

# Renewable Energy Working Group Meeting Summary

## June 10, 2008

### Aerospace Center Building: Washington, D.C.

### U.S. Department of Energy (DOE)

#### Executive Summary

The goals and reporting for federal use of renewable energy are specified in two key documents: EPACT 2005, and Executive Order 13423. In some cases the guidance in these two documents is ambiguous or contradictory. In 2007, the Renewable Energy Working Group led an effort to develop guidance on how to address these problem areas. This led to the issuance of *Renewable Energy Requirement Guidance for EPACT 2005 and Executive Order 13423*, dated January 28, 2008.

The June 10, 2008 REWG meeting was designed to brief federal agency energy representatives on the rationale and details of the Guidance Document. In addition, the renewable energy-related provisions of the *Energy Independence and Security Act (EISA)* were discussed.

#### Extended Summary

**Anne Crawley.** This is the first REWG meeting since the renewable energy guidance was published in January, 2008. Today's emphasis is on the guidance and its basis in EPACT2005 and Executive Order 13432, as well as new issues raised by the *Energy Independence and Security Act of 2007 (EISA)* and current developments in Congress.

The Federal government is on track to exceed the renewable energy goals in 2007. In 2008, we have some opportunities, but the guidance, goals and reporting, which are based on the legislative and executive order language, are not as straightforward as we would like them to be.

We will talk about some of the opportunities in EISA, and what we are doing to get legislative changes to help expand renewable energy use. Then we will follow with legislative items that are pending in Congress.

Finally, we will discuss future meetings of the REWG - if it is useful to people, how often do we want to meet, what do we want to talk about?

#### FEMP Renewable Energy Guidance: Issues and Examples

Kevin DeGroat ([PDF 3 MB](#))

#### Guidance for EPACT 2005 Chart

The Energy Policy Act (EPACT) of 2005 has the legislative language which constrained us to the largest extent. For example, that is where the requirement to "consume" renewable energy comes from, which means we can't count production from facilitated projects and other measures we used to under the old Executive Order (EO). The definitions are directly from EPACT 2005 as well. After EPACT 2005, the EO expanded and added some additional requirements. For example, half the RE comes from "new" sources. So in the guidance we tried to reconcile these different requirements and make reporting as easy as we could make it. However, the reporting spreadsheet was pretty complicated and we had many questions.

The renewable energy goal is 3% for 2007-2009, 5% (in 2010-2012), and 7-½% (in 2013). Agencies are free to set more aggressive internal renewable goals.

### Definition Highlights—1st Chart

The EO applies the "new" renewable energy sources requirement and sets a date to make it definitive - placed in service after Jan 1, 1999. Whenever we refer to "new", we peg "new" to that date. That is important because "new" is used in several different contexts. The EO gave us some flexibility that was not in EPACT2005. For example, the law says "electricity" - which left out all the non-electricity and thermal sources. Using the EO authority, we are able to count those non-electric sources toward the requirement for "new." Although it helps thermal and non-electric projects, it is also one of the chief complications in the guidance. The guidance, like the EO, requires that agencies have to meet half of their RE requirement from "new" sources. But we are letting agencies use thermal to meet that requirement if they want. If an agency has enough electricity projects to meet all of their goals but they are all from old projects, they can still count them to meet the goal if they have the equivalent of half of their requirement from thermal renewable energy from "new" sources. The thermal doesn't help meet the EPACT goal directly, but it can help you comply with the EO with less "new" sources of renewable electricity. We would like to have thermal as a full-fledged renewable energy source that counts toward the goal, and also other non-electric sources. But we are limited by EPACT2005's language.

We had a very similar list of technologies under the federal definition of the old EO. Biomass is in both, but there is some additional information about biomass. Renewable energy also includes waste-to-energy and landfill gas. Hydropower was finally accepted with some restrictions. (Under the old EO, hydropower was not allowed.) The guidance also added hydrokinetic energy and ocean. RECs and purchases from these and other sources are also allowed.

**Question:** Assuming that an agency had a geothermal heat pump that became operational in 2000, how much if any of that, would count to the goal? **Response:** You can't count it toward EPACT. You can count it toward the EO requirement for "new" renewable energy. If it's not generating electricity it can't count toward EPACT requirements, but thermal can get you over the "new" requirement.

