

DEPARTMENT OF DEFENSE BLOGGERS ROUNDTABLE WITH JERRY HANSEN, DEPUTY ASSISTANT SECRETARY OF THE ARMY FOR STRATEGIC INFRASTRUCTURE; DR. KEVIN GEISS, ARMY PROGRAM DIRECTOR FOR ENERGY SECURITY; MAJOR GENERAL DANA J.H. PITTARD, DEPUTY CHIEF OF STAFF, G3, UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND, FORT MONROE; MAJOR GENERAL HOWARD BROMBERG, COMMANDING GENERAL, FORT BLISS SUBJECT: UPDATE ON FORT BLISS' EFFORTS TO ACHIEVE ENERGY INDEPENDENCE AND TO BECOME A "NET-ZERO" INSTALLATION TIME: 11:30 A.M. EDT DATE: WEDNESDAY, JULY 7, 2010

Copyright (c) 2010 by Federal News Service, Inc., Ste. 500 1000 Vermont Avenue, NW, Washington, DC 20005, USA. Federal News Service is a private firm not affiliated with the federal government. No portion of this transcript may be copied, sold or retransmitted without the written authority of Federal News Service, Inc. Copyright is not claimed as to any part of the original work prepared by a United States government officer or employee as a part of that person's official duties. For information on subscribing to the FNS Internet Service, please visit <http://www.fednews.com> or call(202)347-1400

(Note: Please refer to www.dod.mil for more information.)

DAVE FOSTER (Army Public Affairs): I'd like to welcome you to our roundtable today. My name is Dave Foster. I work with Army Public Affairs in our media relations division. And we have with us today, participating in this, Mr. Jerry Hansen, who's the Army's senior energy executive and deputy assistant secretary of the Army for strategic infrastructure; Dr. Kevin Geiss, who's the program director for energy security. And we have the incoming commanding general for Fort Bliss, Major General Dana Pittard, and the outgoing commanding general, Howard Bromberg, Major General Howard Bromberg.

And what we'll be doing is having each of our four participants begin with an opening statement, and then we'll go to questions and answers from our media that have dialed in. We also have one here in the room with us. Todd Lopez from Army News Service will be participating as well.

And what I would ask of everyone is when you ask your question, before you ask your question, if you would, please provide us with your name and your organization. And we'll take a question with a follow-up. And then, for the sake of time, what we'll do is we'll run through the list to allow everyone participating a chance to ask a question, and then as time allows, we'll go around. We've allotted 60 minutes for this roundtable. And once we've completed with the questions, then I'll ask for closing comments from our participants here.

So if we could, Mr. Hansen, I'd like to begin with you, some opening remarks.

MR. HANSEN: Thank you, Dave. It's a pleasure to be here today and to highlight the Army's energy program and certainly the successes at Fort Bliss with Team Bliss, which have been significant.

Just for background, the Army energy security mission is to secure energy -- is to make sure that energy is the key consideration for all Army activities, and that includes reducing demand, increasing efficiency, seeking alternative sources and creating a culture of energy accountability while sustaining or enhancing our operational capabilities.

We view energy security as a critical mission enabler and an operational imperative, which can provide the Army with an essential tactical advantage. Our Army installations, our tactical operations, soldier training all require secure and uninterrupted access to energy. Our current dependence on fossil fuels and the vulnerable electric power grid jeopardize the security of Army installations and mission capabilities. Also, long liquid fuel logistical supply chains and convoys pose serious risk to contingency operations and increase the vulnerability of our deployed forces.

Our current initiatives include Fort Bliss, which has the largest DOD facility growth currently under way, and under Major General Bromberg has enthusiastically embraced the challenge to become an Army center for renewable energy. Fort Bliss has begun to implement unique renewable energy opportunities from wind, solar, geothermal and biomass resources to provide secure electric power for the installation. They also have a unique inland desalination plant which was developed in partnership with the local community.

As a visible symbol to the community, contractor, local government and DOD, as well as the Army, Fort Bliss and the Army Research and Development Command recently cohosted a renewable energy rodeo and symposium which many of us attended and supported from the 7th to the 10th of June 2010. Fort Irwin, California, is another significant Army project where we're developing a 500-megawatt solar thermal energy project. In July of 2009, the Army selected the developer to design a plan for phased construction of this 500-megawatt solar energy plant, and this will be the DOD's largest solar project. Major General Pittard was the commanding general at the time when the project was first embraced, and we know that he is a passionate proponent of energy security who will continue the momentum at Fort Bliss and hopefully propel it to the next level.

The Army intends to use a prioritized list of installations to designate which specific Army installations will become the first net-zero energy installation. The Army is also building one of the largest federal fleets in the country of low-speed electric vehicles and hybrid vehicles. They also have a unique project at Hawthorne Army Depot in Nevada where we're planning to partner with industry and the Navy to build a 30-megawatt geothermal power plant. To utilize their previous expertise, the Navy will assist us with the procurement process.

And the 30-megawatt geothermal plant will meet all of Hawthorne's electric power requirements on a 24/7 basis independent of the commercial power grid with essentially no greenhouse gas emissions. So these are just a few examples of some of the areas in which we hope to make great strides forward in our goal to be using much more alternative and renewable sources of energy and become energy-secure.

