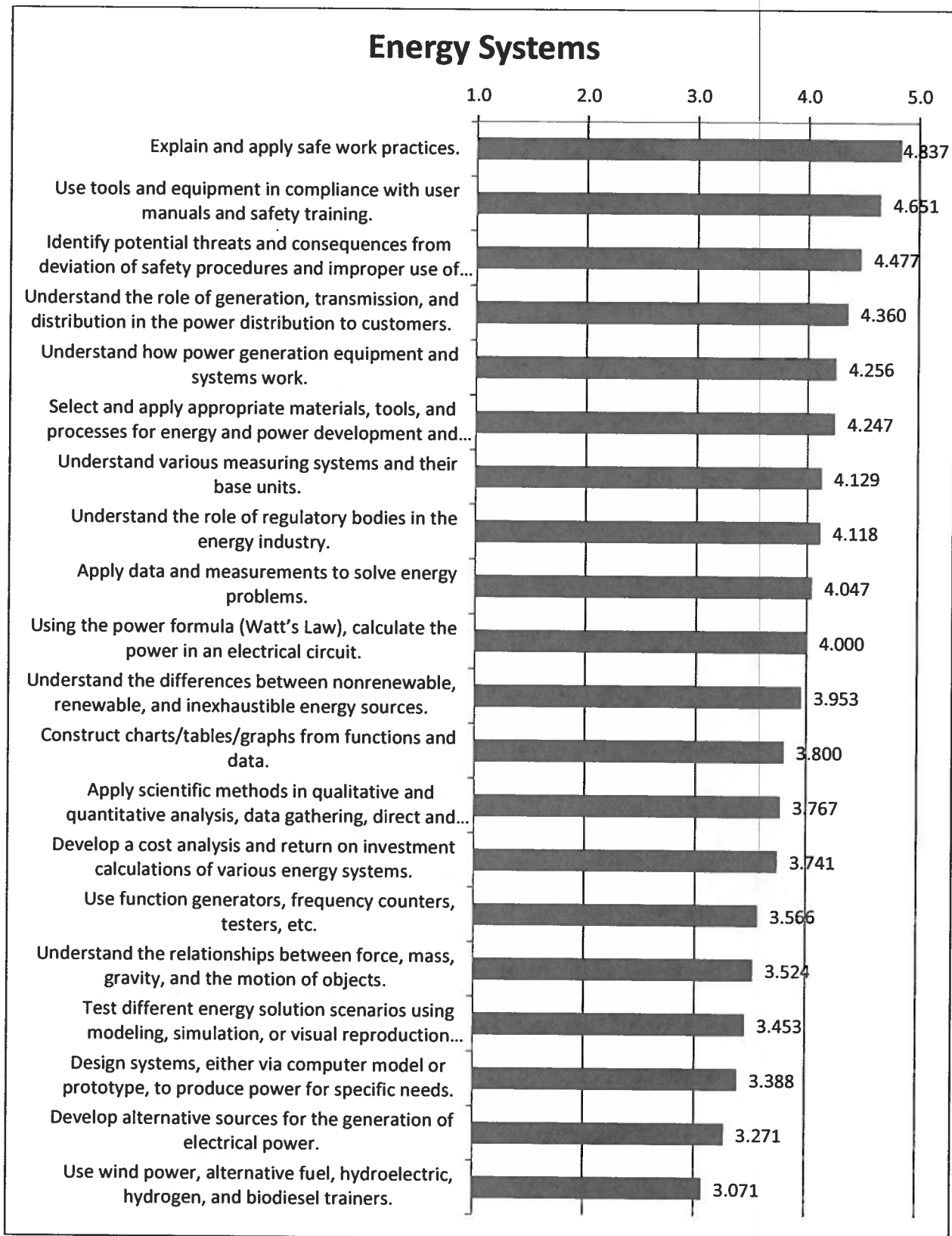


II. Energy Systems



Energy Systems

Skill/Knowledge Set	Mean	Minimum	Maximum	Mode	Standard Error of Mean	Valid N
Explain and apply safe work practices.	4.837	1	5	5	.068	86
Use tools and equipment in compliance with user manuals and safety training.	4.651	1	5	5	.095	86
Identify potential threats and consequences from deviation of safety procedures and improper use of tools.	4.477	1	5	5	.120	86
Understand the role of generation, transmission, and distribution in the power distribution to customers.	4.360	1	5	5	.107	86
Understand how power generation equipment and systems work.	4.256	1	5	5	.118	86
Select and apply appropriate materials, tools, and processes for energy and power development and trouble-shooting.	4.247	1	5	5	.107	85
Understand various measuring systems and their base units.	4.129	1	5	5	.112	85
Understand the role of regulatory bodies in the energy industry.	4.118	1	5	4	.102	85
Apply data and measurements to solve energy problems.	4.047	1	5	5	.107	86
Using the power formula (Watt's Law), calculate the power in an electrical circuit.	4.000	1	5	5	.137	86
Understand the differences between nonrenewable, renewable, and inexhaustible energy sources.	3.953	1	5	5	.110	86
Construct charts/tables/graphs from functions and data.	3.800	1	5	4	.122	85
Apply scientific methods in qualitative and quantitative analysis, data gathering, direct and indirect observation, predictions, and problem identification.	3.767	1	5	4	.127	86
Develop a cost analysis and return on investment calculations of various energy systems.	3.741	1	5	5	.143	85
Use function generators, frequency counters, testers, etc.	3.566	1	5	4	.147	83
Understand the relationships between force, mass, gravity, and the motion of objects.	3.524	1	5	4	.138	84
Test different energy solution scenarios using modeling, simulation, or visual reproduction software.	3.453	1	5	4	.130	86
Design systems, either via computer model or prototype, to produce power for specific needs.	3.388	1	5	4	.144	85
Develop alternative sources for the generation of electrical power.	3.271	1	5	4	.143	85
Use wind power, alternative fuel, hydroelectric, hydrogen, and biodiesel trainers.	3.071	1	5	4	.130	85

