Mr. Wolfhard,

Hello! I am a climate activist, and an energy science nerd that loves both the Department of Energy and *Stranger Things*. This may come across as random and odd, but it is for an important cause. The fact is, we need the help of young people with influence, like yourself, to protect the planet from climate change. Unfortunately, much of what you hear on the news is about how bad things are getting climate-wise, which can be overwhelming to young people. Fear is often a poor motivator, and can just make people tune out, give up, or panic. Many in the science community are extremely concerned, and are looking for the most effective ways to solve this issue, that don't require massive sacrifice from the world's inhabitants. Too many people around the globe are in unacceptable levels of poverty, and can't afford to dramatically change their lifestyle. The good news is that people are leaving poverty in droves in the developing world. This is possible with the ability to improve their economic status, which is highly dependent on energy use.

As you may know from science class, the way we get energy today comes from mostly fossil fuels, which emit carbon dioxide, a greenhouse gas. This causes global warming and subsequent climate change, and potentially extreme disruption. Right now, 85% of global energy use comes from these emitting sources like oil, gas, and coal. Energy use is expected to triple by the end of this century, especially as people leave poverty. This is a good thing for people, but a bad thing for carbon emissions. We need to find a way to give us all this energy with zero emissions. It is possible with nuclear power, which produces massive amounts of constant energy with zero emissions. Nuclear power is often misrepresented, misunderstood and unfairly ignored as a climate solution. It is a topic that must be taken into consideration, and better understood in a scientific context. Especially in a time where so many around the world need energy, and everyone is starting to be impacted by climate change.

Why did I reach out to you in particular? Well many of my friends are energy and science nerds. Many of us like *Stranger Things*, which is also kind of nerdy. And they talk about a fictional National Laboratory run by the U.S. Department of Energy. Seeing one of my favorite institutions portrayed in popular culture is fun, even though it is fiction. I was hooked when I saw the entire first season in one night. Now I am part of the insanely dedicated fandom! You all are remarkable actors, might I add. What do the National Labs actually do? Well it is not all about military technology and malicious secret projects. The vast majority of research the DOE does is very good for humanity. It is really just a science playground for extremely talented people. Discoveries and innovations from these labs help fuel our economy and our scientific prowess on the global stage. Yes, they maintain our nuclear arsenal for national security, but they also do a ton of work on nuclear power and other clean energy research and innovation. More young people should know about this area of science, and the promise nuclear technology holds.

The pro-nuclear power movement is growing. More and more high-profile people, climate scientists, entertainers, and politicians, are becoming more interested in talking about it. Because climate change is a growing issue, people have decided to look at options to fix it. Once many start learning about nuclear power as a proven source of clean electricity, they realize the potential it offers. Your generation will have to deal with the worst of the problem of climate change, even more so than my millennial generation. Also, younger people are not as scared of nuclear power as older folks who grew up during the Cold War. Climate change is a topic that needs to be brought to the forefront. However, we need to carry with it, a message of hope and the

possibility of a concrete, straightforward solution. We need to recognize that pulling people out of poverty, while avoiding climate catastrophe, requires a lot of clean power. Nuclear power can be a beacon of hope for addressing these issues.

Nuclear and hydroelectric power has been proven to really work in transforming the electric grid to produce extremely low amounts of carbon pollution. This is true in a few provinces of Canada, your home and native land. British Columbia is mainly powered by hydroelectricity and a small bit of biomass, such as wood, making the grid more than 90% carbon-free. This makes it one of the cleanest grids on earth. But another example is Ontario, which holds the largest population of Canadians. A whopping 60% of the electricity in Ontario comes from nuclear power! The rest comes from hydroelectricity (22%), and wind (8%). This also means that more than 90% of that grid is carbon free. The only grid that in the United States that is super clean in the United States is Washington's, which also uses hydro and some nuclear. Ontario is a good case study on how to decarbonize a grid almost completely, end end the use of coal completely, while supporting a large number of people and heavy industries. I thought that would interest you, being a Canuck and all. Canada knows what's up!