Here's a "worst case scenario": If you have 3% of your renewable electricity sources built before Jan 1, 1999 (all old) under the EO, you can't report any of that because of the 50 percent "new" requirement. While you can't count the thermal toward the 3% goal, if you have a bunch of thermal that is "new", it lets you qualify all of the old electric energy even though the electricity is from old sources. So it's a way of avoiding having to acquire "new" sources of renewable electricity. We also relaxed the "new" requirement for agencies that might have had older systems. You can report up to 50 percent of the goal. We don't care if it's old or "new", but if you are going to report any more, you must start showing progress on the "new" requirement.

### Definition Highlights—2nd Chart

**Question:** Given the restriction on hydropower, how can Federal agencies use it? **Response:** Hydropower is additional capacity at existing plants. The definitions limit hydropower in that way. There's a lot of hydropower in the US, but most of it is from big dams. There are many opportunities for repowering turbines, for creating more capacity, and for other upgrading. It is environmentally benign and it is going on existing facilities. The door EPACT opens is for that type of addition and capacity. One of the questions is - "I may have repowered my turbines or put in other equipment upgrades, but what if it was a bad hydropower year and I really didn't get any more energy from it?" We advise that if an agency has installed equipment to get 10% more capacity, then 10% of the energy output is attributable to that upgrade regardless of the total amount of generation from year to year. Whatever amount of water actually runs through the system, we assume you will get 10% more than you would have if you had not made the capacity addition, so we'll count that 10% increase in capacity as creating a 10% increase in watt-hours.

The other new technology that came in was "hydrokinetic" which describes a type of turbine for hydropower that can go in a stream or tidal area without a dam (photo on chart). It has a reputation for being environmentally benign. You can put it in a stream, it doesn't require a dam, and it doesn't interrupt flow.

Waste-to-energy got full recognition - but the fact is we haven't built a new waste-to-energy (municipal solid waste) plant in the US since 1995, so tapping existing commercial plants for WTE is limited because of the new requirement in the EO.

Geothermal: Ground Source Heat Pumps (GSHP) are allowed as non-electric. We're going to update the definition and the factors to deal with the fact that we have always counted them in comparison to an air-to-air heat pump, with the difference between the two as the renewable portion. We have to update the air-to-air comparison to meet the current appliance energy efficiency standards, which are now 13 SEER, whereas before we were looking at just what was installed and what it actually displaced, whether they met efficiency standards or not. That will be updated for the counting guidance.

Ocean Energy: Ocean Energy includes but is not limited to electric energy from tidal, wave, current, and ocean thermal energy conversion (OTEC).

**CDR Brad Hancock:** I encourage you to do that fairly quickly.

### **Definition Highlights—3rd Chart**

The definition of non-energy attributes relates to renewable energy certificate (REC) purchases. It basically says that when you purchase or retain a REC, you have to keep all of the attributes—sulphur, carbon, etc. We tried to keep the REC definition simple and fairly consistent with the market. **Anne Crawley:** We tried to standardize as much as we can and make it consistent across the US.

### **"New" Renewable Energy Chart**

There is a special allowance for refurbished or reconstructed facilities to be treated as "new." If 80% of the original equipment or original costs is involved in refurbishment, that's equivalent to building a new plant. Again renewable energy must be consumed, not just produced - which is in EPACT. In the guidance there is a table that shows the amount of thermal that you can use to meet the "new" requirement. But you still need to meet the EPACT with electricity.

### **REC Provisions Chart**

RECs must come from one of the defined RE sources. They have to be retained in order to count toward the goal. If you don't have a REC, then it's not renewable energy. So if the REC is from a project placed in service after January 1999, it meets the "new" requirement. It also must include those non-RE attributes - carbon, conventional pollutants, and others.

### **REC Retention Chart**

The reasoning is that RECs are a type of security - they are bought and sold based on the ownership value of the renewable energy and environmental attributes. Like a stock or bond, their value is in ownership of the property rights they represent.

If you sell the RECs, legally the energy is just regular energy after that. Just like you wouldn't buy a stock that was held by someone else, you wouldn't purchase the REC that someone else was claiming as well. It's a heightened concern right now. The Federal Trade Commission has opened some investigations on green claims and on exactly what green products are. We prefer RECs not become suspect in that market - we are trying to hold the line on that.

