**JOEL DEJEAN FOR CONGRESS**

**“A Positive Vision for the Future”**

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**Realizing the Promise of Fusion Power!**

**A Campaign Webcast with Paul Gallagher**

**September 21, 2022**

*In a series of video messages, Joel Dejean, the LaRouche Independent candidate for U.S. Congress from Texas’ new 38th Congressional District, continues to brings his views to the people of the District on the nature of the great crises facing the nation and the world, their solutions, and his commitment to implement those solutions.*

*This is an edited transcript of candidate Dejean’s campaign event on the internet. September 21, 2022. Paul Gallagher, a former Executive Director of the Fusion Energy Foundation and currently Economics Editor for* Executive Intelligence Review *magazine, is his guest in this webcast. Joe Jennings moderated.*

*Watch the video at* <https://youtu.be/xOkDNbgF1ys?t=119s>.

**Joe Jennings:** Good evening, everyone! Greetings from Houston, Texas. This is a special webcast presented by the independent campaign of Joel Dejean for U.S. Congress from the 38th C.D. The title of our event is “Realizing the Promise of Fusion Power,” a very big topic, as we will discover as the hour unfolds. This topic is as big as the universe itself. But Joel has taken the awesome challenge of bringing that universe, bringing the world, to the people of the 38th District, and thereby transforming this city, this state, this nation toward a future that hasn’t been created yet. We’ll be talking about fusion taking us there.

Before we introduce the candidate and our special guest, I’d like to give you a little progress report on the campaign, how it’s going. [Image No. 1: Joel speaking to an employee of Phillips-66 from behind a campaign literature table at a candidates’ availability Sept. 20.] Joel has been campaigning very intently, engaging in a process of education throughout the District. What you see here was something that happened just yesterday, at the corporate headquarters of Phillips-66 petroleum company, right here in Houston. Joel was there with some 23 other candidates, not just for U.S. Congress, but for various State offices. Republicans, Democrats, Libertarians, what have you. Educating them all in a very polemical, Platonic, and uplifting way.

Now, this [Image #2: Joel waving from the passenger seat of his campaign-mobile] shows how we’ve been taking Joel’s campaign to the streets. Joel is shown smiling from the window of a Jeep truck, which functions as his campaign-mobile. This photo [Image #3] was taken at the Pakistan Independence Day Festival. There have been sightings of this Jeep with Joel aboard at the AFL-CIO picnic on Labor Day weekend up at the Magnolia Farmers’ & Artisans Market in Houston, and up and down the streets of District neighborhoods.

We have a picture [Image #4] of Joel next to the South Texas Nuclear Generating Station, southwest of Bay City. That nuclear plant helps keep the lights on in this part of Texas.

There’s a couple of features about this sign. One says, “Joel Dejean. LaRouche Independent Candidate for Congress.” Joel, why not just “Independent Candidate for Congress?” Why do you assign yourself to be a LaRouche Independent candidate for Congress? At the bottom of the sign, it says: “Nuclear Power, Not Nuclear War.” Do we have to choose? Is it actually one or the other? That’s a paradox, and maybe Joel will answer this for us this evening.

I now turn it over to our candidate, Joel Dejean.

**Joel Dejean:** I’ll answer the question eventually, but that Jeep sure is fusion power!

Nuclear power is a great example of a concept that Lyndon LaRouche laid out repeatedly—that the discovery of a universal physical principle, when applied, can create an entirely new economic platform that increases mankind’s power over nature.

In September of 1905, three months after Albert Einstein published his Special Relativity paper, he published a 3-page paper with the title, “Does the Inertia of a Body Depend on Its Energy Content?” This short paper included for the first time the equivalence of Energy and Mass. You all know the formula “Energy equals Mass times the speed of light squared” (E=mc2). That idea, that principle, which occurs all over the universe, which powers the stars, is a key to our future. Einstein’s editor/publisher was Max Planck, who at the time was probably the only peer of Einstein. Luckily, Einstein didn’t have to submit to peer review as is done today. His paper would probably not be published today.

In 1938, an Austrian physicist named Dr. Lise Meitner, who happened to be Jewish, caught the last train out of Berlin for exile in Sweden. Her former colleague Otto Hahn, who had worked with her at the Kaiser Wilhelm Institute in Berlin, had a problem, because he was experimenting, like a lot of scientists at the time, with shooting neutrons (a sub-atomic particle without an electric charge, present in all atomic nuclei except those of ordinary hydrogen) into the heavy element Uranium. He was assuming and expecting to see a heavier element develop. [Shows Image #5: the Periodic Table of the Elements]

This is major. You probably remember this chart from your high school or college Chemistry class. On the top left is hydrogen (atomic number 1, meaning there is only a single positively charged proton and a single negatively charged electron in its atomic structure), the most abundant element in the visible universe. On the bottom right is the heaviest naturally occurring element Uranium (atomic number 92, meaning there are 92 protons and 92 electrons in its atomic structure).

There is no truth to the rumor that Global NATO is thinking of banning the Periodic Table because it was started by Dmitri Mendeleyev, a well-known Russian scientist. However, the Environmental Protection Agency (EPA) *is* *considering* getting rid of carbon, to reduce our carbon footprint. Looking at this Table, the more we have control over and are able to use various elements, the more power we have over nature.

Fusion is the combining of light elements to form heavier elements. That’s what goes on in all the stars in all the galaxies in the entire universe. The word “isotope” simply means “same place” on the Periodic Table. An isotope, therefore, is defined as each of two or more forms of the same element that contain equal numbers of protons but different numbers of neutrons in their nuclei, and hence differ in relative atomic mass but not in chemical properties. Hydrogen, for example, has at least three isotopes that we use: regular Hydrogen; Deuterium, which has a proton and a neutron; and Tritium, which has one proton and two neutrons.

It was easier for mankind to develop nuclear power in the form of fission, where a heavy element is broken up, releasing a huge amount of energy. During the Christmas holidays of 1938, Dr. Meitner and her nephew, Dr. Otto Frisch took data sent to her by Otto Hann, perplexed because he wasn’t getting the larger element he had expected by bombarding Uranium-238 with neutrons, and figured out that the reason why he wasn’t getting a larger element, was because the neutrons were inducing the Uranium to split instead. They called the smaller parts “fission fragments.” It was at that point that she figured out that not only was the Uranium splitting, but it was releasing a huge amount of energy which matched exactly what Einstein had predicted 33 years earlier.

Once that finding was confirmed, the race was on to use that power. Like most technologies, nuclear has dual use. You can use it for war or peace. In 1938-39 and into the beginning of what is known as World War II, the rush was on to get a bomb, based on the splitting of the atom.

