

Economic Impact Analysis

UAMPS Small Modular Reactor Project

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Should the construction and operation of a Small Modular Nuclear Reactor (SMR) at the Idaho National Laboratory’s (INL) desert site come to fruition, the impact on the local economy would be significant. To estimate the combined impact of the project the Idaho Department of Labor has provided the following analysis using EMSI® economic impact modeling software. This report is broken into the following two phase analysis: Phase I: Constructional impact from adding 1,000 construction jobs and assuming a total project construction cost of \$2.8 billion, and Phase II: Operational Impact from adding 360 permanent jobs to operate the SMR. The data in this report represents the impact on the Idaho Falls MSA labor market as defined by the U.S. Census Bureau and, therefore, does not account for any additional effects in the surrounding counties.

Phase I: Construction Impact

Current estimates for the SMR indicate the project will cost \$2.8 billion and directly support up to 1,000 jobs during the construction phase of the project. Under current project assumptions, construction of the SMR would create or sustain an additional 11,808 jobs in the local economy through indirect and induced economic activity – creating a total employment impact of 12,808 jobs through the duration of the project. Total Labor Income is expected to increase by \$1.5 billion, with a combined average wage of \$44,937. Combined industry sales are expected to increase by \$3.8 billion over the course of the construction project.

Economic impacts are generally separated into three categories. The first category is called the Direct Effect. Direct effects include the initial events that are the catalyst for some change in the economy. The second category is called the Indirect Effect. These indirect effects show the impact of inter-industry expenditures that occur. These effects are usually the result of increased demand on the supply chain of the direct effect industry. The last category is called the Induced Effect. Induced effects are the result of labor income being spent throughout the region. Industries in this category of effect typically follow household spending patterns. Economic impacts eventually dissipate as money is spent outside the region. The following table outlines the expected economic impact assuming a project cost of \$2.8 billion and the addition of 1,000 jobs to the Nuclear Power Plant Construction industry through the duration of the project.

Phase I: Economic Impact Summary Results Nuclear Power Plant Construction			
Impact Type	Employment	Labor Income	Industry Sales
Direct Effect	1,000	\$1,143,677,418	\$2,800,000,000
Indirect Effect	3,987	\$123,494,919	\$353,692,045
Induced Effect	7,821	\$243,927,035	\$620,061,282
Total Effect	12,808	\$1,511,099,372	\$3,773,753,328
Multiplier	1.54	1.32	1.35

Phase II: Operational Impact

Once construction is complete, current estimates indicate the operation of the SMR will support 360 jobs annually. Based on industry multipliers, adding 360 jobs to the Nuclear Electric Power Generation Industry would create or sustain an additional 1,147 jobs through indirect and induced economic activity – creating a total employment impact of 1,507 jobs. Combined labor income is expected to increase by \$98 million, with average earnings of \$65,324 per job. Total output, or combined industry sales, is expected to increase by \$389 million. The following table outlines the expected annual economic impact of adding 360 new jobs in the Nuclear Electric Power Generation industry.

Phase II: Economic Impact Summary Results Nuclear Electric Power Generation Industry			
Impact Type	Employment	Labor Income	Industry Sales
Direct Effect	360	\$58,485,594	\$287,825,795
Indirect Effect	146	\$4,712,635	\$13,136,237
Induced Effect	1,001	\$35,234,431	\$88,195,580
Total Effect	1,507	\$98,432,660	\$389,157,612
Multiplier	4.19	1.68	1.35

The realization of the UAMPS SMR project will have a tremendous impact on the local economy. As the region is already known for its technical expertise in energy research, the development of the SMR would be a natural addition to the region's high-tech portfolio and be mutually beneficial for the industry's current employers.