Suggested Additional Skills and Other Responses

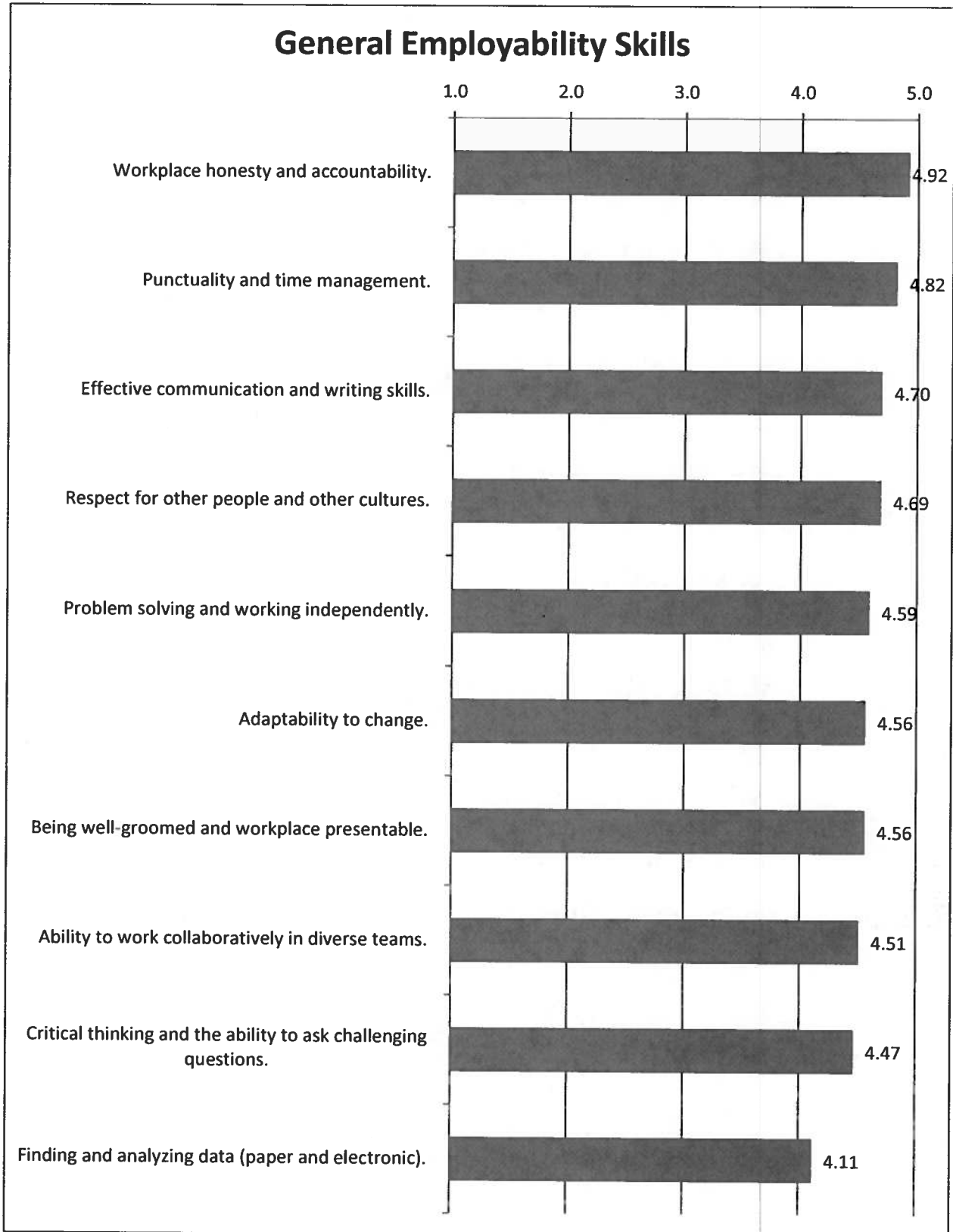
Nuclear Power

the above makes no sense

N/A

SMART Grid / Energy

I. General Employability Skills



General Employability Skills

Skill/Knowledge Set	Mean	Minimum	Maximum	Mode	Standard Error of Mean	Valid N
Workplace honesty and accountability.	4.92	1	5	5	.009	2173
Punctuality and time management.	4.82	1	5	5	.011	2172
Effective communication and writing skills.	4.70	1	5	5	.014	2179
Respect for other people and other cultures.	4.69	1	5	5	.015	2169
Problem solving and working independently.	4.59	1	5	5	.015	2163
Adaptability to change.	4.56	1	5	5	.015	2179
Being well-groomed and workplace presentable.	4.56	1	5	5	.016	2178
Ability to work collaboratively in diverse teams.	4.51	1	5	5	.017	2180
Critical thinking and the ability to ask challenging questions.	4.47	1	5	5	.016	2172
Finding and analyzing data (paper and electronic).	4.11	1	5	5	.021	2175

Suggested Additional Skills and Other Responses	Frequency
Creativity	19
Ability to learn new skills or improve upon skills	22
Other	23
Leadership skills & ability to follow directions	44
Flexibility	55
Adhere to workplace ethics & rules (Being responsible)	99
Communication, Cooperation, Collaboration	120
Attitude (positive, take initiative, motivated, etc.)	121
Being effective and efficient	129
Competent in necessary skills	217