To show you how fast things can develop, once the proof of principle was made, just a few years later, President Franklin Roosevelt committed this nation to what was called the Manhattan Project to develop nuclear power. In two-and-a-half years, we had come up with not one, but two methods of releasing this enormous amount of energy. Although it was used unnecessarily by Roosevelt’s successor Harry Truman in Hiroshima and Nagasaki Japan, after 1945, within six years, we had our first nuclear reactor for civilian power uses, and within only another few years, in 1954, under Admiral Hyman Rickover, we had developed the Nautilus, the world’s first nuclear powered submarine. So, developments were rapid.

At about the same time, Dr. Edward Teller, working at Los Alamos National Laboratory on the Manhattan Project, figured out that we could achieve fusion on Earth by using a fission bomb as a trigger to start the fusion reaction. Within a few months, that is by 1952, we detonated our first hydrogen device. Within 9 months after that the Soviet Union repeated that feat.

Both the fission work and the work on the fusion bomb immediately led these scientists to say, “We need to turn these weapons, these swords, into plowshares.” Ever since then, work has been going on to develop fusion.

Fusion is a much harder process. The Sun has 300,000 times the mass of the Earth. Its gravitational force provides the heat, the density, and the containment time, so that hydrogen can fuse to form helium.

There is a huge difference between chemical and nuclear power. It’s really unbelievable. [Puts up the Periodic Table of Elements again.] A chemical reaction is defined as the exchange of electron orbits between elements. Combining hydrogen with oxygen, for example, as the current space launches do to get those big rockets off the ground, produces something in the range of 10 electron volts. An electron volt is a unit of energy in the very small.

When isotopes of hydrogen, such as deuterium and tritium are fused with each other, over 17.5 million electron volts are released. So, we’re talking about 2 million times more energy released per reaction in fusion than in a simple chemical reaction.

Hydrogen combining with the oxygen, as a simple chemical reaction, of course, produces water (H2O). No water is produced when you use the hydrogen isotopes.

Since 1952, we’ve been working to achieve breakeven in fusion process, that is, to get more energy released than what it takes to get the fusing process going. And, we want to be able to release that energy in a controlled fashion. We’ve had thermonuclear fusion on Earth, but it’s been in the form an uncontrolled release in hydrogen bombs. Just to give you a comparison, the first fission bomb had the energy release of about 14,000 tons of TNT, whereas the first hydrogen bomb had an energy release of three orders of magnitude greater than the fission bomb. About a thousand times more energy was released by the hydrogen bomb. You can see the potential if you can control that.

Two methods have been developed to control the energy released in fusion reactions. I’ll go through that a little later.

Throughout the 1960s, the United States developed a civilian fission reactor program, based largely on the work done by our nuclear navy. The U.S. exported that knowledge to France, Germany, and to Japan—the latter two countries we had defeated in World War II. We were spreading our knowledge of fission science and technology all over the world through the Atoms for Peace program. At the same time, there were programs like Operation Plowshare to get fusion going. But fusion has been attacked.

Lyndon LaRouche immediately saw the potential of fusion. In the mid-1970s, he set up the Fusion Energy Foundation. I’ll now let my guest Paul Gallagher, who was instrumental in that, go through a little bit about what LaRouche was thinking when he formed the FEF, and its history in the 1970s and 1980s.

**Jennings:** Thank you, Joel. I’m glad you brought up Eisenhower and his Atoms for Peace program. That constituted an understanding going back to the discovery of fire. Each breakthrough has potentially a creative and a destructive application, depending on the intention of the user. I shudder when I think about that. When President Joe Biden addressed the United Nations today he quoted Harry Truman, of all people, who as President was the one who authorized the dropping of those fission bombs on Hiroshima and Nagasaki Japan—unnecessarily, as you said.

So, this is a real challenge, but also the difference between fission and fusion. Fission is breaking apart the heavy elements, but fusion is inherently creative.

I’m now going to introduce our honored guest Paul Gallagher. I actually have a copy, here, of *Fusion*, [Shows Image #6: the cover of *Fusion*] the magazine that the Fusion Energy Foundation had in public circulation for quite some time. This one is dated October 1979, with a cover title “Fusion by the 1990s?” Something happened in there, because the 1990s came and went and we didn’t get fusion.

[Puts up Image #7: a photo of Paul Gallagher pointing to a beam weapon destroying a missile.]

This is quite a significant photo in black and white. Here, Paul, then Executive Director of the Fusion Energy Foundation, is being interviewed on the CBS-TV Morning News program about beam weapons on March 24, 1983, the day after President Reagan’s SDI announcement. As *the* authority on this matter, representing the FEF, Paul was explaining to the nation the potential that existed in the Strategic Defense Initiative. We’ll get into this.

Here you see a number of issues of *Fusion* magazine. [[Puts up Image #8: three other *Fusion* covers: “Shock Waves,” “The Anti-Science Mob,” and “How Man Changes the Laws of the Universe.”] There was a time, particularly during the administration of Ronald Regan, when you could barely walk through any major airport terminal in the country without seeing some of our volunteers out there in the process of recruitment and education to these advanced scientific ideas.

Parenthetically, when I moved to Houston in the late 1980s, for one year, from April 1986 to April 1987, I handled the mailing and circulation responsibilities for this publication, which reached 225,000 subscriptions and individual readership before it was shut down by the federal government in 1987.

The May-June 1983 *Fusion* was a very special one. [Puts up Image #9: the May-June 1983 *Fusion* cover, titled “Beam Weapons Can Prevent Nuclear War.”] You can tell from the cover what it’s all about. I think Paul will develop the concept that beam weapons can prevent nuclear war.

With that said, I’m honored to welcome Paul Gallagher, who formerly was the Executive Director of the Fusion Energy Foundation, and today is one of the economics editors for the weekly *Executive Intelligence Review* magazine. He will be elaborating some on what Joel was talking about, and bring this into the present. Paul?

**Paul Gallagher:** Thanks Joe, and Joel. I would like to begin by referring somewhat to the history of the FEF, an organization and a movement in which both Joel and I were active during the 1980s, and also by doing so, refer to the reasons why the success of his campaign now is crucial for the economic revival, reindustrialization of the United States, and the development of a successful Moon-Mars mission. These positive developments depend exactly on the program and success of candidacies like his.

The Fusion Energy Foundation was begun in the 1970s by Lyndon LaRouche and a handful of fusion scientists. Once its publications—the monthly *Fusion* magazine, and the quarterly *International Journal of Fusion Energy*—became regular, the FEF became a movement of a sort which was quite potent. It reached a circulation by subscription of over 100,000 and more than double that in total circulation of copies. *Fusion* was second only to *Scientific American* in those years as the largest two popular science publications in the United States, and it also circulated widely in European countries in several language versions.

