Remarks by the Honorable Ray Mabus
Secretary of the Navy
Veterans for American Power Conference
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Rob [Rob Diamond], thank you. Thank you all for being here today.

Sixty-five years ago today, five Marines and a Navy Corpsman raised the flag over Mount Suribachi on Iwo Jima. That was an image of the courage, the dedication, the sacrifice that our military makes all the time. The flag got raised on Mount Suribachi four days into the battle; the battle lasted 35 days. Half the Medals of Honor that have been awarded to the Marine Corps were awarded for Iwo Jima. It reminds us of the service and sacrifice that people in uniform are making today around the world. We've got folks who are exposed to danger today in Afghanistan and Iraq. Like the Marines on Iwo Jima, Marines are on the ground today, taking down the Taliban in Marjah. I just want to take a moment to wish them well. Our thoughts and prayers are with them as they go into danger for all of us.

And I want to thank you all, everybody in here who has worn the uniform of this country. You are today sounding a different kind of alarm about national security. You've worn the uniforms, you know what the issues are, you know what the fight is about. Thank you for what you did in uniform, thank you for what you're doing now for this country.

America simply relies too much on fossil fuels. Changing the way we use and produce energy is fundamental - as you all have known and talked about in our attempt to spread the message – to our national security. It is also a matter of economics and it is a

matter of being a responsible steward for our environment. As a nation, we have to cut our reliance on fossil fuels and we have to come up with alternative energy sources that will make us more energy independent and reduce the effects that using too many fossil fuels causes. I am happy and grateful that we have a Commander in Chief in President Obama whose leadership on energy security is strong and very principled. His actions to support alternative energy and nuclear power have set the example that we are following.

Within the Navy and the Marine Corps, the two services that I am proud to lead, the case for action is incredibly clear. We know that oil is finite and depleting. We know that we buy too much of it from volatile regions of the world. We know that those regions are susceptible to price and supply shocks, a lot of times for reasons outside of our control. Those can have strategic implications, they can have tactical implications, and they can have operational implications for the Navy and for the Marine Corps.

And we know that fossil fuels lie as one of the root causes of the many impending security challenges for our country. Things like rising sea levels, an ice-free arctic in the summer by mid-century, and future pressures on ocean and littoral natural resources. All of these are going to affect the Navy and Marine Corps of the future. Because of this, I have tried to set the Navy and the Marine Corps on the path to do something significant about reducing our reliance on fossil fuels, both ashore and afloat.

Last October, we issued five goals for energy independence for the Navy and Marine Corps.

First and most importantly, by 2020 - 10 years from right now, one decade - half the Navy and Marine Corps's total energy usage will come from alternative fuels.

Second, by 2020 we will have at least half our shore bases at net-zero in terms of energy usage.

Third, we buy a lot of non-combat vehicles – 50,000. We have a fleet of 50,000 vehicles we do not use in combat - pickup trucks and cars. By 2015, five years from now, we will cut the amount of fossil fuels they use in half.

Fourth, we're going to deploy by 2016, and we're going to demonstrate by 2012, a carrier strike group composed completely of alternatively powered ships - the Great Green Fleet.

Finally, we are going to change the way we award Navy and Marine Corps contracts. We are going to try to use our buying power to produce some results. We are beginning to hold industry contractually accountable for meeting energy targets and energy system requirements. And we are using the overall energy efficiency and the energy footprint of their manufacturing process as one of the considerations of how we pick who we're going to do business with.

These goals are pretty ambitious. Some of the technologies that we need to meet them are not there yet. But history shows us that you don't get very far by taking timid steps. That only if you set bold goals will you basically get what you expect, and in the history of the Navy and Marine Corps, we have never backed away from a challenge.

Let me tell you why I think it's important in a broader sense that the Navy and Marine Corps do this. In the federal government, the Department of Defense uses more than 90 percent of all the fossil fuels; the government uses roughly two percent of the fossil fuels consumed in the entire United States of America. Changing the Department

of the Navy and how we consume energy and how we produce energy will have a broad and measurable impact on how we use fuel across this country. Remember *Field of Dreams?* "If you build it, they will come." We're sort of going to reverse that, if the Navy comes, they will build it; they'll build the infrastructure that you need. Price will come down on alternative fuels if there's enough of a demand. The Department of the Navy can make that demand happen.

The Navy has always been right at the front in terms of changing energy usage. In the 1850s, we began to move from wind and sail to coal. And there has always been resistance to change like that. People said that the Navy was giving up a sure means of propulsion, one that had been used for thousands and thousands of years, in favor of an uncertain, dangerous, and probably infernal method of energy. They were wrong; steam was used to great effect particularly later in the Civil War.

Just forty years after that, the Navy shifted from coal to oil, producing higher speeds, greater maneuverability, and fewer Sailors. Again, there was a big argument against it because the Navy had spent a lot of money, a lot of effort setting up coaling stations all around the world. Again, they were wrong. Oil created a tactical advantage. Ships could stay at sea longer, they could replenish themselves underway instead of having to go in port, and you didn't have to have those huge divisions of stokers on the ship.