Myself and others in this movement are not alone in our views. Scientists are becoming much more supportive. The United Nations also promotes the peaceful use of nuclear technology with the International Atomic Energy Agency (IAEA). The UN's Intergovernmental Panel on Climate Change (IPCC), the folks behind the harrowing climate change reports, say that we need to use nuclear power to meet global emissions reduction targets. Also, the World Health Organization (WHO), another UN institution, has done many studies on nuclear power, especially on the nuclear accidents of Chernobyl and Fukushima. It turns out that they really did not hurt as many people the media portrays, after teams of scientists studied these events. We have learned from our mistakes and can make nuclear power safer, even though statistically, it is the safest form of energy. Nuclear power can be a tremendous tool in addressing other pressing issues in the world today, such as clean water, air pollution, food security, and geopolitical stability. As a source of electricity, it is super abundant, clean, safe and relatively cost-effective.

My goal is to give you hope about the future of humanity on this planet. We need more hope and less doom. You have a lot of power to promote positive change in the world, given your platform. The trick is to make sure whatever you promote is grounded in rational thought, evidence and humanism. This often means you have to be able to see through irrational fear and speak about unpopular truths. To many, nuclear power is a scary topic, but if you look at the data, it turns out we should embrace it for our benefit, and the benefit of nature. I believe what I stand for is a scientific truth, and I want to use this truth to make the world a better place. Unfortunately, many people are still out there who refuse to see this truth, and give in to the illogical fear surrounding the technology. Yes, radiation can make nuclear power seem scary and mysterious, but the more people learn about something they don't quite understand, the more that fear dissipates.

There is an amazing allegory here, I think, with the show *Stranger Things*. Nuclear power is like Eleven, who has a remarkable ability. Originally raised in a lab and exploited for military purposes, Eleven was able to escape the cold, unfeeling, exploitative relationship with Brenner. She found a group of people that wanted to help her, and not use her for destructive purposes. There was a rupture in time and space, and humanity was confronted with the Upside Down. Today's Upside Down is the climate crisis, in a way. Working together

intelligently with her new family, Eleven used her powers to take on the lab, rescue Will, and defeat the demogorgon. She was willing to sacrifice herself to save others. Then throughout the series, Eleven has saved the world multiple times, warding off the Mind Flayer. Using nuclear science and technology, we can also save the world from climate change. What started out as a weapon, has now become the best chance we have to avoid impending annihilation. That's the way I see it, and the reason why I am such a fan of the show. I consider it a storytelling masterpiece.

You might be wondering if I work for any industry, or am just standing up for corrupt corporations and government officials. No, the only client I lobby for is planet earth. I have a genetic illness that will most likely take my life within the next decade, and I probably won't live to see forty. Money means pretty much nothing to me, as far as I am concerned. As someone who studied science in college, I am extremely concerned about the environment we will leave to future generations. The world has become a better place for the vast majority of people, but I am convinced that climate change is one of those things that can upend much of this societal progress. My niece and nephew are only four years old, and I want them to grow up in a wonderful future where people and the planet both thrive. My nuclear power advocacy is for them. This is what I am dedicating the rest of my life to, and literally try to save the world from climate change.

If you choose to take this on as something you advocate for, there are thousands of people in the movement that will have your back. There is also a large body of scientific evidence that supports it, even though some people reject such evidence. My organization, *Americans for Nuclear Energy*, is fledgling, and not super developed as an official non-profit. There are others you should check out, that are quite more official and known: *Environmental Progress*, *Generation Atomic*, and *Mothers for Nuclear*. I personally know people who work for all these groups. This could be a way for you to have a very large impact on the climate mitigation movement, advocating for nuclear science. Only if you find this issue interesting, of course! And who better to advocate for planet-saving technology, researched by the Department of Energy, than the kids from *Stranger Things*! A completely clean energy supply is in this country's grasp, and we can reject the pollution of the fossil fuel industry completely. We could really use the help of young celebrities like yourself to help mobilize the world's youth to secure a bright future for humanity and the planet.

Thank you!

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