### **"Grandfather" Clauses Chart**

It took a long time to get the guidance. Meanwhile, agencies weren't stopping or slowing down their procurements in order to meet the goals. But they didn't have the final guidance. So 3.2.3 deals with on-site projects that were put in place before the guidance and it mostly addresses REC retention requirements because that was the main issue. Many of the projects that were being assembled were selling the RECs or doing other things with the RECs in order to improve the financing. So to be fair we said they can still count during the grandfather period which ends on Sep 30, 2011.

3.3.2 deals with grandfathering for RECs and purchases and it mainly impacts the "new" requirement and non-energy attribute requirements. There were some RECs and purchases that weren't clear about REC retention. Some bought the cheapest RECs to meet the goal because they didn't know what the deal was going to be at the time. That is why 3.2.3 and 3.3.2 have different language.

### **Bonus for Renewable Energy on Federal or Indian Land Chart**

The bonus for RE on Federal or Indian land led to some interpretation questions. For example—biomass: As long as the conversion equipment that turns the biomass into electricity is on Federal or Indian land, it can draw fuel from whatever location that makes sense from the area around the facility. If the RECs aren't retained, you get no credit for the original generation or the bonus. **Anne Crawley** - There's an explicit provision where if it's small and behind the meter, it's going to reduce your energy purchases associated with it. It's going to reduce use and contribute to your energy efficiency goal. The tricky part is if it's a large amount then you're usually metering separately and paying for it. So it is reported as purchased energy and does become part of your energy use. **Kevin DeGroat** - We exempted small systems because putting a meter on something like a small solar water heating system is cost-prohibitive. It is a significant cost for a system like that or even a small PV system. Most of the remote PV applications are too small to meter.

**Question:** Are we still asking agencies to report on-site production for tracking purposes? **Response:** Only if they choose to - there is a section where we ask them to because we eventually want to change the language to also count what's produced and not used.

### **RECs and Bonus Chart - Case 1**

This chart has some examples of the REC swap idea that use bonuses. This is the simplest case. You build something on federal or Indian land; you keep the REC; you don't sell it; and you get the bonus. You get 10 GWH of electricity with 10 GWH of RECs. You get to count 20 GWH of electricity toward your goal. So if the cost was 5 cents/kWH, and the site spends \$500,000 for 10 GWH of electricity - that is the simple case. You just hang on to your REC.

### **RECs & Bonus - Case 2: RECs from On-Site Project Sold Outside Government Chart**

A lot of projects did this before the guidance came out. They sold their RECs in order to cut down on the cost of the project. In this hypothetical case, they saved \$250,000. But because they sold the RECs, under the guidance, they don't get to count it toward the RE goal. They reduced the cost of doing their project, but got no renewable energy credit for it.

### **RECs and Bonus - Case 3 RECs from On-Site Project "Swapped" to Reduce Costs Chart**

Let's say you get 10 GWH of electricity from your project and sell the RECs for \$250,000. Then you buy some cheaper RECs from other sources for \$125,000. You can still cut your costs by \$125,000 by swapping RECs, and you get your full bonus. That's the principle behind REC swapping.

### **Other Bonus Questions Chart**

The bonus can transfer between agencies. For instance, if DOE is buying RE from a project that's on DoD land they can work out whatever split of the RECs and bonuses that they want. Bonuses are limited to new renewable energy sources. Projects that convert renewable fuels to electricity are considered to be on Federal or Indian land if the conversion is done on Federal or Indian land. You can bring in bio-diesel from wherever you want if you are converting it to electricity on your land. That's electricity on Federal or Indian lands. Biodiesel is a good example of where you might be buying from many locations. Bonuses do not impact greenhouse gas intensity. We just count your underlying RE. We don't give you the bonus toward the greenhouse gases. It's totally separate.

### **Guidance for EPACT 2005—Counting RE Purchase Goals for Reducing Energy Intensity Chart**

This is the provision for counting RE purchases goals for reducing energy intensity. It's on a stepped phase-out where by 2012 we're no longer counting RE and REC purchases toward the energy intensity goal. There is a slower phase-out for long-term contracts.

**CDR Hancock** - If an agency has built a large solar project on government land and consumed that electricity, would that agency count that energy toward its electrical consumption? That could be part of the agencies' plans, so without clear guidance, how do we plan? We're going to get right back into the situation where we're doing grandfathering clauses because we're trying to plan without guidance behind us.

