

# Project Perspectives



Global Project Finance

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# Around Akin Gump

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# Observations from Washington D.C.

This past Spring, Akin Gump Strauss Hauer & Feld held its first Global Project Finance Client Retreat at the Ojai Spa and Resort in Ojai, California. The participants engaged in several panels regarding a number of cutting edge topics concerning the power industry and challenges in project financing. One of the most popular panels was one comprised of four senior members of Akin Gump's 60-member Policy Practice in Washington D.C. The panel was moderated by Ed Zaelke, one of the Co-Chairs of Akin Gump's Global Project Finance Practice, and included as panel members Vic Fazio, former 10-term Democratic Congressman from California and former Chair of the Democratic Caucus, Bill Paxon, former five-term Republican Congressman from New York and former Chair of the National Republican Congressional Committee, Hank Terhune, former staff member of the House Rules Committee and Jeff McMillen, former staff director of the Select Revenue Measures (tax) Subcommittee of the House Ways and Means Committee. The following is an edited version of the discussion.

## **Ed Zaelke: Vic Fazio, as a Democrat, how do you see this election year unfolding?**

**Vic Fazio:** Obama's been holding a lead in the national polling, but that lead has frankly, in the last couple of weeks, once the Republican choice was effectively made, pretty much evaporated. I think we know that this race will go to the wire.

I also think we're going to see a bit more polarity expressed in the Presidential race. Obama's no longer engaging, as his Republican primary opponents were, in tagging Romney with the flip-flopper image. It's now going to be about how conservative he is and how polarizing his positions are.

But of course a lot rides on the House and the Senate. And I wish I could tell you with some clarity what's going to happen there. I think Democrats have been fortunate, in recent months, in the Senate where, people who heretofore had been expected to run and win, are not. For example, Olympia Snowe's retirement was a shocker to everyone. But even in other places where there might have been an assumption, like Massachusetts, that it would be Senator Scott Brown's to lose, now we have with Elizabeth Warren, a very competitive candidate, not only in terms of the polling numbers but in her fundraising ability as well. So you know it's going to be a very close call in the Senate, Bill Paxon and I have talked about this.

It's either 51, 52 one way or the other. As you all know that means more dysfunction because you have to get 60 votes to do anything. The threat of a filibuster has tied the Senate in knots. And that's a tragedy, really, if you want to get some issues resolved, but it's a fact of life.

In the House, I see a Republican majority, but not as strong as it currently is. Democrats need to pick up 25 seats, in real terms probably 35 seats, in order to have a good chance of winning control. Given re-districting, Republicans have been able to firm up a lot of their weaker, newly elected members, and so, I think they are pretty tough to dislodge. But at the same time, Republican members of the House have not distinguished themselves in the eyes of the general public in terms of their desire to get things done. They have come across as rather rigid and uncompromising; and it's beginning to show in the polling.

This lame duck session, because we assume policy is a vast wasteland until the election, is going to be extremely important to the country. A huge amount of policy is before the Congress and an awful lot of money is on the line.

So, the real question here is what will the atmosphere be after the election? What kind of mood will the Congress be in to deal with these incredibly important decisions? It's going to be impossible to know the dynamic, the psychology that will come out of the election until it's occurred. But so much has to get done in those six weeks.

Hopefully they will set up for next year, some timelines, some triggers that will force Congress to take action, on a whole range of issues. I don't think they can do it in six weeks, but the next Congress may be the most important in a quarter century. So, that's my view of where we are. I'd love to talk a little about energy policy. I'll just simply say this: all of the push to deal with climate change has dissipated. It's a result of the economy, frankly. A lot of it being the inconvenience, as Al Gore said, of the reality of climate change. And then we have people who just don't believe it. It doesn't take much to convince some people that it wasn't a problem. Or it's God's will or, man didn't create it so what can we do about it? I mean, the issues the policy underpinning of energy policy are in disarray and we'll talk more about that. But let me pass it to Bill.

**Bill Paxon:** Well, Vic, thanks very much and I can almost, almost say just ditto and stop, but being a good politician,



I won't. You know it's as always, everything's been said but I'll say it again. Number one, you have just keep in mind as we talk today, about what's going on in Congress, there's that old line that, and I always get it wrong, that, for Republicans in Congress, Democrats are the opponent, the Senate is the enemy. We all agree on that. We are all products of the House, so if there's any bias in that, it's that we consider the House the upper body as we go through this discussion today.

