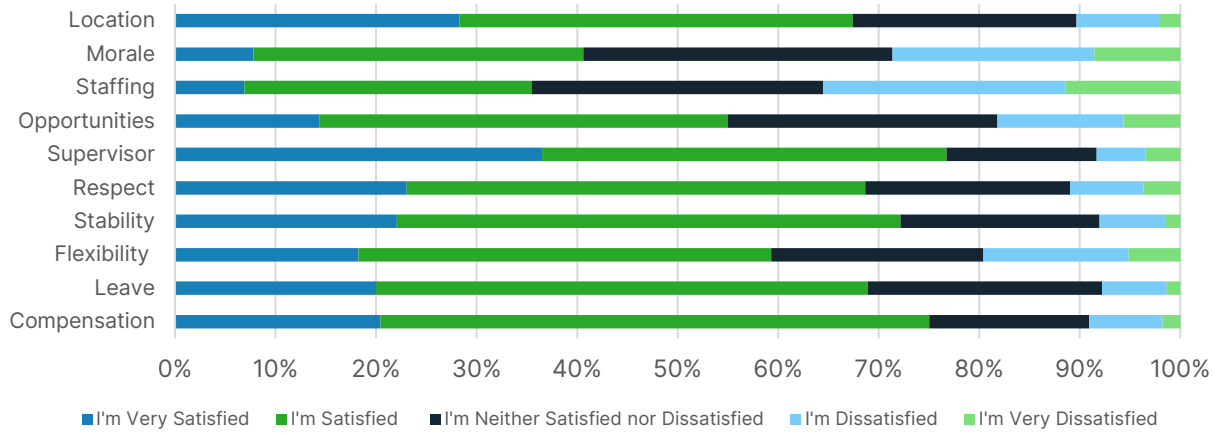

FIGURE A 2: SATISFACTION OF JOB ATTRIBUTES

Only 18% to 23% are very satisfied with their compensation package, flexibility, job stability, and respectful treatment of employees, which are the top four attributes for importance. However, when "satisfied" is included with "very satisfied", over 70% of respondents are satisfied with their compensation package. In addition, about 70% of respondents are satisfied ("very satisfied" and "satisfied") with the respectful treatment of employees, and job security. Flexibility is recognized as the largest difference among the top four attributes for importance, showing only 60% of respondents being satisfied ("very satisfied" and "satisfied"), showing a potential disconnect in this area.

Appendix B: Job Satisfaction by Company Type

There were several patterns of note when examining company type and job satisfaction (**Figure A 3: Job Satisfaction by Company Type**). Utilities, Vendors and New Reactors have a bell curve, skewed with most survey respondents reporting "satisfied," which is a generally positive result. Other organizations are seen to have a slightly flattened response curve; however, this can also be attributed to a significantly lower response rate than the Utilities and Vendors. The following categories had less than 24 responses (less than 2% of total) and are not included: Academic Organization and Startup.

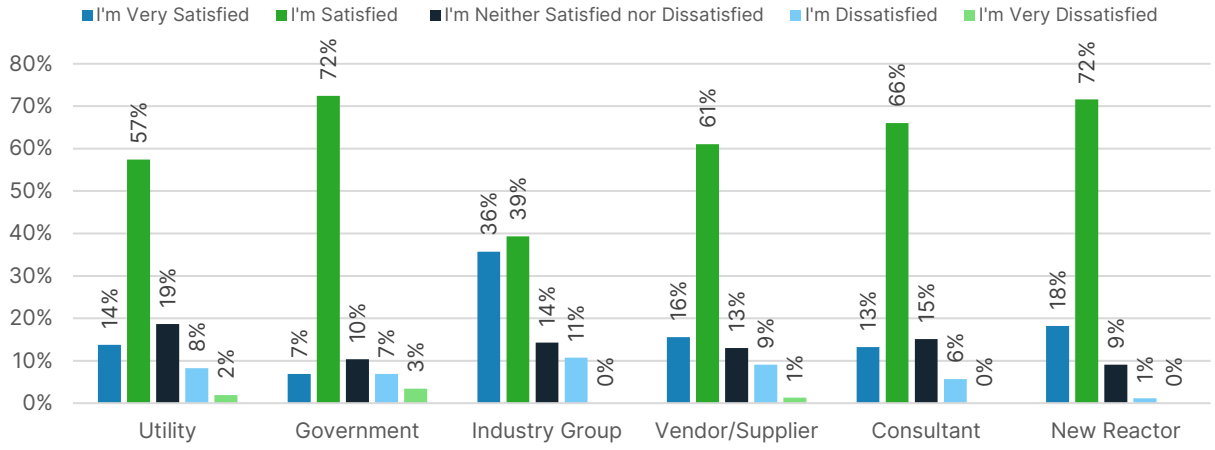

Figure A 3: Job Satisfaction by Company Type

Appendix C: Hours Worked Per Week Trended Over Time

An overwhelming majority (82%) of respondents indicated they work an average of 40 to 50 hours per week (**Figure A 4: Hours Worked in Average Week**). The percent who work 45 or more hours per week in 2024 (27%) is slightly less than in 2022 (31%) and equal to the 2020 levels (27%).

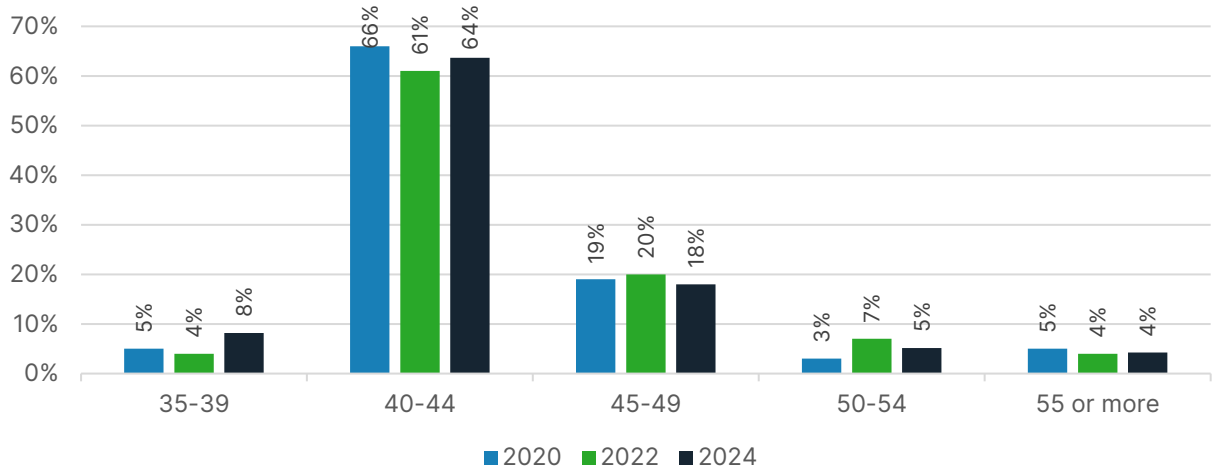

Figure A 4: Hours Worked in Average Week[32, 33]

[32] For the 2022 and 2020 reporting periods, the hours worked per week categories did not have the same breakdown between 30-40 hours per week. Thus, the values represented in the 35-39 hours, actually represented the entirety of 30-39 hours per week.
[33] Responses Under 35 hours per week (other than those noted above) were omitted based on statistical significance.

