HELIOHYDROELECTRIC LETTER TO OBAMA February 2014

PRESIDENT OBAMA: I hereby formally request that you do an EXECUTIVE ORDER to have the Army Corp of Engineers review construction of HELIOHYDROELECTRIC technology projects. This is where you pump seawater inland to flood now existing dry salt lakes with seawater, or pump from underground Alkaline/Salt geologic formations. By flooding the world's nearly 100,000 or so dry salt lakes, you would ineffect put nearly 10 cubic miles per day of artificial rain in the world's deserts. Thus reversing desertification. The additional rainfall would stimulate vegetation growth in deserts and nearly by mountains, and thus removing CO2 gases from the atmosphere.

In the USA alone there are nearly 7,000 dry salt lakes in the American West that can be flooded with solar and wind power pumps. Many of these dry salt lakes have huge Alkaline/Salt water geologic formations underneath. In fact, in the American West there is a huge ocean of salt water, you can float a submarine from New Mexico to Utah. By using solar and wind pumps, it would put by my estimates nearly 1 cubic mile of fresh rain water in the atmosphere on a daily basis... thus ending the drought in the US West. As you are aware, California has declared a drought emergency, Texas is not far behind.

These lakes are not entirely dead. But do grow algae, which can be converted into cattle feed and also diesel fuel. If fully developed, the biofuel grown from algae could power the entire USA diesel needs. These flooded salt lakes are also rich in rare metals, like gold, silver, manganese, selenium, etc that can be electrolytically mined. If done so, I envision a day when we would return to the coin standard for currency with the \$10 silver coin, the \$100 gold coin, and a new coin based on rare metals. It would solve the rare metal shortage.

Some of these projects worldwide are below sealevel. Israel, in cooperation with Jordan and Palestine are building two pipelines from the Red Sea to the Dead Sea. They see it as modifying the climate, by adding additional rainfall in the area. Now when have you ever heard of these cooperating before? As water flows downhill to the Dead Sea, it generates electrical power.

Other below sealevel projects exist. The Saltine Sea, which is now polluted, could have dual pipelines built from Baja to the lake, generating electrical power. This would help modify the climate in Southern California, and should not affect Death Valley. One pipeline would generate power for San Diego, the other for Mexico.

The Quatarra Depression Project in Egypt, may actually bring stability to the country. This area below sealevel could pipe water from the Mediterranean Sea. The electricity generated then could pump additional sea water inland to Egypt's interior. On the Western Side of the country, there is an ancient dry river system, that could be restarted. This would provide the younger generation a future. A similar project could be done for Libya, and also for Algeria. Already in Erithea, the ocean is trying to cut through a volcanic formation, flooding an ancient dry lake bed. The Sahara Desert has nearly 50% of the world's Heliohydroelectric potential, by my estimates.

Australia is right now in the grips of a huge drought, killing wildlife. Already there are dry salt lakes that do flood when a monsoon comes through. By pumping seawater inland using solar and wind technology, it would modify the climate and also help wildlife. Similar projects can be done for China, Mongolia, South Africa and Mexico. This would help stimulate the economies, and provide employment for nearly a billion people.

This is actually no more visionary than what TVA was during the Roosevelt Administration. A little history, Tennessee looked like New Mexico with all the environmental destruction. Roosevelt built these, bringing the USA out of a depression. In those days, we called Oklahoma, the Dust Bowl...today we call it the Sahara Desert.

I wish to emphasize your diplomatic problem with Syria isn't political. IT IS THE WATER. Syria is in the mist of a huge drought, with the country is literally committing suicide over lack of water. If you got the parties to just talk about solving the water problem, I believe you will find a solution. Iran for example, has a huge drought, with Lake Urmia dry. If for example, as part of the diplomatic conversations, you instruct Kerry to focus on HelioHydroElectric technology, where we pump seawater inland to Iran, you may find a common core. We could trade with Iran, oil for US technology to build the salt water projects. Iran and the US need a good project to cooperate on.

Of interest, if these projects were fully developed, it would remove pollution and radiation from the ocean, and over a period of centuries, you could see the ocean become fresh water. The pollution and radiation would be stored safely in the geologic salt formations of the salt lakes.