It was instrumental in the passage of the Magnetic Fusion Engineering Act of 1980, signed into law by a president, Jimmy Carter, who didn’t support it, but nonetheless made a statement Oct. 7, 1980, saying,

“Today, I have signed H.R.-6308, the Magnetic Fusion Engineering Act of 1980, a bill authorizing a magnetic fusion research, development, and demonstration program within the Dept. of Energy. The Bill establishes as a national goal, the successful operation of a magnetic fusion demonstration plant in the United States by the year 2000.”

Now, as I say, President Carter was not in support of that goal, but this Act was passed by a lot of popular mobilization. There was a postcard placed into one of these very-large-circulation issues of *Fusion* magazine—actually more than one issue—similar to the postcards that allow you to subscribe to a magazine like that or to renew, but this one was a postcard that the reader could pull out and sent to Congress. And the readers did so in such large numbers that the primary sponsors, especially Rep. Mike McCormick of Washington state, were given leverage in order to get through legislation that certainly was not supported, particularly on the Democratic Party’s side of the isle, but nonetheless gained bipartisan support and passed. And the president signed it.

The FEF in those years, with literally hundreds of thousands of engineers—as Joel was then—and small businessmen as its readership, became a very strong voice, unique in that it supported the rapid development of fission power—“nuclear power” as most people knew it. And, in addition, the as-rapid-as-possible scientific and engineering development of fusion power. The FEF was unique.

For that advocacy, the FEF was attacked, for example, by a group of public relations companies, calling itself the Nuclear Club of Wall Street. The FEF was attacked for supporting fusion, as impractical, something which would spoil their noble efforts for fission power. At the same time, the FEF was being attacked from within the nuclear-freeze movement of that day—the anti-nuclear-weapons movement of that day—for supporting fission energy. They thought the *idea* of fusion, not necessarily its realization, was great, but they were anti-fission.

The FEF barged right through this gauntlet with its hundreds of thousands of readers in support both fission and fusion’s rapid development, becoming a potent force in that direction. The FEF further supported all of what we call the plasma technologies—the technologies based on radiation, moving at relativistic speeds—lasers being the most commonly-known application, and at the same time plasmas—meaning elements which have become dissociated from their electrons, becoming a free flow of electrons, usually a result of extremely high temperature to which these elements were subjected.

Those plasma technologies were *infinite* in potential. They went far, far beyond the potential of a demonstration fusion reactor in 2000, and eventually, reactors producing thermonuclear fusion power, putting electricity onto the electrical power grid. These technologies otherwise were available, potentially, if they were rapidly developed for a vast range of uses, many of them have been, somewhat. Their development has been started since then, but the Magnetic Fusion Engineering Act of 1980 *was never funded*! Literally, was never funded with anything.

When fusion did not materialize by the year 2000, criticism was made, incompetently, that the Act of 1980 wrongly described fusion as an *engineering* challenge, when it was in fact still a *scientific* challenge and not yet an engineering challenge. That’s a very poor excuse for giving the Act zero funding as Congress did. But it is also scientific nonsense to make such a distinction.

The plasma technologies, among those which *have* been developed, and the many, many more which *could* be developed, range in the temperature at which they operate, all the way from industrial plasmas, usually in the range of 10-20 thousand degrees Centigrade, compared to the efforts toward creating fusion power reactions in a fusion device today, which requires raising the ionized fuel to temperatures of at least 100 million degrees Centigrade. It’s obviously very difficult to do that, hold it, and thereby make it a stable plasma at that temperature.

But there is an entire range of industrial and metals- and materials-treating technologies which use plasmas in the range of 10,000-20,000 degrees centigrade, not hundreds of millions of degrees, whose engineering is right in front of us and has been right in front of us now for decades. Some of these technologies operate with *room-temperature* plasmas, plasmas which, in part, where the free electron flow of those plasmas is actually at an entirely different temperature than the positive ions which are at room temperature or even below.

Those free electrons can be used in treating metals of all kinds. For example, they can be used in laser form. One of the most versatile lasers is in the process of being developed.

I will now take some time to go over two of the most important technologies which are there for the development of the U.S. economy and its revival.

First, laser industrial technologies, what Lyndon LaRouche back in the 1980s, in the midst of his, let’s say, agreement with President Ronald Regan, to launch the Strategic Defense Initiative (SDI), what LaRouche called “the worldwide laser industrial revolution,” as promised by the SDI, along with the development of fusion energy.

And secondly, the development of directed plasmas to propel particularly rockets through space at speeds unattainable with chemical-driven propulsion—speeds which would make crewed voyages and freight trips between Earth and Mars a matter of weeks, possibly even days, compared to the half-year, more like 9 months to a year, with chemical-powered rockets. The difference is essentially whether astronauts can go there, or not. Fusion propulsion would have been one of the most important things to come out of the SDI program.

These things would have been available us, had we developed and engineered the entire range of plasma technologies that were there to develop when the Magnetic Fusion Engineering Act of 1980 was passed, with the FEF as the driver for doing that.

Right now, for the campaign that Joel is conducting to succeed, and these kinds of industrial and space travel and space industrialization technologies to be developed, the U.S. would have to be re-industrialized at a much higher level that ever before, capable of exporting those technologies throughout the developing nations, transforming the process of industrialization those nations are still waiting for.

Two books indicate the opposing poles in this process.

One is by the well-known economist Robert J. Gordon. It’s from 2016, called *The Rise and Fall of American Growth: The U.S. Standard of Living since the Civil War.* A very big book; worth reading. It describes the development of each new technology in the history of this country and what it did to life, to production, to human capabilities in the country, as it spread. He proves a startling conclusion that the one new “technological revolution,” call it, in American history, in human history, which has not produced any major increase in productivity at all, is the so-called “Communications Revolution” or “IT revolution.” No increases in productivity of any significance as a result of the introduction of those technologies now for more than 25 years—really more like three decades. The evidence, when Gordon wrote his book, was already in.

The other book is called *Jump-Starting America: How Breakthrough Science Can Revive Economic Growth and the American Dream*. This book got a lot more publicity than Mr. Gordon’s book. It also recent, being published in 2018 by a couple of MIT economists, Jonathan Gruber and Simon Johnson. A very interesting book in that it went back to Franklin Roosevelt’s World War II committee, the Office of Scientific Research and Development (OSRD) which decided on which were the most important technologies to throw the effort into, to develop them rapidly, like Radar. It was extremely successful. The head of it was Vannevar Bush. After the war, he wrote a book called *Science, the Endless Frontier.*

This let in 2018 to a piece of legislation called the “Endless Frontier Act. Sen. Charles Schumer of New York and Sen. Todd Young from Indiana were the sponsors. When you look at Vannevar Bush’s book, you see all this interesting history, but when it comes down to the last two chapters, what should U.S. investment in new technologies go into in order to jump-start America, the answers provided are: information technology. Semiconductor chips, above all. That’s what it’s all about, and we have to defeat China in that regard.

