1. **Translate the sentences into English using the Passive Voice. Underline the grammar form of the Passive Voice**

**ПЕРЕВЕСТИ ПРЕДЛОЖЕНИЯ, ПОМНЯ О ФОРМАХ СТРАДАТЕЛЬНОГО/ПАССИВНОГО ЗАЛОГА (ТАБЛ.ВРЕМЁН ПАССИВНОГО ЗАЛОГА).**

**ПОДЧЕРКНУТЬ ГЛАГОЛЬНЫЕ ФОРМЫ В КАЖДОМ ИЗ ПРЕДЛОЖЕНИЙ.**

**Iv.**

1. You *(предложат)* a part-time job.*(to offer)*
2. The documents *(были отправлены)* to the manager yesterday.  *(to send)*
3. Не *(предложили)* some interesting work this week. *(to offer)*
4. Creative and broadminded people *(требуются)* for working at our power plant. *(to require)*
5. You have to wait. The machinery *(исследуется). (to examine)*

**IIv.**

1. Your knowledge and skills *(потребуются)* in your future profession. *(to require)*
2. This man (*можно положиться*) on in difficulties and challenges. *(to rely)*
3. We *(показали)* some interesting diagrams at the station today. *(to show)*
4. This event *(комментируют)* upon into day's newspapers. *(to comment)*
5. The output of machinery steadily *(увеличивается). (to increase)*

**IIIv.**

1. When *(сказали*) you about your dismissal? *(to tell)*

2. Wait a little. Your documents *(просматривают)* now.  *(to look through)*

3. Не *(попросили)* to attend training courses this week. *(to ask)*

4. Heat losses should (*быть снижены)* constantly and effectively. *(to reduce)*

5. Good interpersonal skills (*требуются)* for working at this plant*. (to require)*

**Complete the sentences using the given words and translate the sentences**

**ДОПОЛНИТЕ ПРЕДЛОЖЕНИЯ СЛОВАМИ, ДАННЫМИ КУРСИВОМ; ПЕРЕВЕДИТЕ ПРЕДЛОЖЕНИЯ**

 **Iv.**

***systems, heat, natural gas, installed***

|  |
| --- |
| 1. Most new homes have forced-air heating and cooling …. .
2. Furnaces are generally … with central air conditioners.
3. Heat pumps use the vapor compression cycle to move … .
4. Unvented heaters that burn …, propane, kerosene, or other fuels are not recommended.
 |

 **IIv.**

***a central furnace, extra air, power generation, water heating***

|  |
| --- |
| 1. These systems use … plus an air conditioner, or a heat pump.
2. Some heating systems have an integrated … system.
3. Furnaces require oxygen for combustion and … to vent exhaust gases.
4. We manufacture a variety of Air Preheaters that helps in … and also used in various industrial process industries
 |

**III v.**

***circulate, converts, hot weather, radiators***

1. … are wall-mounted panels through which the heated water passes in order to release heat into rooms.

2. Electric heating or resistance heating … electricity directly to heat.

3. [Hydronic heating systems](http://en.academic.ru/dic.nsf/enwiki/1008529) are systems that … a medium for heating.

4. In mild climates a [heat pump](http://en.academic.ru/dic.nsf/enwiki/42657) can be used to air condition the building during … .

**Match the parts to make up sentences and translate them**

**СООТНЕСИТЕ ЧАСТИ ПРЕДЛОЖЕНИЙ И ПЕРЕВЕДИТЕ ПОЛУЧИВШИЕСЯ ПРЕДЛОЖЕНИЯ**

**Iv.**

|  |  |
| --- | --- |
| 1. The boiler transfers energy to the water  | a) to the steam drum |
| 2. From the economizer water passes  | b) from the exhaust of the turbine into liquid |
| 3. Fossil fuel power plants can have a super heater  | c) in the condenser must be kept as low as practical |
| 4. The condenser condenses the steam  | d) in the steam generating furnace |
| 5. For best efficiency, the temperature  | e) by the chemical reaction of burning fuel |