Key to this is the development of low cost solar and wind water pumping technology. I believe there are innovations that can reduce the cost. My US Patent 8,360,052 issued Jan 29,2013, is one such example. Ironically, the invention of the "half shell parabolic" was used by ancient Egyptians to melt bricks for the pyramids. The use of "wind chimneys" common in Iran for example, could reduce the cost of wind technology. Whatever, my advice to you, is tax the oil.

As part of the upcoming talk on issues concerning the XLKeystone Oil Pipeline, may I recommend that you tax the oil, and then use the tax to build these HelioHydroElectric Projects. The policy should be "molecule per molecule"...for every molecule of CO2 added to the atmosphere, another molecule of CO2 needs to be removed. The oil companies would be required to drill for salt water. Keep in mind there would be associated algae rights and extraction rights for rare metals. Australia, for example, has huge oil and gas reserves, that could be taxed to build their portion of HelioHydroElectric.

We really need something that captures the world's attention, and get everyone working in the same direction. For example, if the oil was taxed to construct a bicycle trail system next to every federal and state highway, a trail system separate from traffic and safe, it would provide employment in rural areas, exactly where we need employment, and provide rural areas an alternative form of transportation cheaper than gasoline powered cars...thus stimulating

economic development in rural areas. A national 'Interstate highway' for bicycles would be better than having people be on unemployment. States for example, could use severance taxes on oil and

gas to finance construction. This would be nice, with bicycle camping, shade trees, solar water distillation, rest stops, bridges, plants, etc. It would in fact be lovely to have a bicycle trail next to every major highway. Something the nation would love. ...not unlike the WPA days of the 1930s.

I trust you see the importance of what I am talking about. I don't really have the resources to do this "masters thesis", but the Army of Corps of Engineers do. So let me ask the questions. How many people would it employ? How fast can it build? Where would the pipelines go? How many salt water wells would be drilled? How much solar and wind energy would be required? What would it's impact on the climate be? How does it affect CO2 removal? What are the materials requirements? What is it's revenue and cost? I would be curious to know what the computer projections would read.

The reason why it is called HELIO, is the force of the sun creates rain, which in turn creates hydropower for existing hydrodams. As you are aware, the hydrodams along the Colorado are drying. Evaporation of sea/salt water would put more water into the Federal Hydrodams.

I can tell you this much. I did do similar research on this in my college days at New Mexico State University. I wanted to know what the resource was for growing algae, and it's impact on the water of the Rio Grande. I found myself severely reprimanded by the Reagan Administration, specifically Hodding Carter and John Herrington. They wanted it suppressed. A partial answer may be this. Expende Parente, the inventor of the biofuel formula, came from Brazil to visit me in Seattle, and he told me the BioFuel formula was stamped classified. I have the distinct impression that there is an effort going on to discredit.

I see a lot of problems, both in the Middle East and here in the USA. THESE PROBLEMS WOULD BE SOLVED IF WE AGGRESSIVELY DEVELOP THESE WATER PROJECTS. With them the human race may actually have a chance at survival.... but without them I see a dark future.

I plead with you. This is your job. Direct the Army Corps of Engineers to review these projects, worldwide, and rank and prioritize them, and come up with some kind of estimates.

HELIOHYDROELECTRIC POWER JUST MIGHT SOLVE GLOBAL WARMING.

But no one is talking about it; I ask why?

I can help.

Respectfully submitted, Martin Nix

Obama's Respnonse

February 2014

Thank you for writing.

Few challenges are more urgent than climate change, and I appreciate your perspective.

For the sake of our children and our future, we must do more to combat climate change. Carbon pollution is putting our health and safety at risk, contributing to higher rates of asthma attacks and more frequent and severe heat waves, droughts, wildfires, and floods. The costs of these events can be measured in lost lives and lost livelihoods, lost homes and lost businesses, and hundreds of billions of dollars in emergency services and disaster relief.

We know that the 12 hottest years on record have all come in the last 15. Sea levels in New York Harbor are a foot higher than a century ago. In 2012, ice in the Arctic shrank to its smallest size on record. We can choose to believe that these trends are the result of coincidence, or we can accept the overwhelming judgment of science and act before it is too late. Our planet's future depends on a global commitment to permanently reduce the carbon pollution causing climate change.