What began as a big Endless Frontier Act, became instead the USA Innovation and Competition Act of 2021, also known as the Chips and Science Act of 2022, which basically reduces the U.S. industrial effort to better processes of making semiconductor chip, exactly what economist Gordon had shown, was the area in which productivity was *not* going to increase.

In contrast to that, the kind of plasma and laser technological revolution that Dejean is campaigning for, that Lyndon LaRouche campaigned for in the ’70s and ’80s around the Strategic Defense Initiative, is where a true reindustrialization at a higher level could come for this country.

**Dejean:** Thank you Paul. I was going ask Joe to remedy the fact that I never got my Oct. 1996 subscription to *Fusion* magazine. [laughter]

**Gallagher:** You’d have to ask the Justice Department about that, Joel. [laughter]

**Dejean:** Yeah, I bet they never read it.

Thank you for that overview. I actually listened live March 23, 1983 to President Ronald Reagan’s televised address to the nation on defense and national security—the Strategic Defense Initiative speech. Although Regan never mentioned LaRouche—and I had not then ever heard the name LaRouche, his ideas came through. I thought that it made the most sense to make the weapons that had been produced during World War II and during the Cold War that immediately followed, “impotent and obsolete,” by superseding them with technologies involving higher-level physical principles—new physical principles.

Even though the fusion program has been sabotaged these last 30-40 years, there has been tremendous progress on both coasts in both the magnetic fusion program and also the laser inertial confinement fusion program. [Puts up Graphic #10: the Lawrence Livermore National Ignition Facility.] It’s as big as a football field.

“Laser” is an acronym for “Light Amplification by Stimulated Emissions of Radiation.” It just so happens that the idea of a laser goes back to a paper written by Albert Einstein in 1917, in which he proposed the idea of stimulated emissions of radiation where an element or a molecule would be pumped up with either electrical energy or light energy, causing the electrons in that material to rise to a higher energy state and at the same time the electrons would come back to their ground state, thereby emitting a photon of radiation of the exact same wavelength and frequency. That was the birth of the laser.

The Lawrence Livermore Lab, set up by Dr. Edward Teller in the early ’50s, has been working on laser fusion since the late ’60s. On August 8, 2021, their National Ignition Facility, achieved a threshold of 70% of breakeven, and is still the biggest, most energetic laser facility in the world. It has 192 separate laser beams coming into a target chamber, hitting a small pellet in what is called a hohlraum chamber. The pellet contains a cryogenically cooled isotopes of hydrogen, deuterium and tritium.

That shot last August had an input energy of over 2 megajoules, producing quadrillions of fusion reactions, measured by the neutrons coming off of the shot. Its output was more than 1.3 megajoules, or 70% of the input. So, they’re very close to reaching break-even.

Over the last 30-35 years, there have been tremendous breakthroughs in lasers. Back in 2018, a Canadian woman was awarded the Nobel Prize in Physics for her work with her doctoral adviser Gérard Mourou. They developed a technique, called *chirped pulse amplification* to amplify the laser by stretching out the signal, amplifying it, and then compressing it. That technique has led to table-top lasers with a peak-power.

Power is defined as Energy divided by Time in seconds. So, if you can produce a short pulse of a few nanoseconds, or even a trillionth of a second (a picosecond), you can have peak power equivalent to ten times the entire electrical capacity of the U.S. electrical grid. These petawatt lasers, as they are called, are being used now for rapid-fire—ten shots per second—in a laser confinement fusion machine.

At the same time, over in France, a consortium of 35 nations— including all the European nations, plus China, Russia, South Korea, and Japan—is assembling what’s called the International Thermonuclear Experimental Reactor (ITER). This is an experimental machine is supposed to produce its first plasma in the coming three years, with the first real fusion experiments between 2025 and 2035. Its goal is that with 50 Megawatts of input power, output 500 Megawatts of power over 10 minutes. As you can see, [puts up Graphic #11: ITER] this is a huge machine, about 23,000 tons. I repeat, this is an experimental device. You wouldn’t want it sitting in your backyard.

Dozens of companies across the U.S., in Australia, in Britain, and in China are working on magnetic confinement, using what are called high-temperature super-conducting magnets. When I say “high-temperature,” I’m not talking about room temperature. I’m talking about the temperature at which the gas nitrogen is in its liquid state, 77° Kelvin, which is about -320° Fahrenheit—colder than any temperature achieved in Antarctica during its winter.

That type of high-temperature, super-conducting magnet, instead of being the size of the ITER, could be the size of a small truck. In Boston, former MIT engineers and scientists are putting together a machine that should get us some results in the coming couple of years.

In regard to propulsion, about five years ago, I visited a small company right next to the Princeton Plasma Physics Laboratory. They were then working on a propulsion concept, where instead of having a torus (donut-shaped) plasma chamber, the magnetic confinement would take place in a geometry of a solenoid. They are using something where the plasma basically organizes itself. It’s called *field reverse configuration*. They are proposing to use deuterium, which can be sourced from ordinary seawater in the ratio of one molecule for every 6,000 molecules of water. So, there’s plenty of it around.

When combined with Helium-3 (3He), which in the Apollo program we discovered was abundant on the Moon’s surface,

It would take some work to mine and ship it to Earth. But using 3He instead of tritium would result in reaction products which include a positively-charged alpha particle (the nucleus of helium), and a positively-charged proton, instead of neutral neutron particle. Since they are charged particles, they can be controlled by electric and magnetic fields.

This [Graphic #12: Princeton Satellite Systems fusion rocket] is a 1 megawatt, a small, magnetically controlled deuterium-3He fusion rocket, where the reaction products could be exhausted through a magnetic nozzle. That exhaust could provide the thrust for constant acceleration, for example, between Earth orbit and Mars orbit.

This is what Lyndon LaRouche called for in the mid-1980s. His presidential campaign broadcast ½-hour TV program called *The Woman on Mars*. In that program he called for working on these plasma and laser technologies. He called for building a fusion rocket that could take us to Mars in a few days with a constant acceleration of 1-gravity (1g), which works out to 9.8 meters per second squared. Halfway to Mars, the spacecraft would turn around and slow down, at the same rate. The idea is to get to Mars orbit, not smash into it! [laughs]

In that same program, LaRouche discusses how this fusion rocket would be in the range of one trillion watts. Wow! One trillion watts, the capacity of the entire U.S. electrical grid, in a single rocket engine. So, you can imagine that if we can develop that power for rocketry, we will have absolutely no problem with water desalination, power needs, recycling. We could have a *fusion torch*, enabling us to recycle all the elements of the Periodic Table.

