Workforce in the Energy and Mining Industries

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Total Nameplate Geothermal Capacity in the U.S. as of January 2014

Note: PCA (Planned Capacity Additions), pilot plants and utility scale geothermal plants built in the first half of the 20th century and then decommissioned are not included in the above time series.

PTC/ITC = “Production Tax Credit/Investment Tax Credit
GRED = “Geothermal Resource Exploration and Definition Program”
CA’s GRDA = “California’s Geothermal Grant and Loan Program”
PURPA = “Public Utility Regulatory Policies Act”

Source: GEA
Developing PCA, Resource & Nameplate Capacity by State

PCA = “Planned Capacity Additions”

Source: GEA
Jobs Created by Actual Geothermal Power Plants

Note: This graph is a selection of 10 Plants build or operating over the last few years from 9 companies. The companies are kept anonymous to protect proprietary information.

Source: GEA
Jobs Created by Actual Geothermal Power Plants cont.

Source: GEA, Nathanaël Hance 2005
Directly Employed Jobs Needed to build Geothermal Power Plants

Welders, mechanics, pipefitters, plumbers, machinists, electricians, carpenters, construction and drilling equipment operators, surveyors, architects, geologists, hydrologists, electrical, mechanical, and structural engineers, HVAC technicians, food processing specialists, aquaculture and horticulture specialists, managers, attorneys, regulatory and environmental consultants, accountants, computer technicians, resort managers and spa developers (if it’s a geothermal resort), government regulators, wildlife biologists, archeologists, adjudicators, paralegals, geophysicists, geochemists, GIS specialists, exploration drillers, sample analysts, consultants, clerical staff, management staff, rig hands, mud loggers, cementing personnel, casing crew, directional drillers, rig transport crews, mechanics, service repairmen
Have you experienced labor shortages, or difficulty hiring for specific skills or job profiles in the past 2-3 years?

– Some companies have internship and training programs hiring young engineers and geologists

Others state . . .
– “Skilled and experienced power plant operators are hard to find, especially for remote locations as are typical with geothermal power plants.”

Especially for . . .
– “technical resource area, geologists and reservoir engineers”

Source: GEA
Have you experienced any impact on your labor needs, costs, or ability to hire that could be attributed to the boom in oil and gas development?

“Not internally. This occurs more with outside services, especially drilling related”

While others . . .

“We don’t have any direct evidence, but it is highly likely”
Thank You! Questions?

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