

EXPLORING A JOB IN THE ENERGY INDUSTRY may advance the following

ENERGY LITERACY PRINCIPLES AND CONCEPTS

1 Energy is a physical quantity that follows precise natural laws.

1.3 Energy is neither created nor destroyed.

1.4 Energy available to do useful work decreases as it is transferred from system to system.

1.5 Energy comes in different forms and can be divided into categories.

1.7 Many different units are used to quantify energy.

4 Various sources of energy can be used to power human activities, and often this energy must be transferred from source to destination.

4.1 Humans transfer and transform energy from the environment into forms useful for human endeavors.

4.2 Human use of energy is subject to limits and constraints.

4.5 Humans generate electricity in multiple ways.

5 Energy decisions are influenced by economic, political, environmental, and social factors.

5.2 Energy infrastructure has inertia.

5.4 Energy decisions are influenced by economic factors.

5.6 Energy decisions are influenced by environmental factors.

5.7 Energy decisions are influenced by social factors.

6 The amount of energy used by human society depends on many factors.

6.1 Conservation of energy has two very different meanings.

6.2 One way to manage energy resources is through conservation.

6.3 Human demand for energy is increasing.

6.4 Earth has limited energy resources.

6.5 Social and technological innovation affects the amount of energy used by human society.

6.6 Behavior and design affect the amount of energy used by human society.

6.8 Amount of energy used can be calculated and monitored.