

**Nuclear Power:  
A Powerful Energy Source**

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With the world energy and climate changes on the forefront in America, the question arises of what Americans can do to conserve energy and be energy efficient. This problem has been presented to the best skeptics, and the question then arises: “Are people really contributing to the problem, or is it inevitable?” The earth ages like mostly everything else around us. This is a true statement. However, according to National Aeronautics and Space Administration (NASA) and the National Oceanic and Atmospheric Administration (NOAA), they have come to a solid judgment that humans are contributing to this problem at large by saying, “Climate change is occurring is very likely caused by human activities, and poses significant risks for a broad range of human and natural systems” (Thomas, 2013). So, with the environment becoming so much more threatened by the either extreme heat from the sun or the greenhouse gases that contaminate the air we breathe, the question then arises: “What can we do to extend our stay here on planet earth or the habitable zone?” One method that has a lot of concerns and a lot of success is nuclear power, which is defined as “any nuclear technology designed to extract useable energy from atomic nuclei via controlled nuclear reactions” (Frater, 2009). Nuclear power, if processed correctly, can be of great use to the world’s environment. America should consider nuclear power as a sustainable resource for energy for many reasons. For instance, as a readily usable source, it can help us desalinate our oceans to produce an abundant supply of drinking and useable water for another million light years, and it can help us build weapons that can protect us from any foreign threat. Either way Americans have to consider all methods conscientiously to seriously save the environment as a classic adage holds that desperate time calls for desperate measures.

Nuclear power is a readily usable source. This means that it is already developed to be used and taken advantage of. There are two ways to develop nuclear power, nuclear fission and nuclear fusion. Both powers are extremely helpful if used carefully and properly. Nuclear fission is when harnessed energy is released in the event that an unstable isotope such as uranium-235 or plutonium-239 is split apart by a slower neutron, which starts a nuclear reaction. Nuclear fission is already being used in many countries. According to Christopher Loyn, a professor at The King's School Canterbury, nuclear fission is created about "six percent of the world's energy needs" (Loyn, 2011). Nuclear fission is a great source that can reuse energy and recreate resources and reduce the gases already in the atmosphere. It has been scientifically proven that nuclear powers can reduce greenhouse gases, the leading determinate in climate change and global warming. Meanwhile, nuclear fusion is, according to Loyn, "the process of fusing (joining together) of two nuclei of an element lighter than iron into a single heavier element releases energy" (Loyn, 2011). This method is more convoluted. The issue is that it uses a very powerful source of energy. However, if scientists can achieve the process of domesticating nuclear fusion, it can be a very likely source that will solve all of our water scarcity problems and energy problems alike. For the most part, nuclear power broken into two different categories can seem as a strategic headache; however, if used correctly and precisely, America can achieve the most efficient renewable resource ever applied in the world.

Another advantage of nuclear power is that it could possibly desalinate our oceans. The abundance of water is crucial. However, what seems to be the most important use of nuclear power in desalinating our oceans is human energy. Humans must consume an estimated daily amount of at least according to Mayo Clinic "for men 13 cups and for women 9 cups" ("Water,"

2013). The issue fresh water is a worldwide problem. However, if nuclear power, namely nuclear fusion, is created to desalinize oceans, that would mean a better abundance to benefit the third-world countries living in poverty and create a better standing. The process that could complete this amazing dream is that the deuterium inside of ordinary water can be taken from the water to cleanse it. Then tritium can be taken out of lithium, which is what contaminates oceanic water for human consumption. This would create the most powerful energy abundance known to man. If this process is completed, America will have created the process that can provide a supply of renewable water sources used for technological resources and also a supply of water that can last for over an estimated 60 million years! After all, nuclear power is a very powerful instrument that should be seriously considered. It has many advantages and also is very likely a miracle maker. The solution to desalinizing our oceans has been searched for for many years. This powerful energy source can create energy to power electrical towers naturally; a source that can create energy and still be energy efficient is unheard of (Loyn, 2011).

Comparatively, both nuclear fission and nuclear fusion are two very different aspects of potential energy when it comes to nuclear power. Nuclear fission can create a great energy source to regenerate already used and compressed energy to power the world's electricity and power lines. Nuclear fusion is a game-changing invention that can be created for the betterment of the world for centuries and even millennia. Nuclear power has many risks involved; however, if used accurately with proper safeguards, then this can be a great energy source. The thought of a plant overheating or being misused can be just as intimidating as the current climate changes. However, in perspective, there must be a way that can divide or at

least contribute to the solution to the current predicament of global warming caused by greenhouse gases and human waste. Nuclear power can do this effectively and efficiently. Change must occur because for humans, the condition has already become its worst in known existence. A powerful energy that has multiple uses is the only route that can be adequate. For the sake of America and for the sake of the world, nuclear power is a desperate measure for a desperate time! It's always better to plan ahead then to not plan at all.

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