Dr. Geiss will follow, and he may comment on the process we've used to develop our Army energy security implementation strategy.

MR. FOSTER: Thank you, sir.

Dr. Geiss.

MR. GEISS: Thank you. Again, I'm Dr. Geiss, and I am the program director for energy security here for the Army. I had the pleasure about a year ago to begin my interactions with Fort Bliss, General Bromberg, and we saw the tremendous opportunity that we had there with the significant growth in the installation, the building of facilities and then the opportunity that is there for renewable energy.

I led a team of folks down there, a Tiger Team, to help identify potential projects to do at Fort Bliss, and over the last year, our office, as well as the assistant chief of staff to the Army for installation management, Corps of Engineers, have partnered with Team Bliss with the DPW and the energy manager and General Bromberg there to help them identify projects that would be fruitful down there for pursuing renewable energy and increasing our efficiency.

We're at an interesting time right now where we have the support not only of the president, of Congress, of leaders at OSD and elsewhere to address the Department of Defense energy security needs. Quadrennial defense review for the first time identified energy security as a key area that needed to be addressed as we looked to the future of strategic environment.

The president has come out and highlighted the importance of making investments to increase and expand our utilization of alternative energy to increase the efficiency of our buildings.

And the Army is embracing this vision as we look forward to how we can increase the efficiency and enhance our energy security at our Army installations.

That's all I have to say at this time. I'll turn it over to the folks at Bliss.

MR. FOSTER: Thank you, Dr. Geiss. And we'll now go to Bliss. And Major General Bromberg, would you like to begin?

GEN. BROMBERG: Yes. Thank you. This is General Bromberg out at Fort Bliss. Thanks for the opportunity to be able to discuss this. It's a pretty essential topic, not just for Fort Bliss but also for the Army and for the nation.

As already was mentioned, we're an installation that's the largest growth at the Department of Defense. And when we started looking into this area several months back, or actually almost two years back now -- we have such a unique opportunity because we have growth going on, so we have an opportunity to influence new construction. At the same time, we have large amounts of renovation going on, so we have the opportunity to set some standards in renovation.

Well, and we're also started looking out -- (inaudible) -- really going to be a large installation here. And so how can we get ahead of the curve to kind of keep ourselves where we can keep our costs pretty much balanced out through the future of the community growth? And then as you combine that with the discussion that Dr. Hansen has already mentioned about being a secure installation, we are a power projection throughout -- (inaudible) -- in the Southwest. We have major deployments here for the National Guard and Reserve. How can we keep ourselves secure and independent so in times of national crisis, we can also be an installation secure and independent and can do what the nation needs to be done in times of crisis?

We pull that together, we said we really have to look at ourselves as a model for the future. And the one other area that added to that, that we felt was really a great win for the post and for the Army was we are the home of the Army's evaluation taskforce, which is the future of the brigade combat team modernization act of the Army. As you get into the business of how organizations fight and deploy in terms of energy, things that can be developed to support brigade combat team modernization could also be done here.

So what we have here is we have a holistic opportunity, from homes, to airports, to training facilities, future developments, to how we live and how we work and how we influence our culture here at Fort Bliss. And that's what makes it a unique center in my mind because it takes everything together. It just doesn't focus on one element of energy; we have many opportunities. Not to mention the fact that we have more than one option here: obviously solar is a very -- (audio break) -- stares at you in the face when you have 300- plus days of sunshine a year, so you should go after solar here. But also we have the opportunity with geothermal biomass and also wind. So we have a unique opportunity in the nation for all of these opportunities to come together at one location. So if you combine that with modernization, it really is a unique opportunity.

The last thing I'd mention, before I'll introduce General Pittard, my great friend who's going to come in and change command of this on Friday, we

also have the ability to influence culture. And I think -- you know, and I read about this in Tom Friedman's book and started thinking about this, how the Army has always been the leader.

We're a great growing installation with a lot of young soldiers and families. How we can influence those young soldiers and families to become energy conscious will eventually pay us back as a nation. It may take 10 years or 15 years or whatever. It's kind of the recycling model. If you recycle at home with your kids, your kids eventually become recyclers as they grow up.

So we influence a generation of Americans at the same time. And that even spills over into our cities where we have the opportunity to then get into science and math related to energy products and look at our magnet schools and say, is there something we can do for our public school system that also show energy is a viable place for children to get excited to study math, science and technology and then also have a way of shaping America.

So we just felt with this region, as we looked at it, there was just a tremendous opportunity to go after this as a vision, as a (creative ?) center. So now I'll ask -- again, we'll be looking forward to your discussion and questions at this time. I'd like to turn it over General Pittard so he can -- (inaudible).

GEN. PITTARD: Thanks a lot. And thank you for the opportunity to be a part of this. As has already been mentioned, of course I agree wholeheartedly with what General Bromberg just said, is that -- (inaudible) -- we're looking for has strategic implications, but it's more than that. It's the right thing to do. And it's more than just the Army; it's the right thing to do for our nation.