Appendix D: Hours Worked Per Week by Organizational Level

Across all levels in the organization, most respondents worked an average of 40-50 hours per week (**FIGURE A 5: HOURS WORKED BY JOB TITLE**). Individual contributors work primarily 40-44 hours per week. Many first line supervisors still work 40-44 hours per week, but the number working 45-49 hours begins increasing. Finally, those above a first line supervisor primarily work 45-49 hours per week, with many working 50 hours or more. **This is reflective of a general ramp up of hours worked per week starting at the individual contributor level and peaking at the above first-line level.** Individual contributors could perceive the additional hours worked as a deterrent to pursuing a promotion.

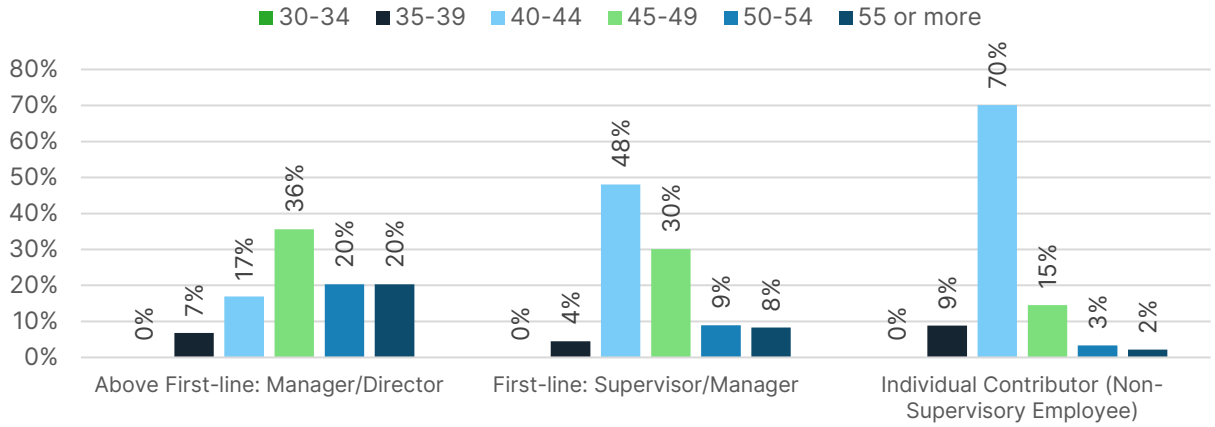

FIGURE A 5: HOURS WORKED BY JOB TITLE

Appendix E: Hours Worked Per Week by Job Type

Survey respondents in engineering have the least variability in work hours: 70% report a standard 40-hour week without much variance (**FIGURE A 6: WORK HOURS BY JOB TYPE**). Non-technical workers have a noticeable trend toward more than 45 hours compared to engineering or non-engineering technical. Compared to previous reports, all three categories are seeing decreases in the number of respondents working 50+ hours per week.

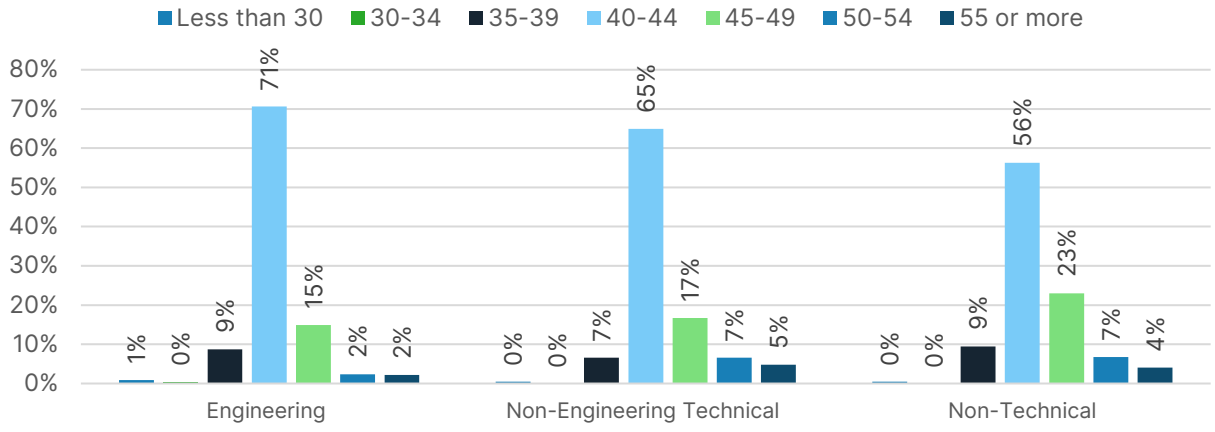

FIGURE A 6: WORK HOURS BY JOB TYPE[34]

[34] Non-Engineering Technical: Information Technology, Maintenance, Project Management, Quality/Oversight, Science (Health Physics, Radiation Protection, Chemistry, Environmental, etc.),Student

Appendix F: Additional Reasons People Stay in the Nuclear Industry

How Areas of Work Impact a Decision to Stay in the Nuclear Industry

Survey respondents were asked to choose the area of nuclear energy in which they would prefer to work if given the opportunity. 23% of respondents said they would prefer to work in the current operating fleet, and 20% of respondents had no preference, indicating that the remaining **57% of respondents would prefer to work in areas of the nuclear industry that are not directly related to existing utilities**. (**FIGURE A 7: PREFERRED AREA OF WORK**)

Of note, **32% of the respondents who currently work at a utility would prefer to work with other areas of the nuclear industry if they were given the opportunity**. This data indicates that as newer technologies grow within the nuclear industry, workers may be drawn away from the current operating fleet.

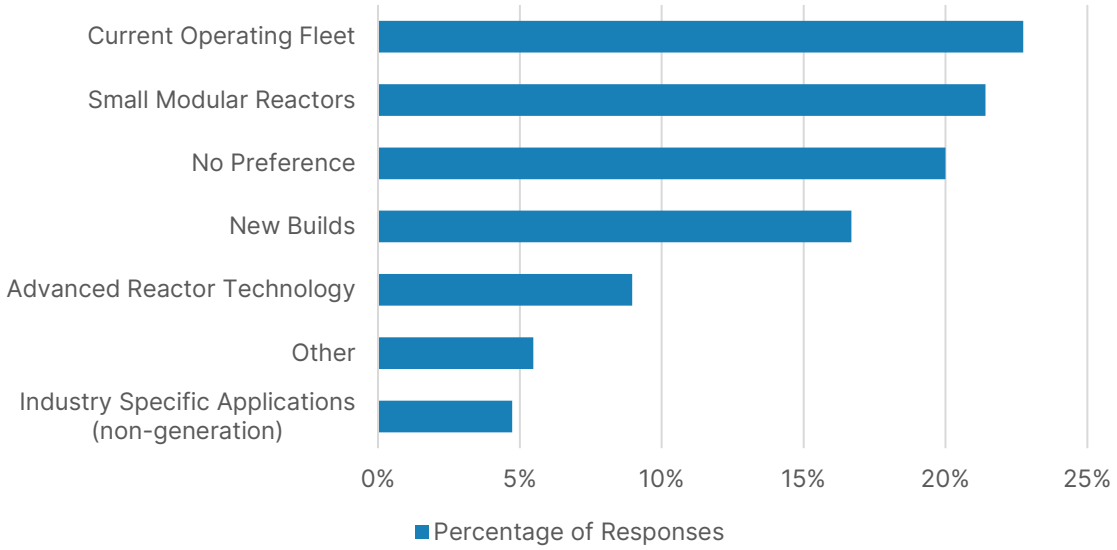

FIGURE A 7: PREFERRED AREA OF WORK

It was clear that salary was the most important motivator to stay in the nuclear industry for all respondents regardless of preferred area of work. (**FIGURE A 8: PREFERRED AREA OF WORK AND REASONS TO STAY IN THE NUCLEAR INDUSTRY**) Respondents who would prefer to work on new builds, small modular reactors, or advanced reactor technologies were highly motivated by the mission and purpose of the nuclear industry.