It just so happens that a couple of months ago, somebody wrote into Princeton Satellite Systems, asking “How fast can we get to Mars with a 1g acceleration, and what would be involved?” Stephanie Thomas, the Vice President of the company, with whom we had met about five years ago, took the time to make the calculation and put it on their website. Her estimation was that a rocket accelerating at one-gravity and then decelerating to get to get to Mars orbit, will get there in a matter of days. Her estimate was that the power of this rocket engine would be in the range of 2-2.5 terawatts, right around the range of what LaRouche called for back almost 35 years ago.

If the FEF had not been illegally shut down by the George H.W. Bush federal government, and if LaRouche had not been thrown in prison, but instead had been elected to the Presidency, we could have had a successful forty years Moon-Mars mission that would have spun off the technologies that would have increased the productivity of labor in this country and around the world over 10 times.

That is what LaRouche was calling for back in 1988. That is why I joined his campaign back then, and that is what we should be striving for now. Obviously, this cannot be accomplished overnight, but with the breakthrough that occurred at Lawrence Livermore just a year ago, if the breakthroughs that are occurring with the petawatt tabletop lasers, and the breakthroughs with the high-temperature superconductors, we could see in the coming years, not decades, but coming years, breakeven, where more energy is produced by these experimental devices than it takes to get the fusion going.

If we collaborate with China, instead of trying to bomb them over Taiwan; if we collaborate with Russia, instead of trying to stab them in the heart with this Ukraine fiasco, we could be well on our way to having controlled thermonuclear fusion over the coming decade. And, if we do that, then we can be exporting these types of devices to countries that today don’t even have electricity.

Last year, I proposed that the country where I was born, Haiti, where 75% of the power comes from charcoal. Half the people there have no access to electricity. The same is the case for the Democratic Republic of Congo (CRC), except that 90% of their energy comes from charcoal.

If we could bring these countries up to not just gas turbine, but nuclear and eventually fusion reactors, we could uplift these countries and uplift this country. That would be the way to peace instead of these constant wars that NATO has involve us in.

**Jennings:** We welcome your questions. Using email, send to joeldejeanforcongress.com, and we will entertain them in the order they are received.

One thing that may shock your memory, Paul: Mike McCormick was a Democrat. Even though Jimmy Carter came into office as the first truly green president, in recent memory anyway, to run a wrecking ball against that commitment to scientific progress, particularly within the Democratic Party, there was still a broad base for nuclear power, including here in Houston. I’m thinking of Jim Wright, and others.

I was reminded of this just last week when my wife Betty and I went to Rice University to attend a celebration there of the 60th Anniversary of President John F. Kennedy’s announcement of the manned Moon effort with its base here in Houston—NASA’s Manned Flight Center. As Kennedy said then, regarding Apollo, we can say that today regarding fusion: we don’t do it because it’s easy, but because it’s hard; because we have to overcome poverty, ignorance, backwardness.

We’re witnessing this transformation—in places where you might think this would be very unlikely —in such places as Bolivia, for example which has a frontier effort to look not just at nuclear, but also at fusion. The world is moving toward a new paradigm that Lyndon and Helga LaRouche have said is required, of cooperation around scientific advance.

But it takes people of vision, like Joel Dejean to articulate how to make this possible. A poor county like Haiti, for example. Do they have to crawl up, step by step, from the 19th Century through the 20th Century? No! They are human. They can develop these capabilities there. They are our neighbor. We should welcome cooperation with them in this.

Paul, please give us your comments on what Joel has said.

**Gallagher:** Although based on statements publishes earlier, in the last 10 days or so, we have from China news of a hybrid fission/fusion reactor. This is an idea that the FEF wrote about and promoted *many* years ago—that is, combinations of fission and fusion reactor development, combining the magnetic confinement route to fusion, better known as the tokamak route, with the laser, or inertial confinement strategy which Joel described in detail.

In that Livermore experiment, they’re also doing that. I won’t try to give an engineering explanation of that, as it would take some time to do so. But the Chinese announcement was that they have a set a goal of 2028 to be using a certain kind of fusion reaction known as a reverse field pinch—specifically a Z-pinch, or Zeta-pinch—to use that kind of a nuclear fusion reaction, not to produce power, because they don’t expect that by 2028 they will have their device capable of producing net power to feed into an electrical grid. No matter. Rather to use the pulse power from that reaction to reprocess the fuel for nuclear fission power plants, much more rapidly and efficiently—because at a higher temperature—than it’s done now.

In other words, to foster what China is trying to do in any case, which is to rapidly increase the impact of nuclear power overall in their electricity grid. China currently produces about 4,000 kilowatts of power per year per person. That’s pretty high. It’s not quite at the European level; it’s not near the U.S. level, but the Chinese territory is certainly much more densely populated than the United States.

The effective availability of power in the U.S. and China is high, and that is giving them the high productivity of their of new technologies, such as their world-famous high-speed rail grid and now magnetically levitated trains. China is attempting to increase rapidly the share of nuclear power in their overall electrical grid, as they reduce the share of coal and oil as fuels for electricity. China doesn’t use much natural gas to produce electricity.

To do this requires the production and reprocessing of the nuclear fuel very rapidly, very efficiently. Even though China has 40 or 50 fission reactors, either online or near online, these reactors are still in the single-digits as a percent of China’s total power generation. So, they want to increase that very rapidly. They can use this pulse power breakthrough in reverse field pinch fusion device engineering, to provide the fuel and reprocess the spent fuel for this purpose.

This is exactly what a high-tech industrialization would involve in the so-called developing countries, including in countries as badly oppressed now as Haiti; and what would be involved in a real re-industrialization of the de-industrialized U.S.

These things have been there to develop since the 1980s, and that was LaRouche’s idea, both with initiating the FEF and also his work, in a sense, making a partnership with President Reagan. President Reagan definitely was thinking of that as nuclear power, rather than nuclear war. This was taking place in 1981, ’82, ’83, when there was such a threat of nuclear weapon exchanges in Europe between exchanges in Europe, of between the SS20s of the Soviet Union, and the Pershing missiles if the U.S.

The launch-time was so short. It was so near even an accidental triggering of a nuclear war in Europe that there were mass demonstrations in the streets of European cities, demanding that nuclear weapons *and* nuclear power be done away with. President Reagan was quite conscious at that time that his alternative was nuclear power, not nuclear war—nuclear power to make nuclear weapons, in his words, “impotent and obsolete.” For that, he seized upon the policy that LaRouche had been promoting for six years, since 1977. That led, not only to the diffusing of that immediate crisis, but also to a series of arms control agreements which were important in themselves.