As General Bromberg mentioned, I'm passionate about this. When I was at Fort Irwin, California -- and there are (very stark ?) differences. Locally in the region we have certainly the resources to do certain things, but there's got to be incentive. There were incentives when I was at Fort Irwin, California, in dealing with Southern Cal Edison and others, because they had pressure from the state government to meet certain (dates ?). At least here, with at least one of these states -- (inaudible) -- we don't have those kind of incentives, so we need some help in that area, certainly, too, as we move forward. It's got to be a holistic approach as we move forward. I like what we're doing and I hope to be a part of it and to accelerate the effort and get there even quicker. Thank you.

MR. FOSTER: All right. Thank you, gentlemen. I appreciate it. What I'd like to do now is move into our question and answer phase, and Staff Sergeant Sweetnam with our online (social ?) division here at Army Public Affairs has a list, I believe in the order in which the callers called in. So what I'll do is turn it over to him and we'll go down. Just to reiterate very quickly, our ground rules: if you would please start by stating your name, your

organization and to whom your question is addressed, if it's specific to one or let us know if it's for the group, and we'll proceed that way.

And, Sergeant Sweetnam, go ahead.

SGT. DALE SWEETNAM: Thank you, sir. Dan Kissinger, would you like to get started?

Dan still on the line? Okay. Why don't we move on to Chuck.

Oh, Dan, are you still there?

Q This is Dan Davis of the Federal Times.

SGT. SWEETNAM: Hang on just a second, Dan. We're asking Dan Kissinger. Were you having trouble getting through?

Q I apologize. I did not hit the mute button. (Laughs.)

SGT. SWEETNAM: All right. Go ahead, Dan.

Q All right. General Bromberg, I have a question in regards to military families. I'm from MilitaryAvenue.com. We provide information for military families out there. You briefly touched on how military families can become more aware of their footprint, their energy footprint. Are there any programs out there specifically for military families on the installations to become aware of the power consumption that they're using, or is it possible to have some NWR programs for them to receive items -- solar panel grids, anything for home usage as well, so the military family can get involved in this?

GEN. BROMBERG: That is a great question. Thanks for that. And, actually, we are just in the infancy stages of that. What we've recently -- through the energy symposium, we have a business partner that has come on and actually offered to take four homes from a privatized partner. These are military family homes, and convert those to solar and still leave them -- the goal is to take them off the grid totally for a period of the next year and have them on the solar panels, and let them help record feedback and experience how you can actually power your home quite satisfactorily off solar. They'll have the ability, obviously, if they have problems, just to go back to the grid if necessary, so we've identified those four homes and we're under way now of actually putting those four homes totally on solar power. Additionally, we've just signed our contract for recycling for curbside recycling, so actually we'll have the blue buckets in everybody's house so families and soldiers can get involved with everything from recycling through solar.

Again, we're just in the starting phases. Our NWR program, as well as our partnership with AAFES and the commissary, -- (inaudible). We've asked them to, obviously, not just push the green bags and get people not to use plastic bags and paper. They're actually going to go to incentives for us, so if you use a recyclable bag or a green bag in the PX, you can get a nickel off or something like that, so we can start just getting people to start thinking about being green.

Additionally, we've partnered with the University of Texas at El Paso, with their department to come and look at all our landscaping, to see if there's smarter things we can do in terms of landscaping and try to bring the whole culture of the environment to the post.

SGT. SWEETNAM: Oh, and Dr. Geiss has a follow-on comment to those comments.

MR. GEISS: Yes, this is Kevin Geiss. I just want to mention that we do have installations, in particular out in Hawaii, the garrison out there, where the privatized family housing has solar hot water and solar TV on -- I think actually a few hundred homes, so we do have examples of that other places in the Army.

We have also looked at doing mock billing to the families to make sure that they're aware of what their usage is and looking at incentives for whether they use more or less than what the baseline would be, so that is something that we're considering at other installations.

Q Thank you.

GEN. BROMBERG(?): I would just add that basically the way that would work is that if they use more than the norm, then they would be charged. If they used less, they would get money back, so it would certainly incentive them directly as -- (inaudible).

SGT. SWEETNAM: Is Chuck still on the line?

Q I am. Chuck Simmons from America's North Shore Journal. (From the sounds ?) of the group, I've heard two mentions of water so far: one involving smart landscaping, the other involving a desalinization plant. We're talking about Fort Bliss, I've heard Fort Irwin mentioned and a facility in Nevada, all three places where the -- probably the most important utility and the utility that ensures readiness far more than any other is water.

What is going on in the Army with regard to the smart use of water and enabling the security of the water supply, versus perhaps falling off the electric grid?

MR. FOSTER: Chuck, let's start here with Mr. Hansen and then we'll work our way -- we'll do strategic and then we'll shift to Fort Bliss for comments from -- (audio break) -- there.

Mr. Hansen?

MR. HANSEN: Hansen here. That's certainly a strategic issue that we are concerned about, both at our installations as well as our overseas deployments. And just like with fuel, the security of water convoys is certainly of great concern to us, as well as the fact that our dumps -- (audio break) -- filled with plastic bottles. We need to get away from that as well.