Job location showed as a higher motivator for those who preferred to stay in the existing fleet. Location was less important to those who would prefer to work in new builds. This is a fortunate trend for the industry as new builds will be somewhat limited in where they are constructed and people will have to be flexible in their location.

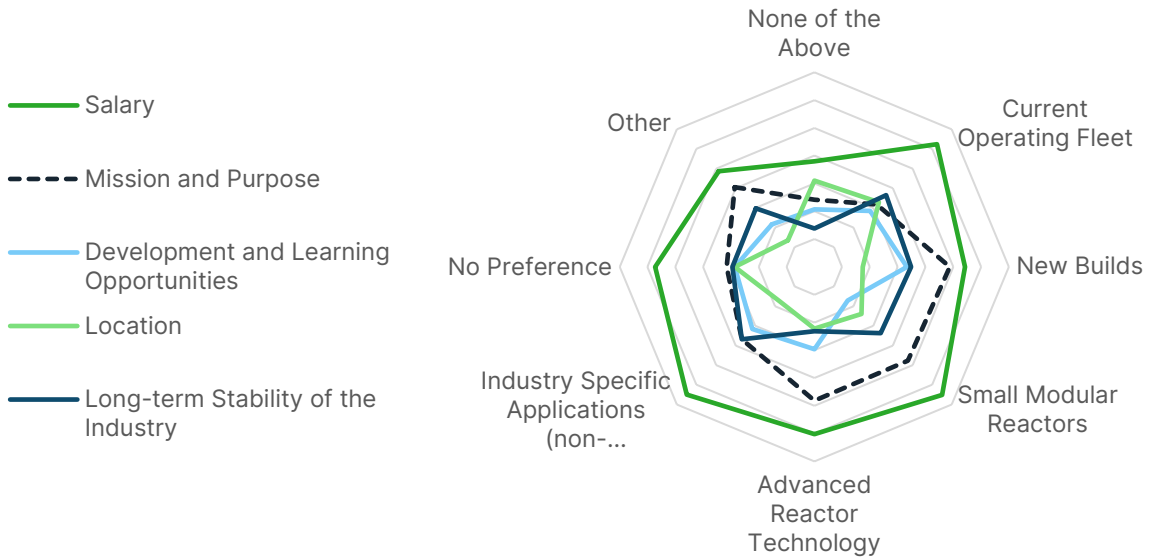

FIGURE A 8: PREFERRED AREA OF WORK AND REASONS TO STAY IN THE NUCLEAR INDUSTRY

Overall, this data shows that an organization's mission as it relates to climate change and clean energy, long-term stability, and a competitive salary are major factors for industry retention, regardless of preferred area of work. Nuclear organizations that wish to attract individuals from the current operating fleet should offer a good salary to greatly improve the chance of recruitment. Additionally, organizations related to new builds, SMRs, and advanced reactors should emphasize their mission and purpose. The current operating fleet should emphasize long-term stability and location to retain employees.

How Anticipated Tenure Impacts a Decision to Stay in the Nuclear Industry

Survey participants were asked to estimate how much longer they intended to work in the nuclear industry. Over 50% of respondents intend to stay in the industry for 10 or more years. (**FIGURE A 9: AMOUNT OF TIME RESPONDENTS INTEND TO STAY IN THE NUCLEAR INDUSTRY**)

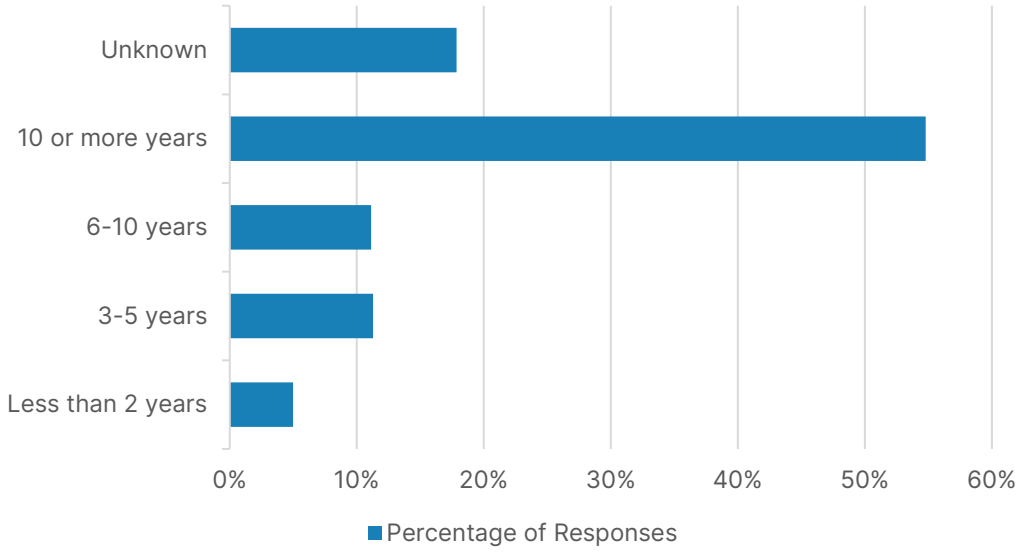

FIGURE A 9: AMOUNT OF TIME RESPONDENTS INTEND TO STAY IN THE NUCLEAR INDUSTRY

Comparing the length of time respondents plan to stay in the nuclear industry with their reasons to stay in the nuclear industry gives additional insights (**FIGURE A 10: MOTIVATION AND LENGTH OF TIME INTENDED TO STAY IN THE NUCLEAR INDUSTRY**)

As expected, salary is the highest motivation regardless of how long someone plans to work in the nuclear industry. For those who are unsure how long they will stay, mission and purpose is equally important to salary. This could be indicative of overall levels of ambivalence towards the industry, however, rather than a specific reaction or preference.

For those planning to stay in the industry for 10 years or more, long-term stability is, understandably, one of the top three motivators to stay. For those planning to stay less than two years, development opportunities are one of the least important motivators, which is reasonable as they will not stay long to see the benefits of these opportunities.

This survey and other industry surveys have identified retention concerns for nuclear talent in the range of 3 to 12 years of experience. Looking at the top motivators for retention of those groups, salary *grows* in importance from 3-5 years to 6-10 years of experience. Companies should consider if the need to retain these employees is worth the salary it will take to retain them. Mission and purpose decreases in importance over these same years of experience, indicating that an increased push in this area will not be overly beneficial.