This is the kind of thing that fusion engineering involves. Plasma engineering involves the kind of thing that Joel is talking about reintroducing into the U.S. economy, and for the developing countries.

**Jennings:** It’s quite a history! One in which Paul and, in my own small way, helped bring about. I know we were on the streets ag the time. We even organized a march on Washington in 1985, as President Reagan was entering his second term. I think it was 10,000 people there. “Feed Africa and Build the Beam,” was one slogan. It was in the context of Martin Luther King’s birthday, that cold, cold January 15, but we organized massive support for the idea that if we could move beyond the era of Mutual and Assured Destruction (MAD) through a mutual conversation around *preventing* of nuclear war, through the development of what LaRouche called “a higher peace movement,” then we could cooperate to overcome poverty, hunger, and disease everywhere.

We have a question now from John of Babel Technology Services, who asks Joel,

“Is there anyone at all in the Congress at this time who has *any* vision in this regard? Also, did President Trump *ever* say anything about fusion?

**Dejean:** The good news is that there is a Fusion Caucus in the Congress. Last November, the Congress invited to speak top scientists from the National Ignition Facility, Boston Commonwealth Fusion Systems, some from Oakridge National Laboratory. They gave a three-hour seminar, in the Congress, on the prospects of controlled thermonuclear fusion in the coming decade. There was even a White House session on this last March.

So, there is an openness to fusion. A lot of it, however, is confused with the idea that this would be a good way to get rid of our carbon footprint. But it’s something that’s so positive, so inspiring, like the space program. Even Democrats and Republicans who are numskulls when it comes to war with Russia and China are still enthusiastic about the space program and about fusion. There’s a handful of Congressmen. Not enough, but a handful, who see the advantage of pumping money into fusion.

The problem is that they’re stuck in the old paradigm of the Federal Reserve system, of massive budget deficits. They don’t have any idea of how to finance such a great project. Which is why they need somebody who knows the Four Laws of Lyndon LaRouche: Glass-Steagall, nationalizing the Federal Reserve, making it into the Third Bank of the United States, providing long-term low-interest credit for great infrastructure such as high-speed rail, and water projects; and a crash program for fusion.

The problem is not the science of fusion. One of the companies I mentioned has had contracts from NASA—the NASA Innovative Advanced Concepts (NIAC) Program, which is just a few million dollars. This company is now resorting to a GoFundMe campaign to finance the next step of their research. This is a disgrace! We should do like China and invest in hybrid fusion designs. But China is also looking at the Moon. They just reexamined some lunar samples that the Chang’e 5 mission brought back about a year ago. They have found not only water, but helium-three (3He). China is focussed on 3He, which, as I said earlier, is *abundant* on the Moon—over a million tons of 3He, compared to a few thousands of tons, here on Earth.

So, China is looking at using the Moon as a fuel station for advanced fusion reactors. If the United States had any sense, we would be imitating China, which is, in fact, imitating the American System. We should collaborate with China in this.

**Jennings:** When I was this event at Rice University, I was sitting next to some NASA contractors whose work involved using robotics to drill into regolith of the Moon and see what’s there. Even though, officially, we’re not allowed to talk to China, they were happy when I brought up the fact that Chinese scientists had even discovered a mineral not previously known.

Now, the second half of John’s question was about Donald Trump. To your knowledge, did he ever say anything positive about fusion?

**Dejean:** Not directly. He did, however, propose to accelerate the small modular reactors, but I don’t remember him specifically talking about fusion. The only bright spot I remember is during his last year in office when he travelled to Davos, Switzerland and spoke at the World Economic Forum. There, he used an image of the dome of the Florence Cathedral, which happens to be on the cover of Lyndon LaRouche’s book, *The Science of Christian Economics*.

So, I believe he could have been steered in the right direction. Unfortunately, he was surrounded by traitors like Michael Pompeo [who served as CIA Director 2017-2018, and as Secretary of State 2018-2021] and Steve Bannon [who was chief executive officer of Trump’s 2016 presidential campaign, and chief strategist and senior counselor to Trump following his election], who told Trump that he would get re-elected by attacking China, instead of working with China.

While Trump made some positive moves in the direction of more fission nuclear reactors, he dropped the ball, literally, when it came to fusion and working with China.

**Jennings:** Wasn’t it during the Trump presidency that there was a hurricane in Puerto Rico? We’re just now witnessing a devastating hurricane today [Hurricane Fiona]. Didn’t even [former Governor of Texas (2017-2019) and Secretary of Energy (2017-2019)] Rick Perry have something positive to say in terms of the possibility of floating nuclear power plants off the coast off the coast of Puerto Rico? That proposal didn’t go anywhere, but the idea is certainly legitimate, don’t you think?

**Dejean:** Rick Perry was a far better Energy Department Secretary than he was Governor.

**Jennings:** Yeah, unfortunately. That’s when the windmills started sprouting up.

We have a question from Ron Either of you can take it up, but it’s addressed to Joel. “You mentioned the Atoms for Peace program, which projected 1,000 nuclear fission plants for the U.S., 1,500 more for export to the world. Only 110 were built in the U.S. The program was sabotaged by a “non-proliferation” argument by networks that were the seeds of the so-called “neo-cons” later. Can you comment a bit more on the “non-proliferation” argument, and the disinformation parallel today regarding science, Russia, and China development? In other words, the argument that anything nuclear is got to be bad—using that to sabotage peaceful development and cooperation.

**Dejean:** President Jimmy Carter, was supposedly trained at the Annapolis Naval Academy as a nuclear engineer. He even worked under Admiral Rickover, the father of the nuclear navy. But Jimmy Carter pushed through this “non-proliferation” nonsense, saying that if we give these countries nuclear reactors, they will be able to extract plutonium, reprocess it, and make bombs out of it. To do that requires a lot of very sophisticated operations. It’s not something that a small country can do easily.

So, Jimmy Carter, who was forced to sign the Magnetic Fusion Engineering Act, sabotaged our nuclear program with his “non-proliferation” stand.

The way to deal with proliferation is by reprocessing all the spent fuel that is the result of the nuclear reactions. 95% of spent fuel is U238, which can be reprocessed. Yes, it was sabotaged, using the excuse of non-proliferation, and it was done under the Carter regime.

**Gallagher:** It was the Atomic Energy Commission was the agency that actually made the projection you mentioned, in what was called the Seaborg Report. Dr. Glenn T. Seaborg was the Chairman of the AEC at that time. They made that projection by starting from the amount of electric power that the average American had at his or her disposal in the course of a year. At that time, it was between six and seven thousand kilowatt hours per person per year. That defined a standard of living, because electricity is the most important machine-tool, and the most important mechanical handmaiden of human life, and has been since the beginning of the 20th Century.