At the installation level, before we undertake these energy projects, water's always a big factor that we -- (audio break) -- hydrology and geology studies to look out about 30 years to make sure that we know the impact that any of the projects will have on the water supply. And we do have a lot of water conservation efforts under way as well.

MR. FOSTER: Dr. Geiss?

MR. GEISS: Yes, a couple things. First of all, with the signing of Executive Order 13514, the federal government was ordered to look at water conservation. And in response to that, the Department of Defense, in their strategic sustainability plan, have identified specific areas that they expect the department and the services to reduce their overall water use, to look at re-use of water across the board.

The second point I'd make is that as part of our energy security implementation strategy, we identified water as a component of not only supporting the installation, but also interlinked with energy. And we have a specific metric that will be tracking our overall reduction of installation water use as it relates to supporting energy projects. Then a third point I would make is -- and we did mention Fort Irwin. And as we pursue that project out there, we actually currently have a working group looking specifically at the water issues out there, and would be replicating that kind of analysis as we pursue similar projects at other installations.

MR. FOSTER: General Bromberg, from your end?

GEN. BROMBERG: I think that from our local perspective -- let me just go back to that inland desalinization plan. That is a public partnership with the city here, and it comprises a series of wells, half of which are federal and half of which are not federal.

But the important thing that it brought to us is that it forced us to look at how we use and monitor our water. I mean, it gave us our supply we needed -- that's the supply coming off the underground aquifers that are spread

throughout Mexico and all the way down to Central Mexico. But what it also did was made us really think about how we wanted to use our water.

And so -- it's not just the conservation but, as I mentioned, with the University of Texas at El Paso, when we do our new buildings, we say okay, what can we do differently? It's not just xeriscape, but how can we change how we're doing business, from watering to natural areas to going into the homes and looking at all the incentives you can use with individuals to help them, encourage them to change their wasteful water behavior.

We're still not perfect at it. There's a long ways to go, but we're going to -- (word inaudible) -- we can also monitor now how we do our water usage. It's pretty important; something we couldn't do before, so -- other than just counting the number of gallons you're using, but where you're using it at.

We've also gone back into a heavy use of gray water, heavy use of the brackish water that comes out of the de-sal plant. So for example our golf course, we have a nice golf course. It's not desertscape down here, but all this water -- the gray water, we don't use any potable water to do that. And it's all -- the watering is all pumped and powered by small windmills that we stood on the actual golf course. (We try to ?) take the energy aspect as well, with the water conservation aspect.

Still a long ways to go, but again, it gives us all -- it makes us all very conscious.

Over.

SWEETNAM: Thank you.

General Pittard, anything to add? GEN. PITTARD: Negative.

SGT. SWEETNAM: All right. Thank you, sir.

We'll move on to Dan Davidson, please.

Dan, you still with us? Dan Davidson?

Okay, we'll move on to Suzanne.

Q Hi. This is Suzanne Yohannan with Inside Washington Publishers.

I had a question that relates to -- in the media advisory on this call, it said that Fort Bliss is going to be part of this energy- resilient community, working with White Sands Missile Range, Holloman. Can you describe what that really means, what you're talking about there? And is this kind of a pilot test case here and you're going to replicate it elsewhere?

MR. FOSTER: General Bromberg, do you want to take that one?

GEN. BROMBERG: Yeah, let me -- I'd be glad to. That's a good question. I think that comes back to -- (audio break) -- believes that everything in this region. As you know, Fort Bliss is the same size as Rhode Island. And when we couple ourselves on our border with White Sands Missile Range and Holloman Air Force Base -- (audio break) -- largest contiguous land and airspace mass in the Department of Defense of government-controlled land for training and testing.

We have an agreement amongst the commander of Holloman and the commander of White Sands and the commander of Fort Bliss that we would try to approach things regionally. Well, anything that benefits Fort Bliss or White Sands or Holloman, we'd look for opportunities of what else could benefit each other in the region.

We do this in training ranges, we do this in control of airspace for testing, and we will do it in energy in the future.

For example, much of our training land is in New Mexico and borders White Sands, so when we do something we just don't take a -- (audio break) -- if we found geothermal sources in DOD land but it also bordered White Sands, we'd certainly want to work with White Sands to see if they could get a benefit out of -- from that geothermal energy source.

So that's what that comment in the media was in reference to. That's just the way we've approached business in this region; it's the way we approach things out of the region -- work with both states, both congressional parties, both local communities and industry partners to make sure we're not trying to use a state boundary to prevent us from thinking, as we remove the borders and the boundaries in our approach to this region. Does that answer your question, ma'am?

Q Yeah. And one more thing was I just wondered if -- it sounds like it's pretty unique there, but are you going to replicate this elsewhere? Can you respond to that at all?

GEN. BROMBERG: I'll let Dr. Hansen follow up, but it's my belief that -- and this is somewhat a little selfish, but being honest here -- is I believe if we can -- if we have a product in the renewable energy area or in the -- even in energy conservation, that we can become a model, I believe there's great value in doing -- putting the analytical rigor to that model and the budgetary rigor that goes with that.

And if it's successful in an installation like Fort Bliss, then why -- even -- (inaudible) -- large candidate for replicating across the department. And that would be our thought. The department -- (inaudible) -- is in cities and states that I've talked to the Department of Energy about.