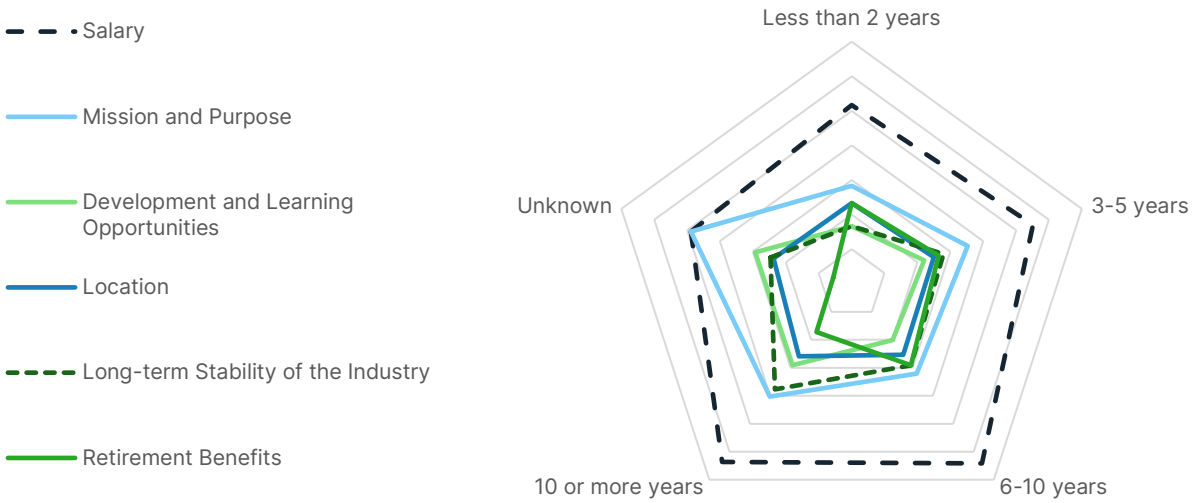

FIGURE A 10: MOTIVATION AND LENGTH OF TIME INTENDED TO STAY IN THE NUCLEAR INDUSTRY

Promotion opportunities become a more important retention motivator the longer an individual intends to remain in the nuclear industry. (**FIGURE A 11: IMPORTANCE OF PROMOTION OPPORTUNITIES FOR RETENTION AND LENGTH OF TIME INTENDED TO STAY IN THE NUCLEAR INDUSTRY**) For those who intend to stay in the industry for 10 or more years, promotion opportunities were selected as a high motivator. Organizations that provide and communicate ample promotion opportunities will have a better chance of retaining individuals in the industry.

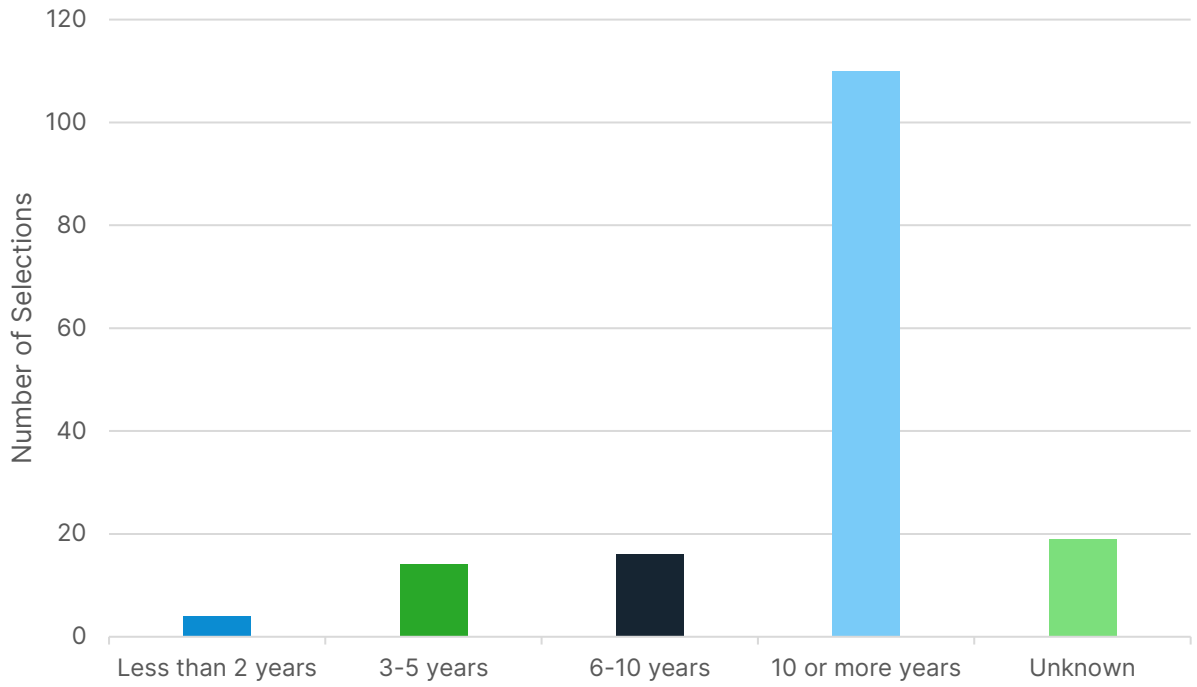

FIGURE A 11: IMPORTANCE OF PROMOTION OPPORTUNITIES FOR RETENTION AND LENGTH OF TIME INTENDED TO STAY IN THE NUCLEAR INDUSTRY

Appendix G: Motivations of the Nuclear Workforce with 3-12 Years' Experience

The ability of companies to retain employees with 3 to 12 years' experience has long been an issue in the nuclear industry. Understanding the motivations for those in this experience range is key improving retention of this essential demographic.

To begin, specific job characteristics are evaluated based on relative importance and satisfaction for each respondent. The chart below shows the differences between the importance and satisfaction for these key areas, all relative to years' experience (**FIGURE A 12: DELTA IN IMPORTANCE VS SATISFACTION FOR JOB CHARACTERISTICS IN KEY DEMOGRAPHICS**).

FIGURE A 12 shows staffing, morale, and flexibility are the top disconnects for respondents with 3 to 12 years of experience. However, more subtle trends can be seen in the way respondents are seeing their work environment.

- The disconnect for stability increases as years of experience increases.
- The highest disconnect for compensation is at 9 years of experience, but it does not reach higher than 35%. As essential as salary is in employee retention, employees with 3 to 12 years of experience are not expressing a disconnect with compensation.
- The disconnect for advancement opportunities remains relatively high through 9 years of experience.
- Those in the later end of the spectrum see less of a disconnect regarding leave and respectful treatment from their supervisors. However, those same respondents are more worried about the stability of the industry.

