

Arjun and I affirm: “Resolved: The United States should increase its use of nuclear energy for commercial energy production.”

One observation. Because the profitability of large-scale nuclear power plants is diminishing due to cost overruns and delayed construction, *Hulac 20* finds, US nuclear production will diminish 75 percent in the next decade. **However, new innovations in the status quo exist to mitigate the issues that plague large-scale plants.** *Deign of Greentech Media 18* reports, future nuclear production will only be achieved with new innovations called small modular reactors or SMRs, which are miniaturized reactors that are quicker and cheaper to produce than large-scale nuclear plants. However, these reactors are currently being barred from mass implementation, as *Ford of Arizona State University 18* finds, the lack of government investment in SMRs have stagnated their progress in making headway in the market. **Fortunately, affirming would increase investment,** as *Plumer of Vox 17* writes, the only way to sustainably revive nuclear production is with massive flows of government investment into SMRs. **This will not take away from growth into renewable energy,** as *Funkhouser of Columbia University 18* analyzes, growth in renewables would have happened regardless of government investment, as states across the nation encouraged the growth in the sector with requirements instead of cash. **Thus, Rock of the Department of Energy 18** finds, small modular reactors will come online in the next decade but will need government investment to ensure its capacity for decades to come.

Therefore,

Contention One is A Greener Future

Frazier of NPR 18 writes, as nuclear power plants close, they are often replaced by natural gas plants due to lower natural gas prices. **Unfortunately, because natural gas leaks methane into the atmosphere,** *Conca of Forbes 19* elaborates, the replacement of nuclear energy with natural gas has increased US emissions, adding 25 million tons of CO2 annually. **Fortunately, Maloney of the American Power Association 19** finds, SMRs are significantly cheaper to produce and operate when compared to

traditional nuclear power plants due to their ease of manufacturing with smaller size. Because increased nuclear production will increase government investment into small modular reactors, **Maloney** finds, SMRs will be able to outbid natural gas on price as natural gas prices tend to be more volatile than the constant price of SMRs. **Thus, because nuclear energy is largely carbon neutral compared to natural gas, Hansen of Columbia University 13** finds, over 80 billion tons of CO2 emissions from natural gas can be avoided. In fact, **Hansen** contextualizes, 1.1 million premature deaths can be prevented domestically from nuclear power in the next thirty years.

Contention Two is Protecting the Troops

Lieutenant General Dan Christman explains, US military operations abroad currently rely on a diesel-based fuel system to deliver electricity, delivered by pipelines, trucks, and ships. Because fuel is often located away from military bases, the military must go on fuel convoys to receive it.

Unfortunately, enemies of the US government have learned to exploit this operation. Thompson of the Center for Defense Information 19 finds, terrorists often use IEDs and roadside bombs to disrupt these convoys and the supply of energy for the military.

Fortunately, increased nuclear energy production can solve this issue. Christman explains, small modular reactors could revolutionize military logistics by providing portable energy for the military that leaves no footprint. **Christman** elaborates, the reactors are built already fueled, ensuring that the military does not have to rely on fuel shipped in from vulnerable convoys passing through warzones.

However, **Baker of the American Security Project 12** finds, a surge in commercial SMR production is necessary in order for the military to use it, as the current lack of government investment in SMRs holds back its potential benefits. **Thus, Baker** finds, over 90 percent of the military needs can be fulfilled by these new nuclear reactors.

Importantly, *Thompson* explains, the root cause of military casualties abroad is the increasing number of fuel convoys necessary to sustain military operations. Fortunately, ***Christman*** finds, fuel convoys would no longer be necessary with SMRs, as energy would be supplied right from military bases. Thus, SMRs can save tens of thousands of lives, as ***Helman of Forbes*** quantifies, fuel convoys have accounted for 50 percent of annual military deaths in the War on Terror.

Thus, we affirm.