But that would be my personal thought, and I would ask Dr. Hansen if he wanted to add on to that.

Over.

MR. FOSTER: Mr. Hansen?

MR. HANSEN: Thank you, General. Jerry Hansen here.

I would say that not all installations are so unique. We've juxtapositioned with other installations that offer the -- quite the same attributes that you have at Bliss, with White Sands and Holloman. We are certainly trying to take a regional approach and an intraservice approach wherever it's possible and wherever it makes sense, and there are other places that do have similar features.

So we expect to continue that approach. We have a Defense energy work group that meets every month that explores joint possibilities. And so I think this will definitely be a trend of the future, but exactly which locations has yet to be announced.

Q Thanks.

SGT. SWEETNAM: Next, we have Veronica Johnson.

Q Good morning. I'm Veronica Johnson with KFOX 14, and I'm also the military issues examiner for El Paso.

And my question is for General Bromberg. You mentioned the city partnership with water and also some of the education outreach programs. Are there any other direct effects that this program or conversion has had on El Paso and other areas of the borderland? And are there any other possibilities of partnerships with local government?

GEN. BROMBERG: To answer that question, yes the most recent additional project that we've undertaken is with the city of El Paso. They applied with the Department of Energy and worked in coordination of this for a block grant. And we did receive a block grant to look at some opportunities to go after geothermal resources that can be shared.

In addition, we've also applied with the city of El Paso to look at the research that can be done in the area of biomass. As we mentioned, our landfill is getting fuller every day. We think there is a great opportunity to partner with the city of El Paso to look at a combined area for refuge, for landfill, and can you do anything with that in terms of biomass -- (audio break) -- private venture.

Further, there's other examples of where the city has asked to take -- do an extended land-use lease, where they can put on some type of solar project. They could put on a solar project that would then give us a benefit back either into the grid or back into their area of the city for energy. So we're having discussion on many, many of those.

The other area that has also cropped up, the city -- as we develop our center and our vision becomes more of a reality, there's opportunity for the city to become involved in the renewable energy business, such as (Unicom ?), as the mayor has discussed and some local business people. They want to bring in industry, tie the University of Texas at El Paso for technical support, such as becoming the place that does all the new future solar panels, and they want to be known for that.

I think there is great merit in that, and that's up to the city to decide. But I think it's a wonderful opportunity. Because as we expand our vision in the city, they can ride along. Not ride along, but the city can come along with that vision.

And with UTEP becoming such a larger institution every day, we do have a charter with UTEP to support us for engineering work in terms of renewable energy. So if they can bring that together, they have a wonderful opportunity to help us and help the nation, and then also help business in El Paso.

SGT. SWEETNAM: Okay, Andy Bochman.

Q Hi there, this is Andy Bochman from the DOD energy blog. And also, I'm former Air Force, so please don't hold that against me. I have two questions for -- I think I'll say the panel in general, because I don't know to whom to target it. And hello, Kevin. The first question is on the topic of energy security. When you hear -- if you go to conferences, if you speak with folks who are considering deploying renewables at different bases, these -- this is all installation and facility tuned, not to -- not to expeditionary energy. If you talk to folks about renewable supply -- (inaudible) -- they're always trying to figure out if the technologies will have -- are mature enough to have a reasonable return on investment or ROI.

And if they can be, if such a deal can be arranged, either with incentives -- local incentives or deals with the local utilities, it can happen. And this is a good thing.

Sometimes, however, if we're talking about energy security -- if energy security is a primary driver, not just to be seen to be doing the right thing from a social consciousness point of view. But to actually respond to the DSB's comments that -- (inaudible) -- spaces are way to dependent on the brittle grid, there is not necessarily ROI for energy security that regular folks can understand. Do you find you're having any -- do you have any techniques or any

strategies for making the energy security case free and clear or on top of the other reasons that we're using to argue for renewables?

MR. FOSTER: I'll start with Mr. Hansen.

MR. HANSEN: I'll just start and let Dr. Geiss elaborate further. But we certainly recognize that to get where we need to be in energy security, it does require some up-front investment. And we are certainly having to be attuned to the ROI arguments. The ROI in some cases may be two or three years. In other cases, 10 or 12 years, which is beyond our normal DOD POM cycle, program objective memorandum, which is -- normally, it's five years into the future.

We don't see the -- necessarily see the savings within that time frame, but it's real nevertheless. And in order to make the investment up front, since there is never enough up front, year-end money to do everything that we need to do, we're depending heavily on public-private partnerships and other innovative ways to get there

The Irwin enhanced-use lease is one good example of that, where we're working on a 500 megawatt project there. And we're certainly open to and exploring similar ideas at other installations as well. We've taken another study of all the installations, looking not only at what they have to offer in terms of solar and daylight and thermal, et cetera, but also, looking at tax incentives, and state incentives that might make it their business case for that particular area.

We also look at the local utility rates, of course, as part of that ROI. And certainly the energy independence and the dependence on the vulnerable grid go into the arguments at the top. There are arguments that many people see very clearly. But we're in a very competitive budget environment right now.

Q Sure. MR. HANSEN: So we're dealing with family programs and medical care, and a lot of other crucial issues as well. So -- but those are some of the approaches we're taking.