There are two kinds of things that are at play at the Presidential race, as Vic alluded to it. It's two choices, incumbency vs. the economy. We are a country that re-elects our Presidents usually, unless they kind of like Jimmy Carter give it up and say surrender. If you campaign and you don't surrender, generally speaking, the country re-elects Presidents, and usually every eight years we switch between the parties. For a long time that's been the case. So that clearly advantages the President. On the other side the economy, with the large deficit, jobs, unemployment, energy, healthcare, as a basket of issues, it just couldn't be worse for the President. So it's why, even though that was a horrible primary process, within two weeks Romney's numbers went up very quickly. A lot of us were quite surprised by that to be quite candid with you. But I think it shows the polarization of the country. There is a very small group of people that are undecided amongst different demographic groups.

The other question is whether it is going to be a choice election or a referendum election? Obviously the President wants to make it a choice to compare the advantages between the two candidates. The Republicans want to make this a referendum on the administration. History does show, generally

speaking, that Presidential races tend to be referendums on the incumbent. So that will be the big issue. A year ago I felt that the President had the slight advantage, I still think he does. It's a tremendous position to be in when you're the leader of the free world.

The fact is, if ever there was an opportunity for the Republicans this year, it is in the House and Senate. I agree with where Vic is; the House provides a slight advantage to the Republicans again, incumbency, reapportionment helped change the congressional districts in the states, and the Republican presidential candidate. The same on the Senate. There are 23 Democratic seats in play only 10 Republicans. So the Republicans have a smaller space to defend, Democrats a larger number. However, I absolutely agree with Vic, it could be 50/50 or 51/49 either way and as Vic said, and I totally agree, this is going to be, no matter who's elected President, no matter who's in charge of the Senate or in the House, this is going to be a challenging environment, both in the lame duck session and then next year.

**Ed Zaelke:** Jeff and Hank, both Vic and Bill talked about the lame duck session. Lame duck session is what, maybe between November 6th and Christmas, 45 days, call it 50 days. How can we do two years of legislation in 50 days? Is this just a crazy idea? Well it is a crazy idea. What can really get done?

**Jeff McMillen:** It is a crazy idea. That said, if I were in Vegas I'd say it's all going to come down to lame duck. I don't think that you're going to get an extenders package prior to lame duck. I just don't think the freshmen in the House know enough about 85 different provisions. They are all about transparency; and if they don't understand it, then it's not transparent. You are seeing Chairmen of the Committees, most specifically Chairman Camp in the House, trying. We are going to have extenders hearings and we are going to let members come in and talk about their bills. We are going to try to go over these 85 provisions, with hopes that even in a lame duck that they can get something to move. By my count there's approximately 7 trillion dollars coming up for lame duck that has to be figured out, between the extension of the Bush tax cuts, what do we do with sequestration, estate tax, capital gains, dividends, all of this kind of stuff. I'll throw in debt ceiling, which maybe is the most difficult thing of all, and my best guess is that in lame duck they probably, and it all depends on the election and we don't know which permutations are there, but my guess is that they kick it down the road for a year, which really tries to put pressure to move towards tax reform.

**Ed Zaelke:** And a big budget deal?

**Jeff McMillen:** And a big budget deal. Yes, tax reform and a big budget deal, I think those kind of go hand in hand, but that's not going to get figured out in the lame duck. You're not



going to do tax reform in a lame duck. Having been on the Hill, from November 15 to maybe Christmas Eve or it could be worse, it could be New Year's Eve this year, it is physically impossible for agreement among the Parties on what we're going to do in tax reform. There might be some outlines they can do but they are not going to get this done in a lame duck session. I think they are going to get one year, to give themselves that extra year, year and a half, to try to move something on a big budget deal, and on tax reform.

**Ed Zaelke: One quick question, just because that the panel yesterday, the five folks on the wind side and I include myself as the sixth, we were all reasonably optimistic about getting some sort of PTC extension by the end of the year, either before the lame duck session or during the lame duck session. You've been up to your elbows in this for six to eight years, what do you think Jeff?**

**Jeff McMillen:** Lame duck, I think I agree with you guys, assuming that they get something done in the lame duck, I think the PTC gets extended. You know there's been some discussion among some of the members on the tax writing committees, if we extend it for a year, which year do we extend it through? Do we extend it through 2013 or not and, do we extend it in 2014? The industry has been up there and this goes back to my days on the Hill ten years ago. The industry has successfully argued over the years that credit does not expire on December 31st, the credit expires the 1st of June or the 1st of July because that's when we start seeing shutdowns. Well, the folks on the Hill are kind of getting that now. So if we are doing this in a lame duck and we've told them the credit expired five or six months ago, then why are we doing 2013? Shouldn't we just do 2014? What does 2013 get us? Those are going to be some of the things that are discussed. I do believe the credit will be extended. Outside shot that you get 2013 and 2014, probably higher that you get 2013 rather than 2014, but I think there are people up there discussing very seriously doing a one year extension, and that year being 2014. Which complicates things, I know.