In my first year in office, I set a goal of significantly reducing greenhouse gas emissions by 2020. And my Administration's actions have helped drive them down to the lowest level in nearly two decades. We are now on a path to a cleaner and more secure energy future—but there is still more work to do. That is why I have laid out a comprehensive plan to address climate change by cutting carbon pollution, preparing our communities for the consequences we cannot avoid, and leading international efforts to address global climate change.

My plan starts with changing the way we produce and use energy—using less dirty energy, using more clean energy, and wasting less energy throughout our economy.

Today, about 40 percent of our carbon pollution comes from power plants. But while we limit the amount of mercury, arsenic, and other toxic chemicals they pump into our air and water, there are no Federal limits to the amount of carbon pollution they release. That is why I have directed the Environmental Protection Agency to put an end to the limitless dumping of carbon pollution from our power plants, and complete new pollution standards for both new and existing power plants. These changes will be developed in an open and transparent way; provide flexibility to different States with different needs; and build on the leadership many States, cities, and companies have already shown.

As power plants modernize and cut their pollution, we will do even more to boost clean energy production. Thanks in part to my Administration's investments in renewable energy—the largest of their kind in American history—the United States has already doubled our output from wind and solar, and thousands of Americans now have jobs as a result. I have set a goal of doubling electricity production from these sources again by 2020 so we can build on our momentum and create even more jobs.

My Administration will do its part to achieve that goal. The United States military—the largest energy consumer in America—will install 3 gigawatts of renewable power on its bases, generating enough electricity each year to power 750,000 homes. I directed the Interior Department to permit enough private, renewable energy capacity on public lands to power more than 6 million homes by 2020. And I set a new goal that the Federal Government will consume 20 percent of its electricity from renewable sources by 2020.

Another important step we can take to reduce carbon pollution is to waste less energy. My Administration already established the toughest fuel economy standards in our country's history, doubling the fuel efficiency of new cars and light trucks by the middle of the next decade. We built on that success by setting the first-ever standards for new heavy-duty trucks, buses, and vans. In the coming months, we will partner with truck makers to do it again for the next generation of vehicles.

We also need to unlock energy savings in our homes, businesses, and other buildings, which are responsible for about one-third of our greenhouse gases. That is why my Administration set new energy standards for appliances and continues to invest in energy upgrades for buildings. In the years ahead, we will encourage the private sector to make additional energy-saving investments.

As we work to reduce our own emissions, we must also forge solutions that ensure other countries do the same. My Administration led international climate negotiations that produced the first set of national greenhouse gas reduction commitments by all major developed and developing countries, the most robust transparency system for reviewing commitments to date, and important progress on global climate preparedness. At the same time, we have launched international initiatives to promote clean energy, energy efficiency, and reductions in greenhouse gas pollution. Moving forward, we will redouble our efforts to engage our international partners in taking concrete action and reaching a new global agreement that is ambitious and inclusive.

These measures will drive meaningful progress. We could do even more if Congress put aside politics and pursued a bipartisan, market-based solution to climate change, or stopped awarding \$4 billion a year in oil and gas subsidies to an industry that has never been more profitable. But this is a challenge that does not pause for partisan gridlock, and neither will my Administration.

Finally, while we move quickly to reduce carbon pollution, we must also prepare for the consequences of climate change we cannot avoid. Federal agencies are working with communities to ensure our economy, infrastructure, and natural resources are resilient to extreme weather and other impacts of climate change. We are partnering with States, cities, and tribes to prepare for droughts and floods, strengthen critical infrastructure, reduce wildfire risk, and protect natural storm barriers like dunes and wetlands. We are also providing actionable scientific information and technical assistance to help cities and towns assess risk, so we save lives and do not waste money building structures that cannot withstand the next storm.

No single step can reverse the effects of climate change. But as a Nation, we have a moral obligation to act—not just for ourselves, but for future generations. This is not just a job for politicians. We need you to educate your classmates, your colleagues, your parents, and your

friends and tell them what is at stake. We need people to speak up for the facts and broaden the circle of those who are willing to stand up for our future.

My Administration is making a serious, sustained commitment to address climate change. I encourage you to learn more about my Climate Action Plan at www.WhiteHouse.gov/Climate-Change.

Thank you, again, for writing.

Sincerely,

Barack Obama