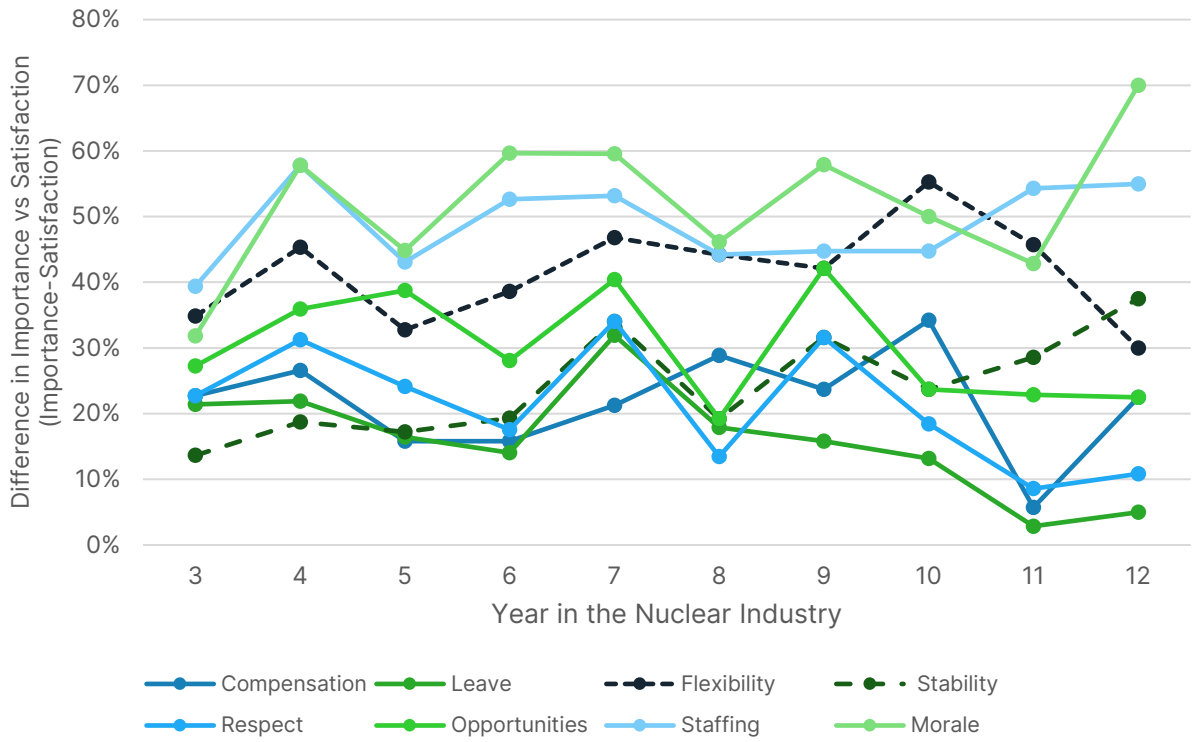

FIGURE A 12: DELTA IN IMPORTANCE VS SATISFACTION FOR JOB CHARACTERISTICS IN KEY DEMOGRAPHICS

In the 2026 Career Report, NAYGN will ask more questions to understand what actions can be taken to improve morale and flexibility. However, improving staffing is an area that each employer will have to better understand and prioritize to see improvement.

Finally, considerations were given as to the reasons those with 3 to 12 years' experience stay and what might cause them to leave. (**FIGURE A 13: IMPORTANCE OF FACTORS FOR STAYING IN/LEAVING THE NUCLEAR INDUSTRY BY YEARS' EXPERIENCE**). Salary remains consistently high, but it is noteworthy to comment on several other trends.

- Respondents with 3 years of experience see mission and purpose as a major reason to stay in the industry.
- Respondents with 6 years of experience see long-term stability as a top reason to stay. They see promotions, or lack thereof, as a reason to leave.
- Respondents with 9 years of experience see mission and purpose and location as top reasons to stay. Lack of stability is a top reason to leave.
- Respondents with 12 years of experience, see location as a top reason to stay. Lack of development, lack of promotions, and lack of stability are top reasons to leave.

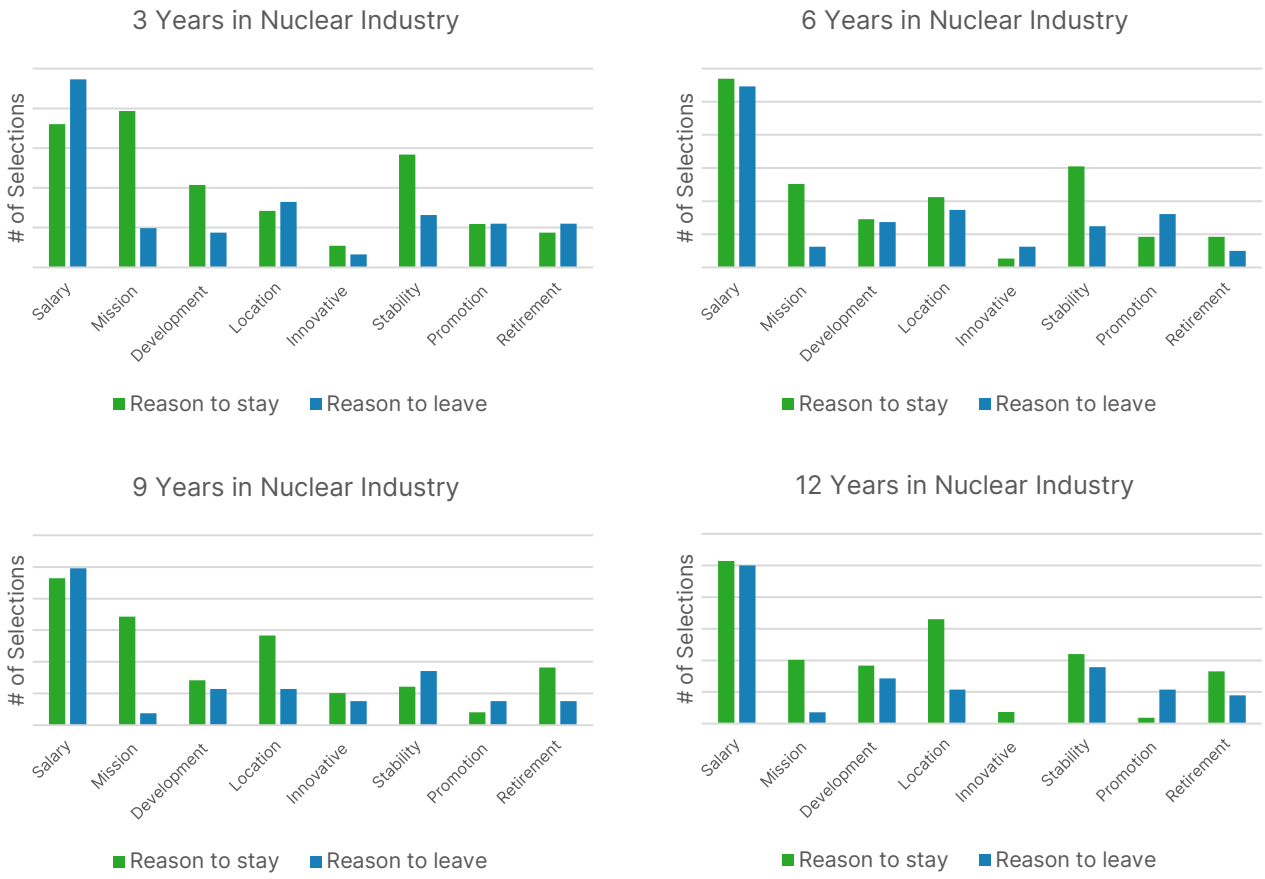

FIGURE A 13: IMPORTANCE OF FACTORS FOR STAYING IN/LEAVING THE NUCLEAR INDUSTRY BY YEARS' EXPERIENCE

Appendix H: Insights on Current Job Searching

Examining survey respondents' perspectives on searching for another job provides insights into nuclear talent attrition and clues to retaining existing nuclear talent.

Job Searching by Gender

The difference between men and women is small, however trends can be seen that women may be looking more actively for new roles, whereas men may be more passive in their job searches.