**IIv.**

|  |  |
| --- | --- |
| 1. The water enters the boiler through a section
 |  a) steam at the high purity, pressure and temperature |
| 2. The rest of the energy must leave the plant |  b) in the convection pass called the economizer |
| 3. The steam generating boiler has to produce  |  c) stainless steel to resist corrosion from either side |
| 4. The condenser tubes are made of brass or  |  d) sufficient air for combustion |
| 5. External fans are provided to give  |  e) in the form of heat |

**IIIv.**

|  |  |
| --- | --- |
| 1. Hydraulic turbines are identified with | a) common and significant of all turbine types |
| 2. Wind turbines are the least  | b) the steam produced in a boiler |
| 3. The steam turbine is mainly used by | c) dams and the generation of hydroelectric power |
| 4. The steam system collects and controls | d) in order to burn the fuel and generate heat |
| 5. A boiler incorporates a firebox or furnace  | e) thermal power plants |

**ВАРИАНТ 1**

**Power engineer job’s description**

 Throughout the world, humanity continues to rely more and more heavily on electricity. However, many of the power generating plants produce carbon emissions that harm the environment. Fortunately, power engineers are in the process of developing power grids that are more renewable and energy efficient, removing the toll that power consumption places on the Earth.

 Utility systems used by facilities are developed by power engineers. Power engineers conceive, direct and implement power systems projects. These engineers will evaluate integrated power technology to assess the efficiency of this technology. These engineers also develop methods of integrating renewable power technology. These engineers also are often hired for the implementation of power grids for large public works projects and for governmental institutions. Power engineers also ensure that power grids are safely operated and that the pumps, generators, motors, boilers, turbines, heat exchangers and air conditioning systems are functioning properly. Many are responsible for the integration of green technologies that increase energy efficiency and reduce the impact of energy demands on the environment.

Power engineers work for power plants, large industrial plants and commercial and residential areas. They are also hired by businesses and federal projects in which large power grids are going to be integrated.

Boiler operators for industrial plants work in very clean and well-lit facilities. However, some of the equipment generates a large amount of heat and also produces dust, dirt, noise, oil and smoke. Workers must spend a lot of time standing and must also often crouch and kneel. Electrical engineering in general can be dangerous, with electrical equipment producing burns and electrical shocks. Some machinery also has large moving parts that can injure the power engineer.

Boiler operators however sometimes are hired without any post-secondary education and are trained on-the-job. There are also technical schools that will provide boiler operation training. As boilers become more complex, the Bureau of Labor Statistics predicts that boiler operators will be expected to receive more training. Power engineers need a bachelor's degree in electrical engineering in order to find work. Creative and curious power engineers are needed to create innovative power grid technology.

The Bureau of Labor Statistics reported that the need for electrical engineers is expected to grow by 2 percent, with growth being limited by international competition. The need for boiler operators will grow by 5 percent as businesses implement more boilers. However, these machines will become more advanced and less prone to damage, causing them to require less maintenance.

**Ex. 1. Answer the questions upon the text**

1. What are the main duties of power engineers?
2. Are many of power engineers responsible for the integration of green technologies? Why?
3. What is the work area for power engineers?
4. What are work conditions for power engineers? Can it be dangerous to work as a power engineer? Why?
5. Why does the Bureau of Labor Statistics predict that boiler operators will be expected to receive more training?
6. What do power engineers need in order to find work?

**Ex. 2. Give the summary of the text, using the vocabulary and tell about:**

1. the duties and responsibilities of power engineers; 2) power engineers’ outlook.

**Ex. 3. Make up 8 sentences using the following words and word combinations. Mind the Passive Voice**

|  |  |
| --- | --- |
| be responsible forare hired and trainedthe need for power engineers**essential duties and responsibilities** | technical career in almost any industryto communicate their ideas to othersto conceive, direct and implement to direct maintenance and repair of equipment |