In the middle of the 20th century, the 1950s, the Navy added nuclear power to our fleet. Again, there were opponents, people who were afraid of the technology and people who were concerned about safety. Nuclear technology has been proven over the last 60 years in the Navy. It has given us reliable, clean, and efficient power for our carriers and

our subs. The tactical advantages are incredibly clear. Our carriers never have to pull up beside an oiler and our submarines, because they don't have to come up and vent their diesels, they can stay silent and submerged wherever they're needed.

We are a better Navy and a better Marine Corps for innovation. That is our legacy. Every time new technology has improved our strategic position, the operational capability of our fleet, and the tactical performance of our ships and aircraft.

We are already starting to do this. Last fall, we ran a F/A-18 engine on camelina. Prior to then, I did not know what camelina was. I understand it is related to the mustard seed family. But I think that things like camelina are going to be pretty common knowledge in the Navy and around the country because that F/A-18 engine did not know the difference between jet fuel that we traditionally use and this biofuel mixture that we ran it on, even when you put it on full afterburner. We're going to fly that plane later this year, our very own Green Hornet. The only people laughing in here are people over a certain age. Everybody else goes, what? I never could remember the difference between the Green Hornet and the Green Lantern when I was growing up. I liked the Green Hornet better because he didn't have to put his hand in that lantern all the time. [Laughter] We are going to expand our testing of biofuels for use in our gas turbines on our ships, and in the tactical vehicles that we use in the Navy and the Marine Corps.

Besides changing the type of fuels we're using, we're making a lot of strides in terms of efficiency – doing more with the fuel we have. Last year we commissioned the *MAKIN ISLAND*, an amphib named after a Marine battle in the Pacific in World War II. It's a hybrid ship. It has an electric drive that dramatically reduces fuel usage at lower speeds; under 10 knots it uses this electric drive. It went from Pascagoula where it was

built, all the way around to its homeport in San Diego. The very first voyage it saved almost $2 million in fuel costs. At today's prices, that ship in the lifetime it's going to be in the fleet, is going to save about a quarter of a billion dollars in fuel costs. So we're prototyping, putting this engine and this hybrid drive system on our new DDGs and retrofitting our old DDGs with this kind of drive.

Ashore, in our bases and installations, we are developing alternative energies and we are seeing not only freedom from fossil fuels, but also a cost savings as a result. We put solar power at Miramar and Camp Pendleton through the Recovery Act that Congress passed. I want to give an "Atta-Boy" to people like Senator Bill Nelson, who you've just heard, for having the foresight to allow us to use these recovery funds, these stimulus funds to do energy projects that are not only going to produce jobs now, but are going to save us money and cut us loose from fossil fuels in the future. The equipment we put at Pendleton and Miramar will increase our solar capacity there by 500 percent and power the equivalent of 13,000 homes. All told in our bases we have the opportunity, over the next 10 years, to increase our alternate energy production by 370 megawatts. 370 megawatts will power 250,000 houses, basically the, number of houses in the Washington, DC area.

We're going to make sure everything we do, every action we take, in energy increases our warfighting capability.

Through the development of things like solar and wind, and biomass, geothermal, hydrothermal, and improved efficiencies, we will improve the range and the endurance of our ships and our aircraft. We are going to reduce their reliance on a vulnerable supply

chain. We are going to create a resistance to those shocks I've talked about. The stakes are clear, the challenges are big, and the answers are pretty easy.

As the President said in Copenhagen, we have chosen bold action over inaction. We are placing our faith in the ability of the Navy and Marine Corps to meet any mission and overcome any challenge. And we are placing our faith in American ingenuity, American entrepreneurship, and American science to meet challenges.

The President is providing some real leadership here, but so are the veterans in this room, so are you in Operation Free. You served our nation in uniform; you are serving our nation today. Thank you for your leadership. Thank you for your service.

When you think about things as mundane as getting a gallon of gasoline to those Marines in Marjah, think about how hard that is. You have to take it by ship to Pakistan, you have to go over the land, it's dangerous when you get to Afghanistan. You take that gallon of gasoline and you are, number one, spending a huge amount of money to get it to those Marines; number two, you are taking a large number of those Marines out of the fight to get that gallon of gasoline there; and number three, you are putting them at risk by doing it. You can cut down the need for that gallon of gasoline through efficiencies, by just building stuff with insulation or by producing the energy where you are - solar and wind. Marines today, about a month ago, were given water purifiers, solar powered, and they are all working today in Afghanistan. They were working for the Afghans, the Marines who put them up in Afghan villages all across Afghanistan. They are producing the energy they need right there. That's the sort of innovation we're talking about. We're not talking about something abstract. We're talking about freeing up Marines to do what Marines need to do instead of transporting fuel. We're safeguarding some of

those Marines so they don't have to go down these highways on convoy duty for a load of fuel. We're making us better warfighters. And oh, by the way, we're helping be better stewards of our environment and of this planet while we're doing it.

I want to thank you again. I want to thank you for your prior service and your service today.

Even today as our armed forces oppose those who seek to limit freedom and deny justice, we are called upon to preserve our planet. Those are the challenges of our generation. Basically they are the same, they seek the same end - to provide a better world today, but more importantly for our children and for their children.

Thank you.