**Anne Crawley** - I don't think we've completely worked out the large on-site projects that are metered.

**Wayne Thalasin** - Doesn't the guidance state that agencies omit small on-site un-metered renewable energy systems from the energy intensity reporting?

**Anne Crawley** - Functionally some systems are un-metered, and if it's not metered, then you don't know what to count. If it's un-metered, you can make an estimate. But the energy reporting is only really going to show up in the fact that you're not buying as much electricity or gas from somebody else. If you have something that shows up in that way and is measured, it would be included in your energy use. We have work to do to resolve the gray areas.

**Wayne Thalasin** - So then if we have a meter on a renewable energy system, it gets included in the energy intensity reporting?

**CDR Hancock** - I would say that it would.

**Anne Crawley** - I would argue that we should propose to the energy counting folks that your energy goal should be your traditional energy use - your fossil fuel, your purchased electricity utility sources, generally, and that on-site metered RE should not be counted against that energy goal. Nobody has made that proposition explicitly yet. I don't know of any place in all our energy guidance - because you're supposed to reduce your energy by such-and-so. But it doesn't define if it includes RE? Does it not include RE? It's not defined as far as I know. And that's one of the reasons we haven't talked - it's a whole other layer of challenge - but you're absolutely right - we need to look at big projects and figure out how it applies to the energy efficiency goals. When we wrote the rules for allowing RE purchases to reduce from the energy production goal, it was actually positive that we should be able to take advantage of the fact that you're purchasing RE - not traditional energy - and that's why we did that. Then it turned into a big game with the RECs, but it was initially done for a lot of other reasons.

**Bucky Green (EPA)** - We are developing preliminary calculations of EPA's Greenhouse Gas emissions. We are using EPA's Climate Leaders methodology because a number of the GHG and cap and trade bills introduced in Congress last term pointed to EPA's Office of Air and Radiation being the locus for development of official policies for tracking and trading GHG's. (The Climate Leaders program is located in EPA's Office of Air and Radiation.)

If your focus includes reduction of greenhouse gas emissions as well as reduction of energy use, I think, sooner or later, you are going to have to go back to the REC market. Unless, of course, you build a lot of on-site renewables.

**Question:** Have we thought about how we are going to do greenhouse gases? **Response:** If you sell the REC - and that's where the non-energy attributes kick in - non-energy attributes include the carbon. So yes - it doesn't help you with greenhouse gases - not renewable. With the accounting, we take the renewable amount (the purchase) out of the carbon because there's no carbon in the renewable energy. There is an issue there regarding biomass and waste-to-energy. Are they sustainable, are they actually carbon free? Right now, we're treating all as carbon neutral.

**Comment:** In looking at the Annual Energy Report, where is that carbon reduction? All I see is electricity times a multiplier gives you carbon. I don't see the renewable subtraction anywhere.

**Response at the Meeting:** I know we subtract it for the final report calculations. Let me look into this

particular page and report back to you. (Since the meeting date we have determined that the annual report table accounts for carbon reduction, but the small area on the RE reporting sheet does not reflect a subtraction of renewable energy.)

**Question on Phone:** Are you requiring the agencies to hold the RECs for RPS or other reasons?

**Response:** Yes, if they have no RECs at the agency level, then it's just electricity.

### Reporting Chart

We have automated calculations as much as possible for reporting. We have assumed that you want to swap and maximize the bonus and make that part of the formulas. We've already had some questions about grandfathering exceptions and people just noted that for grandfathering, this applies. The small scale systems that are un-metered aren't included and basically all renewable energy is assumed to have no greenhouse gas emissions (which again for biomass is going to be an open question). Depending on how the accounting goes, that may change.

### Contacts Information Chart

**Point of Contact:** Anne Crawley, 202-586-1505, [anne.crawley@ee.doe.gov](mailto:anne.crawley@ee.doe.gov)

FEMP Web Site

- [Renewable Energy](#)
- Renewable Energy Requirement Guidance for EPACT 2005 and Executive Order 13423 ([PDF 539 KB](#))

### The Energy Independence and Security Act of 2007 (EISA) and Renewable Energy, FEMP Legislative Items and Recent DOE Experience

Anne Crawley ([PDF 622 KB](#))

One of the first renewable energy-related items that catch one's eyes is the 30 percent solar water heater requirement for construction. But that's not everything. So I'm going to discuss some of the other pieces of EISA that I think are applicable. I will also talk about the few legislative items that we are trying to push and I will talk briefly about what we are doing in DOE.