So, that defined his standard of living. Their thinking at the AEC was that if this many—really, in their first draft of the Report, they said 7,200 gigawatts—that’s 7,200 times a thousand megawatt plants. If that many nuclear plants could be built in the world by the year 2000—this was, roughly, 1950—then the entire world population, by 2000, would have the electricity use and therefore the standard of living of a U.S. citizen in 1950. You could say that that was the most noble goal of the AEC, and of the Atoms for Peace program of the Eisenhower administration.

The questioner said that nothing like that ever happened, but consider: if it had, then at this point, all of the lecturing, like Barack Obama’s telling the African youth leaders at a town hall event June 29, 2013 in Johannesburg, South Africa:

“Ultimately, if you think about all the youth that everybody has mentioned here in Africa, if everybody is raising living standards to the point where everybody has got a car and everybody has got air conditioning, and everybody has got a big house, well, the planet will boil over—unless we find new ways of producing energy.”

He told them that if their people wanted air conditioning and automobiles, then the planet would boil over, so they should forget about it.

All that kind of colonialist, Malthusian, and almost genocidal lecturing that is directed against the Third World, just wouldn’t be there. They would be at a reasonable standard of power and human living standard right now, and it wouldn’t have anything to do with anybody’s “carbon signatures,” or anybody’s emissions, because it would be achieved by nuclear power, which was the only way it *could* have been done. It was the only kind of resource that existed that could have been used, and the only technical process that could have been used to achieve that.

That’s the kind of goal we had in the FEF. We immediately adopted and promoted widely that idea, although it was by the time the FEF was founded, it was already nearly 25 years later, and it was clear that the Seaborg Report’s recommendations were not being carried out.

That is *still* the commitment of people associated with Lyndon LaRouche, namely, that that transformation, industrialization, and power to the developing sector should be achieved. Without it, you’re just not human.

**Jennings:** I agree. Because you are admirably serving as Economics Editor of *EIR* magazine, and because Joel is talking about these big projects, what pops into people’s heads, is “Wow, that’s a lot of money. That costs so much. We’ve got all these problems. Can we afford such projects?” In terms of LaRouche’s conception of physical economy, what about the windmills? Isn’t the wind “free”? Isn’t sunlight “free”? Isn’t that the way to go to save money? We can have all this “free” wind and “free” solar. As Barack Obama said, “We don’t need that fancy fusion.” That’s what one of the things he said when he first came into office. Can you make just a little bit of cost-comparison, in terms of the physical output from these more diffuse sources of power which are being promoted down here in Texas?

**Gallagher:** It’s best to put it in the form of a chart. I’ve done that and our audience can see it every easily. A nuclear power plant is typically cited on an area of about a square mile of land. What I call the *power efficiency*, that is, actual, delivered electric powerthat such a power plant will generate and deliver into a grid for use, over the course of a year is more than 10 times the quantity of electrical power than that from a wind-turbine farm of a comparable footprint. You can choose any other period of time you wish, but a year tends to be the period in which both the U.S. Energy Information Administration (EIA), and the OECD’s Nuclear Energy Agency (NEA), keep track of such things. For photovoltaic panel arrays, the comparison is even greater in favor of the nuclear plant.

Both wind turbines and photovoltaic panels spend so much time when they’re not, in fact, generating any electricity at all—when they’re offline, when the wind isn’t blowing, or when the sun is not shining. Such a case is what is called a “cold calm” (*dunkle Ruhe,* in German). Germany, the guinea pig entire world as far as installed wind- and solar-derived power is concerned, has experienced a lot of “cold calms.”

So, that’s really what you might call the “mathematics” of it. Look at Puerto Rico, which just experienced this very drenching rain [Hurricane Fiona] go through, the second time in five years, with exactly the same result. Why? Because exactly the same company, LUMA Energy, an American-Canadian company, which has been heavily involved in deregulating the electrical grid and the shift to wind-power in Texas—was given the responsibility to restore the power in Puerto Rico.

This is just craziness! LUMA Energy was given the responsibility after Hurricane Maria in 2017 for developing the generation side of the power of Puerto Rico, which everybody knew had an old and miserably ineffective power generation and distribution system. LUMA was given the responsibility, but have done absolutely nothing. They’ve been completely incompetent. Puerto Rico has blackouts all the time. They don’t need hurricanes for this. They’re *always* in blackouts.

Because of the philosophy of deregulation, combined with trusting wind and solar—which is what this company represented—will produce this kind of disaster every single time. And, it will produce the kind of living standard which should not be, but is, associated with so many areas in the Caribbean, South America, Sub-Saharan Africa, parts of Southeast Asia, and the Middle East. This just should not be! It is a travesty to do things this way. When the power sources which could actually have given humanity as a whole the kind of a living standard that Americans had in the middle of the 20th Century at least, that has simply been thrust to the side.

**Dejean:** Anybody who lived through the Great Texas Freeze of February 2021, and still has faith in windmills and deregulated natural gas power, has got to be a total moron. Texas is rapidly heading toward the levels of Third World nations like Haiti, and, unfortunately, like most of Africa, where people have very little access to electricity—unreliable when it is available—instead of having a developed infrastructure, including water management and electricity.

Again, unfortunately, President Biden’s reaction to the failure of Texas’ land-based windmills, is to propose off-shore windmills, which is going from the frying pan into the fire. Hopefully, the shock of what’s about to happen in Europe come winter, where they are committing suicide by cutting off Russian natural gas, shutting down their coal-fired and nuclear plants, and instead going with wind and solar. Hopefully, the shock will wake up enough Americans before it’s too late.

**Jennings:** When that cold snap happened in Texas, you and I kind of dipped into the 19th Century for a little bit. You came over to my place and we had a hamburger charcoal cookout in that bitter cold February. That’s all we could do! [laughs] It was kind of strange. We made it through, but what you have said about being a shocking reminder is true. There is something called *physical economy*. You can be a millionaire, and still go hungry if we lose the capacity to produce electricity, which runs the farms, which transports us, which powers hospitals—what’s necessary for human life.

In the introductory conversation that Joel put forward today, he said that every star in the universe, our sun, the galaxies that we’re discovering more and more of with the James Webb Space Telescope [puts up Image#13 from the JWST of a sky full of galaxies], each one a fusion reactor. And that should inspire us. God did give us a prerogative to have dominion over Nature, which doesn’t end on planet Earth. [puts up Image #14: an artist’s conception of a construction site on the Moon]

I think we are kind of duty bound to figure out this problem, don’t you think so, Joel?

**Dejean:** Absolutely! I use the comparison in that article that was linked to in the Invitation to this webcast, that if you think of how long man dreamed of having powered flight, for a long time, thousands of years. For a long time, all we were able to do was use hot air balloons, gliders. But now, in the United States, two million people, *every day,* board an aircraft to fly at 600 mph to either go half-way, or all the way across the U.S. and beyond.