Q All right, thanks, Mr. Hansen.

MR. GEISS: Andy, I guess a couple things I would say, is we -- as we look at the opportunities that renewables provide for us, we do think that the primary option to leverage to get towards energy security, right? If we can produce the energy on site, then we're less reliable upon an external -- (audio break).

The other thing is efficiencies have a role here. So as we increase the efficiencies of our buildings, of our operations, that decreases our demand, which can contribute to our energy security because we are requiring less of a supply to support that mission -- those operations. I think you do put your

finger on something that is challenging, is that there is not necessarily a near-term economic ROI to increasing the surety of power. But clearly, we do have effective on what the risk to mission would be with certain facilities.

And you're probably familiar with the recent arid reliability act and the requirement that we need to look at our critical infrastructure, and identify facilities that would be vulnerable. And then we would be working with the power providers as they would need to enhance the reliability of mission and distribution -- (audio break) -- structure.

So then, the costs for that would probably -- you know, I would expect just be put into the rate, and we would end up paying for that anyway. But there is no separate fund specifically to address power surety. But we see that as something that as we address energy security across the board and enhance our efficiencies, incorporate renewables and alternatives, that we have the ability to increase our surety as well.

And then the last thing would be is as we look at the renewable power sources, there are certainly ones that you can base load off of, like geothermal, and can provide that 24/7 power without having to have additional storage. But we're certainly cognizant of the challenges with intermittent alternative energy sources, such as solar and wind and the need to incorporate some sort of storage and other technology to handle that intermittency related to that power.

Q Hey, thanks. And sure, I think everybody agrees that the generation technologies are going to become more affordable. Storage is going to make things more practical. And as you said, efficiency gains make the finish line a lot closer. So that it can be an ROI case on dollars and cents, which frees you from having to make some of the more cerebral decisions that are harder to justify related to energy security. This isn't exactly a question, it's more of a comment to see if you're familiar with it. As you consider deploying renewables at Fort Bliss and Irwin and elsewhere to become somewhat less reliant on the grid -- I'm not sure if you're familiar, but from my service, the Air Force there showcased deployment of solar at Nellis. Sort of the -- some of the vagaries of that deployment partly depends on the infrastructure that's in place at the time. Probably depends on the agreements with the local utilities, but my understanding is that when there's a blackout or brownout in the -- in the region, they cannot take advantage of the 14 or so megawatts of solar that's generated. It's just not wired that way. So it looks like it's helping free them up from the grid, potential grid problems, and yet it's not; it can't be used that way. And for that to be a consideration, a primary requirement for any renewables deployments that are going on with you guys would be a good thing. Maybe you know about that already.

MR. GEISS: Andy, this is Kevin again. You know, first off, I would -- I would avoid Monday morning quarterbacking that project too much. I mean, if

we roll the clock back, I think primarily what they were doing was trying to take advantage of the renewable resource.

Q Sure.

MR. GEISS: I'm not sure what the Air Force policy a few years ago when they were doing that project was on energy security, but clearly, you know, that project does help them in the -- in the regard -- in regard to addressing their renewable power purchase requirements --

Q Sure.

MR. GEISS: -- the first thing. And then the second thing is, as we -- as we pursue these projects, yes, we're looking at the challenges that we might face and what the interconnect is with the grid, and whether we can, you know, throw a switch if the grid goes down and still maintain power, et cetera, but just to clarify on a comment you made, every -- you know, every renewable project, there's not a requirement that it has to be able to function regardless of the status of the grid. I mean, certainly that's the direction we're going, but I don't want for that to be the impression that those are the only projects we're going to do.

Q Sure. There's benefit there if it's just supplementing or helping complement, take off some of the load that's coming in, from the -- from the grid. I didn't intend it to be as pointed as that might have sounded. I just wanted to be sure that you guys were aware of that particular use case, that that can happen.

MR. GEISS: The other thing is that we -- you know, as we talk about this, I mean, it's to support the mission. And there are -- there are critical loads that are required to support the broader mission. And the intent is also not necessarily to have 24/7 power to every outhouse on an installation. And as we look at the installations and develop energy security plans, the focus is on the primary mission. And as we prioritize projects that we would do, you know, that's where the priority is going first. And, you know, we also do have installations where we talk about being overall net zero, but that's a, you know, a different kind of discussion than just each installation making sure that we have the critical mission --

Q Thanks a lot. And I'll cut short here. Just one last comment. I've heard the general's comments of Fort Bliss as sort of a holistic lab, not just individual point projects, but bring it together in a community format with renewables.

Two places I'd reference, in case you're not familiar with them, are Babcock Ranch in Florida, which is a planned city, and it's being -- it's in the design stage now. It is funded, and it's easy to search. Again, that's Babcock Ranch in Florida -- completely renewables-driven city. And then something

that's deployed right now and is growing every year is a showcase for renewables integration into standard generation in a microgrid campus, perhaps base-sized, and that would be University of California at San Diego -- is probably the exemplar for bringing that stuff all together on one campus.