### EISA: Standards for New Buildings/Renovations Chart 1

Section 323, which has to do with Public Building Energy Efficiency and Renewable Energy Systems, requires GSA to estimate future energy performance of buildings and describe use of energy efficiency and RE systems in prospectuses of proposed facilities. That's of interest for energy efficient lighting and perhaps other RE. The big one, potentially at least, is Section 433, which we think will be working to a revised building standard that reduces fossil-fuel generated energy by 55% for 2010 going to 100% for 2030.

Cyrus Nasser (FEMP) is the point-of-contact for EISA rule-making.

A number of meeting participants had questions or comments about EISA

**Bucky Green (EPA)** - Let's say that next time we build something we use a ground source heat pump. A ground source heat pump still uses electricity that is generated from fossil fuel. If we have electricity in the fossil fuel accounting for the building, are we going to be able to offset that with RECs? **Anne Crawley** - That is part of the bigger issues that must be settled. Formally, you deal with Cyrus Nasser on that as part of the formal rule-making process.

I think if this group wants to make an impact, then this is one of the places we could, specifically with the provisions that deal with construction. If this group wants to have a sub-group, it might be worth an effort. Maybe the Interagency Sustainability Working Group (ISWG) is the logical area. If we do not

have a sub-group, we'll coordinate with the ISWG. If we start talking now, we can influence those requirements, rather than just responding.

**CDR Brad Hancock** - If we start developing something new, and it's not the same as the current renewable energy guidance, essentially you're doing another RE accounting standard. I'm not sure that this group needs to wrestle with that. I would think that the ISWG would wrestle with that.

**Matt Gray (Chairman of the ISWG)** - There are two approaches to the guidance - renewable guidance and recommendations on a rule. **Anne Crawley** - I don't think we should do guidance - I think we should do recommendations.

**Bucky Green (EPA)** - I just assumed it was indirect energy - like if I'm buying electricity, that counts as fossil fuel.

**CDR Brad Hancock** - I think that's going to be part of the issue.

**Bucky Green (EPA)** - So it might only include on-site fuels like natural gas?

**CDR Brad Hancock** - Exactly. If it is electricity - do you have to go back to your source and figure out what part of that is RPS and what part isn't RPS?

**Anne Crawley** - Based on past history, the whole site source issue is a huge source of confusion. We have a challenge in that we have different standards to deal with. The renewable definitions are there. The more that we can make it simple, the better.

#### **EISA: Standards for New Buildings/Renovations (cont'd) Chart**

Here is the provision for solar hot water - we'll be working that. One thing that's important for renewables is that the life cycle period has changed from 25 years to 40 years. I think it does change the situation significantly.

**Bucky Green** - Is it clear that 523 applies only to domestic hot water? We use process hot water in our labs.

**CDR Brad Hancock** - That could be a big issue for hospitals.

**Anne Crawley** - That issue could be part of the rule-making. GSA has also been directed to look at Ground Source Heat Pumps.

#### **EISA: ESPC Provisions Chart**

There are many ESPC issues. It allows funding flexibility by allowing appropriated funds and private financing. Our experience with our lawyers is that's a challenge and very narrowly interpreted. There's an opportunity there, but it's not a slam dunk. This provision has to do with helping on the bundling and trying to encourage bundling. Formerly we were limited to shorter than 25 years. This change to a longer period is an advantage for renewables in terms of extending the period - using up all 25 years for the total amount of obligation. It also allows the use of excess generation. So there are pieces of this on the ESPC site that encourage RE.

**Doug Dahle, NREL** - The REC retention, swaps and excess generation issues are important. Projects will need to acquire substitute RECs because the economics of the projects are likely dependent on the private developer selling those RECs? **Anne Crawley** - We would come back to our agency-level REC swapping or selling portions of them depending on how much we should want to count. There's a lot of work we have to do around that internally at DOE. If there's no REC attached to the project, it's not going to count toward the renewable goal. The agency has to be able to account for it. It doesn't have to be tied to the project.