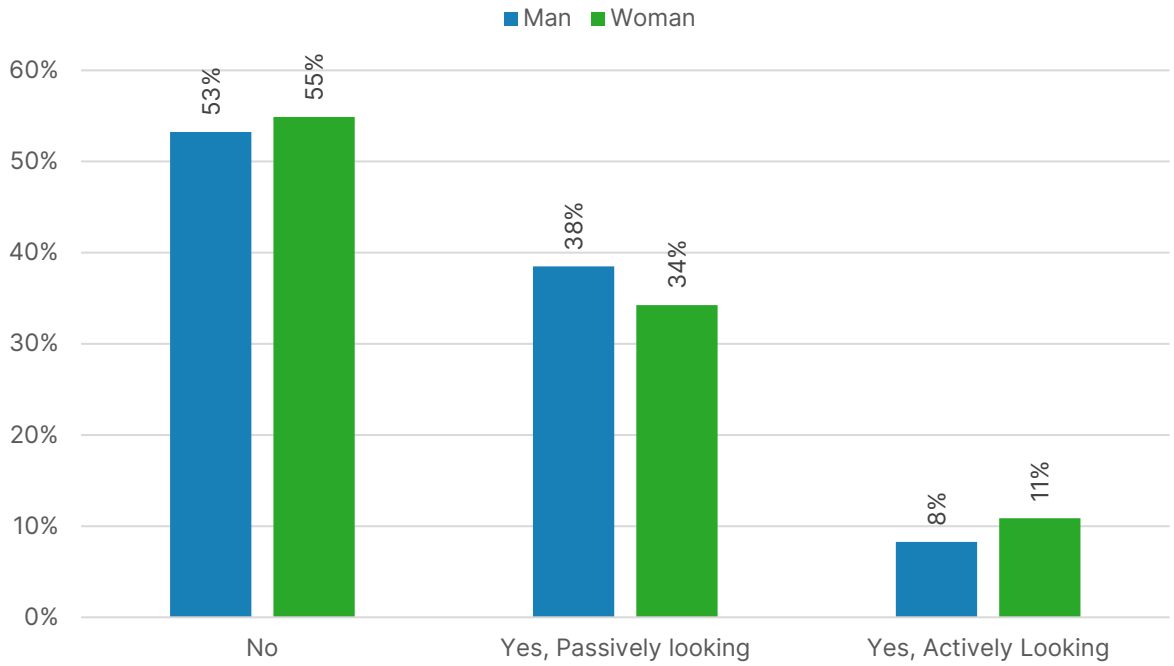

FIGURE A 14: RESPONDENTS LOOKING FOR A NEW JOB

Job Searching by Hours Worked per Week

Seventeen percent of respondents who work over 55 hours are actively looking for a job, while a larger portion of this group is only passively looking. (FIGURE A 15: JOB SEARCH BY AVERAGE HOURS WORKED PER WEEK). There continues to be a trend seen in the number of hours worked compared to the likelihood of looking for a new job, though the probability anyone is actively looking seems to have decreased uniformly.

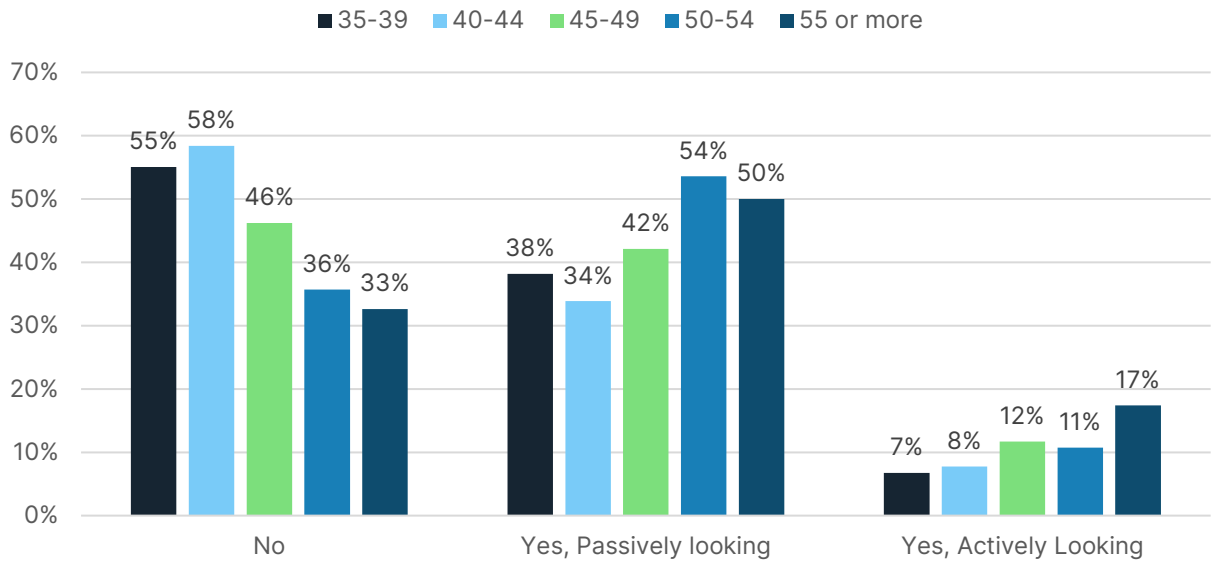

FIGURE A 15: JOB SEARCH BY AVERAGE HOURS WORKED PER WEEK

Job Searching by Industry Organization

Company type appears to be a major factor in the willingness to look for new opportunities (**FIGURE A 16: JOB SEARCH BY COMPANY TYPE**). Generically, responses can be grouped into three categories:

- A majority are not looking for new opportunities (Consultants and New Reactors)
- About an even split between looking versus not looking (Utility, Vendor, and Industry Groups)
- A majority are looking (Government, Academic, and Startups)

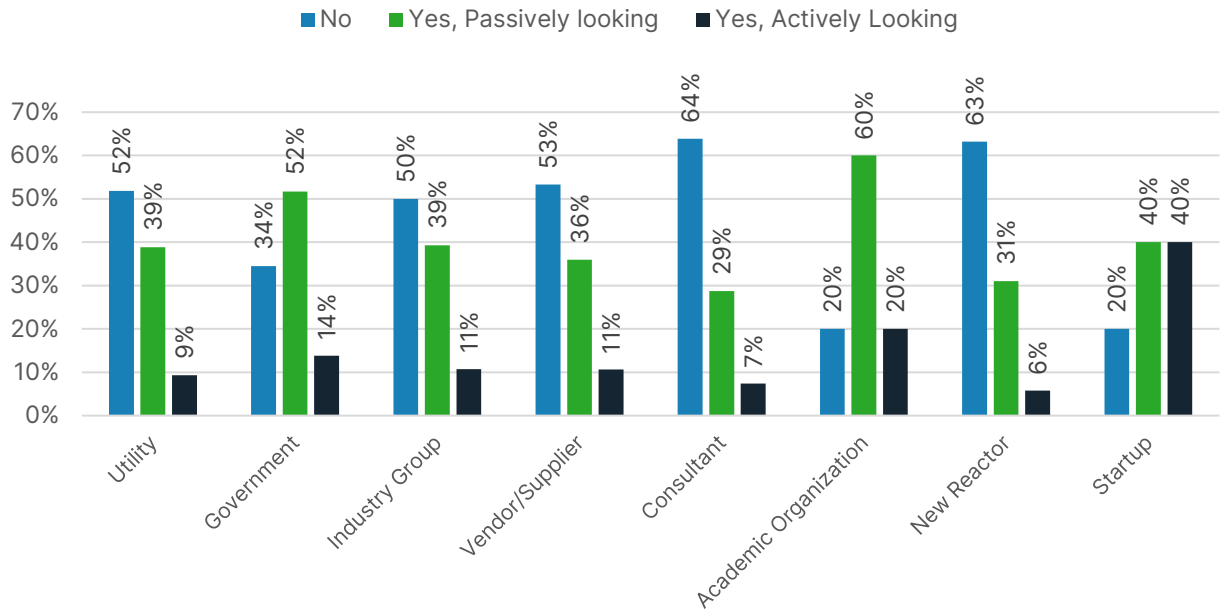

FIGURE A 16: JOB SEARCH BY COMPANY TYPE

Job Searching and Reasons to Stay in the Nuclear Industry

When looking at individuals searching for new jobs, it is evident that salary is the most important reason to leave the nuclear industry, followed by a better work-life balance and better remote work opportunities. (**FIGURE A 17: JOB SEARCHING AND REASONS TO LEAVE THE NUCLEAR INDUSTRY**) Comparing this to reasons to remain in the nuclear industry, salary was also the highest factor for retention, followed by mission and purpose. (**FIGURE A 18: JOB SEARCHING AND REASONS TO STAY IN THE NUCLEAR INDUSTRY**) For those who were passively looking for a new job, long-term stability was a more important reason to remain, while those actively looking for a job valued location slightly more. Retirement benefits were a more important reason to remain for those actively looking for a new job than those passively looking.