MR. FOSTER: Thanks a lot, Andy/ What I want to do now is bring in Todd Lopez, who's here with us at the Pentagon. And he's with Army News Service, and Todd, please go ahead, ask your question.

Q Hey, I just have a quick question. You said on a prioritized list of the next -- (inaudible) -- installation --

GEN. BROMBERG(?): We are in that process, yes --

Q You're in that process --

GEN. BROMBERG(?): -- of identifying the first five that we'll be doing. (Audio break) -- been able to announce those yet -- (inaudible).

Q (Will that be out in the ?) next year, or --

GEN. BROMBERG(?): Oh yeah. It'll be announced.

Q Are you going to get Fort Bliss on that list?

GEN. BROMBERG(?): Well, we haven't announced the list yet. (Laughter.)

MR. : Might want to ask Fort Bliss if they want to be on that list, and see what they have to say.

Q And then, how far along is Fort Bliss towards achieving net zero status?

MR. FOSTER: General Bromberg, you want to take that one? How far along is Fort Bliss in achieving net zero status? GEN. BROMBERG: Well, I think we're still in the early stages of -- if you use the Army terminology, is it a crawl, walk, run, we're still in the crawl phase as an organization. But I tell you, we have invested over \$50 million of our own money into this. And last year alone, we were -- already got our energy bill down between 10 and 15 percent of the installation.

I think with the symposium this year, it's going to take us from the crawl phase to the walk phase, because in that -- in that symposium what we gleaned is we received numerous opportunities, such as the housing already mentioned -- we took some housing off the grid. We've also now got very, very close to getting our microgrid up and running. We have our next analysis to do on the geothermal. And then also we have moved forward within our training areas with everything from -- (inaudible) -- a fence to reduce -- to reduce

costs and improve efficiency, as well as we've now stepped out in other areas in solar. We have a headquarters building now, it'll be off the grid, that we've now put in solar projects. So I think we're in the process of moving that out.

Our next discussion with ARDEC, the Army's Research, Development, and Engineering Command, is to go to fleet management. We're reviewing our fleet of vehicles right now and buses and to -- we've asked to get support to get a small fleet down here of either hydroelectric vehicles or purely solar -- you know, electric vehicles. Not just a small fleet -- as what we're -- as they're buying out our smaller light vehicles -- but also now you're getting to buses and some larger commercial applications that are available, and we'll model those for the installation. So I think we're at the crawl. We're still moving forward with these projects, but as we're looking out over the next year, we view the continued analysis, I think we're going to get to the walk phase.

Q Yeah, I have one other question. I noticed that somebody -- that you were talking about energy use by -- (audio break) -- other families, maybe some sort of sample metering. Did someone say that? I wonder if our Army -- does Army privatized housing put meters in every home, such that -- such that soldiers and families who are living in privatized homes now and paying the BAH entirely to a developer or are already paying for all their utilities, or are aware of their usage?

GEN. BROMBERG: (Inaudible) -- know that they're all metered, but the utilities are paid through the BAH, so that the soldiers' families don't pay a utility bill. But we can get back to you on what the percentage is. But -- and what we've been talking about, if the house is metered, then you could give that and provide that information to them. So the first thing would be to provide the information so that they're aware. And then the second thing is this incentive that's been discussed, where you've got a range of usage that is expected for your house, and if you go above that, that nominal difference, you would get a small charge for that. MR. FOSTER: I noticed we had had a couple of drop-on and drop-offs.

Oh, wait, sir, did you want to add to that?

GEN. PITTARD: If I can just add to that, now, we tried that at Fort Irwin and it was really effective, I think, mock billing. And as was just mentioned, for the average bill of a certain type of house -- they've got older housing here in one category, and newer housing, more energy-efficient, a different category -- but very, very effective. And if you went above that average, what we -- (inaudible) -- is that they would in fact get a small charge. Now we actually never really went through with that -- that part of it -- because we really saw a significant reduction of usage just by getting a mock bill. So I think it's a very effective technique.

MR. FOSTER: We had a couple of folks drop off, maybe others that came back on. Is there anyone on line with us that did not get a chance to ask a question yet?

We have time for probably another one or two quick questions.

SGT. SWEETNAM: Absolutely. We have time again for some final questions. Dan, do you have any final questions? Dan Kissinger?

Q I'm good at this point, thank you.

SGT. SWEETNAM: Okay, thank you.

Chuck?

Q Yeah. Two quick questions. The first is for the Fort Bliss net zero. Can we have a number of what ends up being taken off the public grid? And secondly, there's been some media criticism around Fort Bliss and some wildfires there recently, kind of related to the environment. Would somebody want to address the issue of wildfires at the installation?

GEN. BROMBERG: I'll do my best. I'm not sure I can give you the detailed answer on the first question about what comes off the grid in terms of megawatts. We had some projections in terms of what we think our projected uses will be on the installation. But let me just take a pause there, and I'll ask someone who -- one of my -- I mentioned too, we've got Hodge (sp) behind me. I think he has those numbers. I'll have to get --

(Off mike.)

GEN. BROMBERG: As Mr. Hodge (sp) just said, we've started -- what we've taken off the grid so far is about three megawatts off the grid. We're in the early stages of that now to start building that out, ease up. Mr. Hodge (sp) is our DPW energy lead, and he's going building by building across this great installation to figure out what we're actually being able to take off the grid.