## **FEMP Legislative Items Chart**

We put three legislative changes up through our chain. One pushed for including non-electric renewable sources in the goal. It would change the goal from electricity to renewable energy, so it would allow thermal, mechanical, or anything else renewable.

We also sought language to allow longer than 20 years energy purchasing authority for a new RE project. That one looks like it has a chance at going somewhere. GSA is pursuing it at the moment. The 50-year life provision for wind got kicked out of EISA because of pay-go scoring. We're trying for 40 years to be consistent with the life cycle. That one looks like it has at least some chance of going somewhere. The language about "produce or use" was proposed so that we can count both production and use toward the goal. Because that and the thermal issue are straight revisions to EPACT as apposed to EISA, the feedback I've gotten back from our legislative person is that they're not going to shoot for those at this point.

**Beth Shearer** - Is anyone pursuing the technical corrections to the EISA provision that reduces fossil fuel consumption by 100% in new buildings? Anne Crawley: I don't know the answer.

**Bucky Green (EPA)** - You have the possibility of fuel used to generate energy off-site resulting in more overall fossil fuel consumption if the provision applies just to on-site fuel use.

**Matt Gray** - I know GSA has been talking about the issues. The ISWG is still working on the large guidance. We're going to bring out these issues in the rule-making.

**Anne Crawley** - It's not clear what the rules will say.

**CDR Brad Hancock** - The rules for the source fuel reduction could go a long way toward fixing the problem.

## **Legal and Policy Changes and Federal Renewable Energy Use Chart**

For context, this slide shows the federal RE use since 2000. Renewable energy use increased a lot, starting in 2003, which was about when EPA and DESC started getting all of the RE credit purchases really starting to work.

These are the goals— 2-½% for 2005-06, 3% for 2007-09, 5% for 2010-12 and 7-½% for 2013 on. In 2005, we achieved 6.93%, and in 2006 - 6.90%. That is the last official year that we have. The rules changed in 2007 and the EPACT definitions kicked in. The numbers on the chart for 2007 are preliminary - without the thermal. The EPACT numbers are just a little under 5%. If you add the thermal - all of which should count, we go up to 6.6%. We believe the decrease from 2006 to 2007 can partly be attributed to fewer RECs. For instance, DOE chose not to buy RECs.

I wanted to give you the big picture. I think the challenge as we go forward is not being able to meet the goal. I think that we can meet the goals, by buying RECs pretty easily. I think the hard part is trying to follow the challenges put to us at DOE - to meet the goal with on-site generation. For those who wish to do that, it becomes more interesting and more challenging. Our colleagues at DESC are good at buying RECs and our friends at WAPA are. Meeting the goal is less of an issue and there are some more important issues concerning how we deal with RECs. I think the focus that I intend to bring to this group as we go forward will be with whatever rules and issues we need to deal with and continuing to work with our counterparts at EPA and the Green Power Partnership.

## **TEAM Process Chart**

The DOE Secretary instituted our Transformational Energy Action Management (TEAM) initiative. It was formally announced at the 2007 GovEnergy conference. We've been working hard ever since and have some interesting projects in the works. We're not talking about them yet, but hope to by 2008 GovEnergy. We did a lot of work on screening, and would be happy to start to share those methods

with folks. Based on site visits and reports, our focus, in synch with our management, has been on alternative financing. However, alternative financing is not applicable in every situation. We worked with the Energy Savings Performance Contracts folks. We have at least one power purchase agreement in place at NREL. And we're looking to do more. There are cases where we're doing appropriated \$ projects where the economics of it just didn't make sense - for whatever reason.

## **Renewable Energy Legislation Update**

Kevin DeGroat ([PDF 793 KB](#))