Overall, the data shows that focusing on salary, work-life balance, and remote work opportunities could be key to retaining individuals in the nuclear industry when they are looking for a new job. Additionally, development opportunities could also be a factor in keeping those who are passively looking for a job inside the industry, as it was ranked as a higher motivator for that group of respondents.

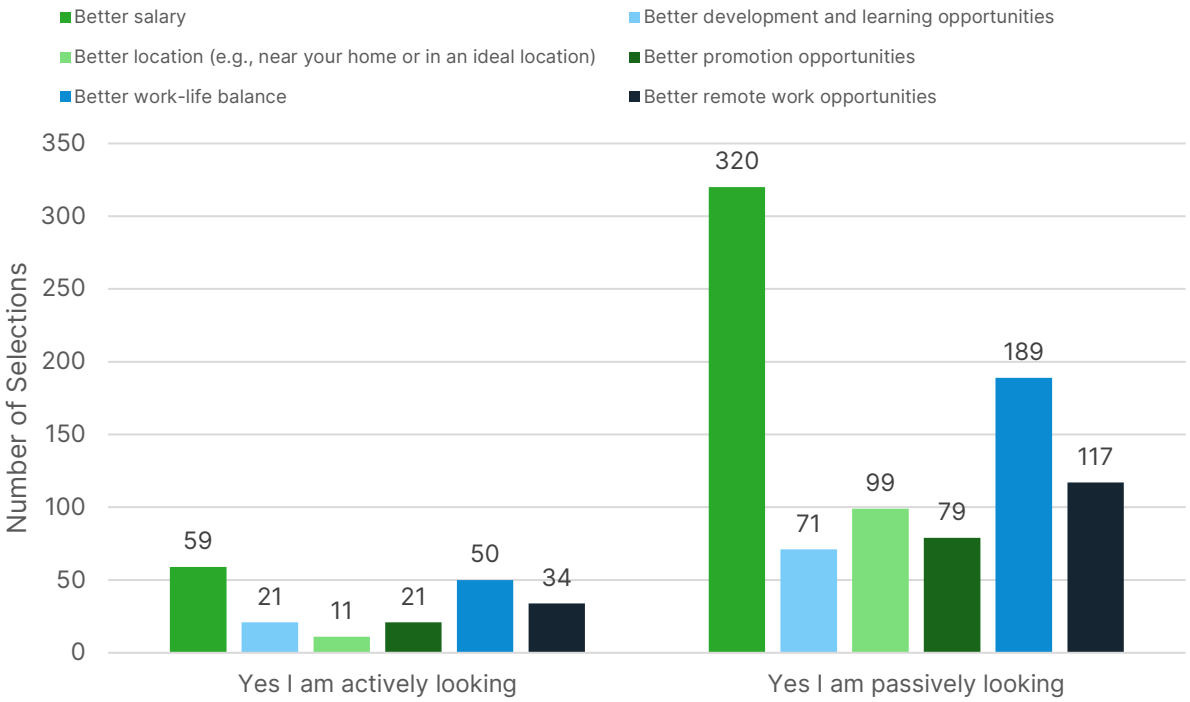

FIGURE A 17: JOB SEARCHING AND REASONS TO LEAVE THE NUCLEAR INDUSTRY

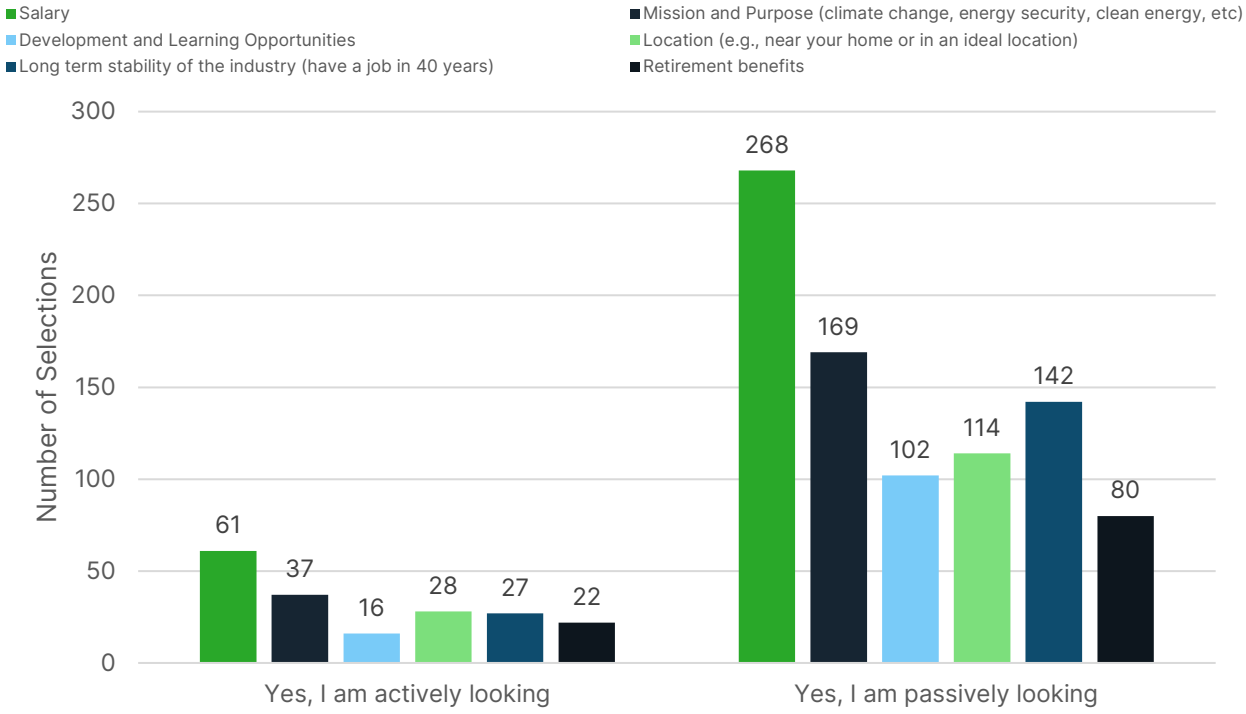

FIGURE A 18: JOB SEARCHING AND REASONS TO STAY IN THE NUCLEAR INDUSTRY

Appendix I: Starting Salaries Comparison

Figure A 19: Starting Nuclear Salaries by Gender (Engineering Only and All Disciplines), **FIGURE A 19** shows starting salaries by year hired in the nuclear industry. Based on survey responses, the average starting

salary for women was only higher than the average in two years. But as previously mentioned, this may be due to job function selections, and when engineering is compared to the average, a different trend emerges. **An alignment in starting salary emerges in the last decade, with engineering starting pay being close to equal between genders.**