What we did when the revision statements -- we looked at the dollar amount out to 2025 to see where we think we'll be. So more work needs to be done there, but that's where we are today, about three megawatts off the grid, which is a very good start -- (inaudible).

And the second part of your question is about wildfires. We did have some fires -- (inaudible) -- started out in the range. It's not an uncommon event. We have ranges with a lot of fires -- you know, a hot and dry climate.

But it was up in the -- below the canyon areas up there, and we do have fire control and I think it was controlled very well in the designated impact area.

Q Thank you.

SGT. SWEETNAM: Yeah, Veronica Johnson, do you have any follow-up questions?

Okay, Andy Bochman, are you still on the line?

Okay. Well, at this point, let's go ahead and ask for any closing comments that you have, Mr. Hansen. And then we'll follow with Dr. Geiss and shift down to Fort Bliss. And thank everyone very much for your participation. Mr. Hansen, any closing comments?

MR. HANSEN: No, I'd like to just thank everyone for their participation also. This is a topic that we appreciate feedback on. We certainly don't have a premium on all good ideas, and appreciate your suggestions as well as your questions. And I just want to take the opportunity to commend and thank General Bromberg for the great effort that he displayed there during his command. It's really been heartwarming. And it really increases all of our energy to see the enthusiasm and the momentum going on there. And I certainly thank -- (inaudible) -- Hodge (sp) for that, too. He's been a great inspiration to me personally as well as at Fort Bliss. And certainly welcome General Pittard and look forward to working with you, sir.

MR. FOSTER: Dr. Geiss?

MR. GEISS: Yeah, this is Kevin Geiss. I want to add my personal thanks to you, General Bromberg, for your entrepreneurial spirit and your interest in this topic. I think that if the Army had more Howard Brombergs and Dana Pittards, we'd be a whole lot further along in addressing our energy. But I'm sure glad that we have these two gentlemen to stand up and be real leaders for the Army and I think for the nation.

As General Bromberg pointed out, you know, Fort Bliss is a city. And the model that they're using can be replicated in other locations, and the integrated planning that Fort Bliss is engaged in and looking across all of the sectors and functional areas of that installation is, I think, a good model. And very pleased in the progress that Fort Bliss has made. And I wish we could have a meeting each week highlighting an installation in other areas of the Army on the advances that we're making. But certainly we have an exemplar in Fort Bliss and Fort Irwin as well. So thanks so much for the leaders we have there.

MR. FOSTER: General Bromberg, General Pittard, please, closing comments.

GEN. BROMBERG: I just wanted to -- yeah, I just wanted to tell you thanks for all of your support. We couldn't have done this without great support, particularly the Tiger Team analysis. And that's what enabled us to get some credibility. So I do thank everybody, I thank members outside of the military community as well who helped support this effort.

As Dana said, this is the right thing to do. And the one thing that we always tell our soldiers and our -- tell our families as well, you know, do the right thing. And this is right for the Army and right for the nation. It really will have long-term effects. So I'm just happy to have the blessings and the opportunity.

I do want to pass on special thanks to -- (inaudible) -- Hodge (sp) because he's been a one-man energy show out here. Those who don't know, he was the energy office here about 18 months ago and was the only man in the shop. And he's really carried a heavy load and he's really done tremendous work.

And so I'd say, thanks for your support. I appreciate it. I look forward to keep working with people. I do have a question for you, Dr. Geiss, or whoever the gentleman was -- I didn't get your name -- about the University of California at San Diego model. I'm actually from that area, my daughter goes to school out there. So someone give me a point of contact. I'm going to call them and actually do a -- (audio break) -- stop by and see them when I'm out there on vacation or -- (inaudible) -- I'd appreciate it.

Q This is Andy. I can provide you that information however you like.

GEN. BROMBERG: That would be great. If you can get it to Kevin or get it to me on e-mail, that'd be super.

Q Okay. Will do.

GEN. BROMBERG: Thank you very much. I will pay them a visit. (Laughter.) And with that, I'll turn it over to Dana Pittard if he has any comments. But I'm just so happy he's here to carry -- help carry this on.

GEN. PITTARD: Oh, thanks. I appreciate what we've talked about. And what we'll be doing, of course, will be building on the great foundation that's already been set. So this will be more than just -- (inaudible) -- passion, a labor of love. El Paso is also my hometown. So it really opens doors to the partnership between Fort Bliss and El Paso. (Audio break.) And I thank you in advance for your continued support.

MR. FOSTER: All right. I'd like to thank everybody very, very much. And Sergeant Sweetnam had a final closing comment. If we have any panelists left on the line or any callers as far as -- this will be back online?

SGT. SWEETNAM: Roger, yeah. I apologize for that --

(Background noise.)

(Laughter).

Q This is great.

SGT. SWEETNAM: (Laughter.) Sorry for that. There's people still on the line. So quickly, today's program -- this program will be available online at the bloggers link at dod.mil. So you also have access to the -- (inaudible) -- along with source documents such as this audio file. So if anyone is still there, this concludes the event. You can disconnect at this time.

END.