The industry's top priority right now is the Investment Tax Credit (ITC) and the Production Tax Credit (PTC) tax extensions. Both expire at the end of the year. They are trying to work passage through a tax extender bill. They have already failed once attaching it to the Iraq War Supplemental and the fiscal stimulus bill and a couple of other must-pass bills. They are trying to get an extension right now for at least 8 years. It's important for federal agencies because obviously RE is more affordable because taking advantage of state and federal incentives influences costs. But for industry, the multi-year extension is even more important because they can't invest in new capacity based on changes in a year-to-year market. The recurring renewals have been a real detriment to them. The House insists on the pay-go requirement, but the Senate attached it to the fiscal stimulus bill and argued that this is a tax cut that will pay for itself. In this case the House didn't accept that logic. So it didn't make it through. There's still hope that they will find a vehicle that will carry them through. The latest is that they are trying to pass the tax extender bill. But the pessimists think that it may go to the lame duck session that does all the clean-up at the end of the year. That will probably involve appropriations and expiring tax credits, nominations, and everything else. So it's a real perilous choice for them to wait that long. But right now, there's no great train leaving the station for them to use as a vehicle. And again, it's the clash between the Senate and House - principally over pay-go issue and how to pay for it.

**CDR Brad Hancock** - We've got a relatively good size project right now that's about to die on the vine.

## **Future REWG Meetings; Topics? How often? Topical subgroups?**

**Anne Crawley** asked for a discussion about how often REWG meetings should be held, and what topics should be addressed. Anne feels that its value is sharing information, such as what are we doing that's working within our respective agencies. There is a lot going on, and will go on as the greenhouse gas environment around us picks up.

We talked about a topical sub-group on the guidance. The REWG was the principal body in developing the renewable guidance. We also talked about a sub-group to address the renewable parts of the rule-making associated with EISA.

**CDR Brad Hancock** - Quarterly might be reasonable time.

**Matt Gray** - We could discuss more on developing projects versus purchasing renewable energy. I don't know how much knowledge federally there is to do anything about it, but we (the ISWG) are thinking about next year - guidance for building projects or purchasing renewable power. We're thinking about a little bit of purchasing but focusing more on PPA and a guide to do them. Would that be of value? There's just not that many projects - we should be thinking through ways to do more.

**Bucky Green (EPA)** - We are dealing with power purchase agreements and tax credits. If the tax credits ever get passed, we have lots of questions on how to leverage them. Our lawyers are interested and it would be a good thing to have more information.

**Anne Crawley** - So, based on what I have heard today:

- Quarterly meetings - we will plan the next one in mid-September.
- Potential Topics

- One potential topic of interest is the guidance
- The rule-making is another potential general topic - several specifics are of interest
- Power purchase agreements (PPA) - how they work with ESPCs
- Calculating greenhouse gas amounts, taking into account renewable energy
- ESIA provision for fossil fuel consumption by 100% in new buildings.

In response to Anne Crawley's question as to whether agencies are interested in sharing a project that they've done, CDR Brad Hancock responded that the Air Force is willing to discuss or brief the Nellis Air Force Base PV project.

Anne Crawley and CDR Hancock encouraged participation at GovEnergy. Brochures were available to participants.

## **List of Participants**

### **At the Meeting**

Lee Bristol - Standard Solar  
 Anne Crawley - FEMP  
 Kevin DeGroat - McNeil Technologies  
 Kendra Gastright - Smithsonian  
 Matt Gray - FEMP  
 Bucky Green - EPA  
 CDR Brad Hancock - DoD  
 Brad Higgins - McNeil Technologies  
 Jim Hoelscher - Antares Group  
 Perry Luksin - Energetics  
 Richard Paradise - Sustainable Building Council  
 Cindy Ralph - DESC  
 Beth Shearer - Beth Shearer & Assoc.  
 Leslie Simpson - DESC  
 Evan Snyder - EPA  
 Wayne Thalasinis - NASA

### **On the Phone**

Bernie Avon - NETL  
 Rick Brown - Lawrence Berkeley Lab  
 Doug Dahle - NREL  
 CDR Gordon Delchamps - Indian Health Service  
 Norm Eckert - BP Solar International  
 Dick Fillman - AFCESA  
 Harry Plaza - NASA Kennedy Space Center  
 Mel Green - Navy PAX River  
 Anthony Harris - Kennedy Space Center  
 Shelia Hayter - NREL  
 Mary Heying - Interior  
 Melinda Latimer - Golden Field Office  
 Regina Larrabee - VA  
 CDR Steven Raynor - Indian Health Service  
 Eric Ruffel - CH2M HILL  
 Chandra Shah - NREL  
 David Stull - NORESO Federal Energy Savings Contract  
 Tony Tomlinson- United Space Alliance, Kennedy Space Center  
 Major Damund Williams - AFCESA  
 David Zimmerman - TVA