So, if you think of what we did with man-powered flight, from the Wright brothers in 1903, to landing on the Moon, a mere 66 years later, gives you an example of what mankind is capable of doing. Similarly, achieving controlled thermonuclear power should be a cakewalk.

**Jennings:** Paul’s been in this fight for a long time. When I was Circulation and Subscriptions Manager for *Fusion* magazine, it wasn’t just the subscribers that had signed up for single issues. We had people who generously supported the FEF to allow us to reach out to others, and through my department, we were sending out single copies and subscriptions in the way of gifts that went to every single congressional office, that went to colleges and universities. We were running out of them. To high school libraries. A mass-dissemination of advanced ideas.

You can understand why the oligarchy, that *Sir* George H.W. Bush represented, because they wanted to dominate a Hobbesian world of scarcity and finite and dwindling resources, wanted to get rid of the FEF and what it represented.

*Fusion* magazine had articles on developing Africa, on lighting up the continent. It’s *all* possible. There is no *objective* reason why this could not be done today. There are *subjective* reasons, a lot having to do with the pagan belief in money. Credit is a funny thing. Credit applied toward productive investment pays for itself.

Paul, do you have any final comments to make, as we wrap up this discussion?

**Gallagher:** You refer to the shutdown of the FEF and its *Fusion* magazine. All that was only part of the reaction against Lyndon LaRouche’s having successfully brought the possibility of a real collaboration between the U.S., and at that time, Soviet Union, overcoming the threat of nuclear war, by jointly working on these frontier laser and plasma technologies for the benefit of their own economies and for the developing countries. When President Reagan took big steps in that direction, LaRouche was subjected to *immense*, constant slandering persecution.

The FEF had been, perhaps, the primary publishing vehicle by which the Strategic Defense Initiative—that breakthrough by LaRouche—had been prepared. September 8 would have been Lyndon LaRouche’s 100th birthday. There is a concerted celebration of that which has been going on since immediately the days before that date, and is still, in a way, being celebrated, because we’ve learned, by their public statement from one of the economists who is a prominent member of the Eurasian Economic Union’s task force on forming a new global monetary system, a new economic system, a system of payments and credit, which is being worked on among the nations of Eurasia at this point. One of the leaders of that effort, Sergey Glazyev, the Russian economist in that EEU group, made clear that they are relying on LaRouche’s work in order to do that.

At this point, the path from here to a successful new international financial-economic system which enacts the equivalent of the U.S. Glass-Steagall Act, separating the commercial from speculative banking functions and which puts credit into reindustrialization—that path is now clearly being walked along with Lyndon LaRouche’s work as the guide. Today’s celebration is proof of just what an extraordinary contribution his life was.

**Jennings:** What Paul just said is true, but most Americans are unaware that to the extent that America has abandoned a development-based foreign policy, a policy that says the way to make friends in the world is to empower them to be the instrument of their own development. If we are trying to impose “green,” regressive policies on the world and enforcing those policies through threats of military destabilization, occupation, and even—as NATO is doing—nuclear war.

There is the Royal Institute of International Affairs, also known as Chatham House, the think tank of the British oligarchy. In King Charles III, we now have a Green Prince now ascended to the throne, the same guy who chaired the COP-26 Climate Summit in Glasgow, Scotland last year. Addressing that event Nov. 1, 2021, this Charles has said that a military effort will be needed to impose green policies on the world:

“Climate change and biodiversity loss ... pose an even greater existential threat to the extent that we have to put ourselves on what might be called a war like footing.... We need a vast military style campaign to marshal the strength of the global private sector, with trillions at its disposal far beyond global GDP....”

You can’t get clearer than that. Joel has put this in the center of his campaign, as well as has his New York co-candidate, Diane Sare, who’s running a very high-profile campaign against Senate Majority Leader, the Democrat, Chuck Schumer.

Nuclear power. Light up the world, through peaceful use of these advanced technologies, to assert dominion over Nature, or nuclear war. Joel has friends in New York City who have been bringing this message to the United Nations in its General Assembly deliberations this week. We had teams of dozens of people demonstrating that kind of commitment to development, and that if the U.S. will not provide it, because of its obsession with world dominance, I’m sorry, the other nations of the world will go elsewhere. They’re going to leave the dollar system itself.

But the world cannot exist that way. As President Abraham Lincoln once said, “A nation divided against itself cannot stand.” You can’t have a Malthusian, Dark Ages system in one part of the world and in the other half economies flourishing with the Belt & Road, a pro-progress tradition. LaRouche has been involved in the process that’s bringing this new paradigm into existence—in China, in Eurasia. Sergey Glazyev, as Paul mentioned, is very much an admirer of LaRouche’s role in reawakening Russia, a new understanding of their real history.

Our job, the role of Joel Dejean, here in Houston, and Diane Sare up in New York, is to bring that culture of progress, which used to define us as Americans, back to life.

We’ve covered a lot of territory, here. Joel defined himself, as we say in every piece of literature we’re getting out, “Joel is a man with a positive vision for the future,” which is what you have to have, to have the optimism to go out and organize and educate every single day. This is the reason why Joel is my friend. That is why he has been part of the LaRouche movement all these years.

I’ll leave it up to either of you gentlemen, if you have any closing remarks.

**Dejean:** The Promethean myth should be our guide, because Zeus—now represented by King Charles III of the British Empire—is a dying system. It was altogether fitting that Queen Elizabeth II, who was on the throne for 70 years, who therefore must have been the most constipated woman in history—died on the 100th Anniversary of Lyndon LaRouche’s birth. It’s time that we bury Zeus and the British Empire, and go back to the tradition of Prometheus, who brought fire to mankind. Now, he’s bringing the fire of the stars for man’s use throughout the planet, throughout the solar system, and throughout the galaxy.

**Jennings:** Yes. That is what we’re all challenged to be—to bring that Promethean spark to our fellow human beings—what Friedrich Schiller called the *Gӧtterfunken*—that spark of creativity, which is the real source of wealth, and which will enable us to master fusion.

Please send your questions to joeldejeanforcongress@gmail.com. We will be happy to take them up and open up a dialogue with anyone who’s out there. For the time being, we’re going to sign off. We really thank you very much for joining us. We especially thank Paul Gallagher for being with us this evening. We hope we’ll be seeing you at a future webcast. We hope you’ll reach out to our campaign. Contribute to help us put Joel’s message out there. We’re now into a six-week sprint until the November 8 general election. Open some doors for us, for Joel to get his message out in the 38th CD, in the greater Houston area, in Texas, and by extension, the world.

Good night!