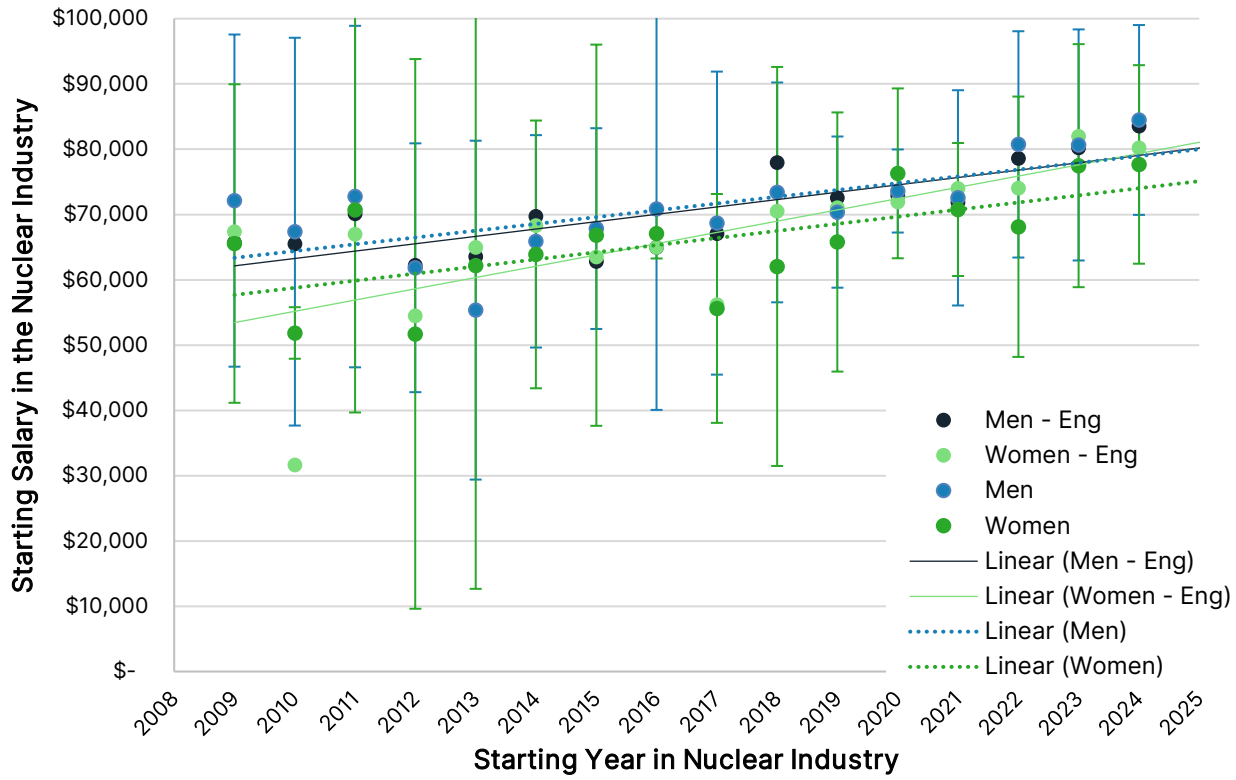

FIGURE A 19: STARTING NUCLEAR SALARIES BY GENDER (ENGINEERING ONLY AND ALL DISCIPLINES)[35, 36]

Appendix J: Compensation Calculation Notes

Respondents were asked several questions related to their compensation, including:

- Currency (USD/CAD)
- Fixed Salary or Hourly Wage
- Years of full-time work experience: Years at Current Company, Years in the Nuclear Industry, & Total Years throughout Career
- [Salary]
    - Starting Annual Base Salary in the Nuclear Industry, *AKA "Starting Salary"*
    - Current Annual Base Salary
    - Current Target Annual Bonus
    - Company Paid Benefits
    - Additional Pay

[35] Error bars not shown for Engineering Only groups. There is no significant difference in the years of experience prior to starting in nuclear based on gender, which allows further interrogation of the contribution to the gender pay gap as an entry-level hire issue.
[36] There are too few responses in both genders to display meaningful data prior to 2009.

- [Wage]
    - Starting Hourly Wage in the Nuclear Industry
    - Current Base Hourly Wage
    - Estimated Annual Overtime Pay

Items of Note:

- Unless otherwise noted, 643 respondents are included in the salary-based compensation data reported in this section, composed of 545 salary-only responses and 98 both salary/wage responses. In total, 724 respondents filled out compensation information. As respondents were not restricted from entering information in both wage and salary fields, the breakdown of responses is as follows:
    - 545 salary-only information entered
    - 156 wage-only information entered
    - 98 both salary & wage information entered
    - 23 outliers were removed.
- Inflation is not considered, except where explicitly mentioned.
- All responses are cost-of-living adjusted, as in 2022. US NAYGN members were asked to use the Advisor Smith cost of living calculator and Canadian NAYGN members were directed to the Numbeo cost of living calculator (References 5 and 6). All cost-of-living adjusted values were then normalized to 100 for US (USD) responses and 70 for Canadian (CAD) responses.
- Salaries are reported in US dollars, but there was not significant difference in CAD vs USD responses after cost-of-living normalization, thus the salaries were not further adjusted for currency conversion ($1USD=$1.35CAD, at time of writing) and can be considered equivalent to both CAD & USD. This is likely due to relatively lower average compensation for Canadian respondents, but also lower average cost of living (Canada=70 vs US=100).
- Data Cleanup & Outlier Removal:
    - Interns/Co-Ops/Students are not considered in compensation analysis, only full-time equivalent responses were analysed.
    - Outliers with current base salary under $12K as likely typo
    - Outliers with current base salaries over $300K as likely typos or c-suite
    - Hourly wage selected but input salary data
    - Outliers of excessively large hourly wage as likely typo

Appendix K: NAYGN Recruitment Feedback

Recruiting new members is essential for NAYGN's growth and development as a non-profit organization. Survey respondents were asked additional questions regarding how they discovered NAYGN and their preferred methods of communication. Non-members of NAYGN who completed the survey were asked what kinds of activities NAYGN could host to get them to consider joining.

For current NAYGN members, the two most common survey answers to the question "How did you find out about or join NAYGN" were as follows:

- A co-worker
- Company publications

NAYGN has put significant efforts into assisting company onboarding efforts where they have chapters to make joining NAYGN easy or giving touchpoints for new hires to get introduced to NAYGN through standardized materials.

While planning new and engaging events is crucial, clear communication promoting these events is just as important. NAYGN relies on four primary methods of communicating upcoming events and initiatives with our members:

1. Bi-monthly newsletter
2. Social media posts
3. NAYGN.org website
4. Local Chapter Lead monthly meetings

Of these methods, the bi-monthly newsletter is a consolidated list of the most immediate upcoming events. It is a great resource for NAYGN members who want to participate in near-term initiatives. However, only 59% of survey respondents (who said they are NAYGN members) said that they receive the newsletter. Closing this gap is a primary goal for NAYGN in the upcoming year.

As technology continues to progress, there are many new options available to communicate upcoming events to NAYGN members. Survey respondents were asked to select how they preferred to find out about upcoming events. Of the available options, an event-specific email, the standard NAYGN newsletter, and a filer at one's company were the most popular.

Among open-response responses that NAYGN leadership has considered before, there were ideas for an NAYGN application that has an opportunity to be revisited again.

Approximately 30% of survey respondents said that they were not members of NAYGN. These respondents were asked what would get them to come to an NAYGN event. This question was left open-ended, and NAYGN received a lot of great feedback.

NAYGN will take the feedback received from survey respondents and incorporate the many ideas into events for our chapters.

Appendix L: Definition of Work Flexibility

Throughout the generation of this report, it was determined that there was inconsistency in the use of the of the term "work flexibility". Based on the position of the respondent, the definition could include but is not limited to:

- Flexibility in work location
- Flexibility in work hours
- Flexibility in type of work performed

Because of this, the authors would like to acknowledge that sections including discussion about flexibility are deducing this to mean flexibility in work location. It is understood that not all respondents may have treated this definition consistently, thus use of any data should be used with caution.