**Ed Zaelke: Hank, what do you think of the lame duck session and does it matter whether you do have Obama continuing in the Presidency or someone else? Does the lame duck just go away if the Republicans take the Presidency?**

**Hank Terhune:** You're anticipating exactly what I was going to add to this conversation. It's called a lame duck because you have members in the post election period who have lost their election but who are still in office through the end of the year before the new congress comes into place or the President's inaugurated. So if you have Obama lose or if you have the Senate flip it may not be in the interests of the newly elected

majority in the Senate, or the new President to do much business in the lame duck session. Having said that, this is an extraordinary lame duck session in terms of the deadlines that are faced in this period, so it's a lot of pressure to do things, but it's also possible that given the outcome of the election they may just decide to put it over into the first quarter of the next year, just move everything into that period, so that they have time for the newly elected members to deal with it.

**Ed Zaelke: Bill, let's assume for a second the Republican landslide. Republicans take the Senate, they don't get beaten up so bad in the House, they take the Presidency; what do the next two years look like?**

**Bill Paxton:** No matter what, is a very complicated political situation. Governor Romney can come in and lay down an agenda. Republicans tend to follow the leader. We have always done that. I was elected when George H.W. Bush took office. We followed the leader, that's just the way the party operates. The Tea Party movement is a big issue, but there's always been that, after President Bush was elected there was a conservative movement out there. So it's a long way of saying if Governor Romney is elected, as President Romney, he will have it in his ability to lay down some markers pretty quick with some Republicans in Congress. He knows, the Republicans in Congress know, they will have a very narrow window to get things done, and they will be looking of course, as we always do in this country, at the next election on the horizon. Because, assuming the economy is still sluggish at best in the fall, they know that they will be risking political extinction, if they don't act quickly, and of course, your issues, the energy issues, come under that basket on the economic side. So, I think there will be a big effort made and a big push made by the incoming President to take charge on the issue of the economy.

**Ed Zaelke: Vic, let's say the Democrats hold onto the Presidency, and the Democrats keep 50 to 53 seats in the Senate. Obviously Obama made some mistakes. He didn't follow the cardinal rule of "it's the economy stupid", the first couple years of his administration. What are we going to see different in the first couple years of Obama's next term?**

**Vic Fazio:** Well I think the President, if he's reelected will be into legacy, and will have to focus on what neither party is willing focus on at this point, is the huge burgeoning debt and deficit. There's got to be a deal; and the deal has eluded our political leaders. The Boehner/Obama deal almost came together last summer. It failed because, depending upon whose side you take, there was unwillingness to deal with the entitlements or taxes. Frankly, I'll tell you Reid and Pelosi had agreed with Obama that they would support him in entitlement reform, but you've got to deal with the revenues. And I

think as everyone knows John Boehner did not have the votes in the Republican Congress to put revenues on the table. But that is what you have got to go back and look at. If you look at the President's budget it doesn't do enough on deficit reduction. If you look at the plans all the Republican presidential hopefuls on the other side have offered, they add to the deficit, because they're making huge tax cuts - largely for people who already are doing relatively well. So the question is, will there be an adult conversation that leads to a result, which is going to mean entitlement reform, reducing ultimately the cost of healthcare, and new revenues on the table. Everything else takes second place to that. Nobody wants to talk about it during the election, because deficit reduction is popular until you get into the weeds, and then it's terribly unpopular, because everybody loses something. Now there's a deal to be made on tax rate reduction, eliminating expenditures, some people call them loopholes, credits, you know what I'm talking about, exemptions, all of that could be done, if there was some additional revenue put on the table. That's the kind of bipartisan agreement we could have on tax reform. But who gets tossed out? The real issue here is will there be a willingness to confront this in the first year of the new Presidency, when everyone's political courage quotient is at its peak. These are fundamental needs that the country desperately requires, and that I think would be a positive for the economy. Just as I think the Clinton budget deal back in the early nineties was a plus for the economy, for the bond market in general, but we need to do this on a bipartisan basis. We've got to get beyond the point where, anything the other side wants to do is automatically something you have to defeat. When you have a Congress that can't pass a highway bill, you have to ask the question, is it feasible that they can do anything?

**Ed Zaelke:** Vic, do you think there's a better chance of that with an incumbent President that is, in some ways, an instant lame duck. Is there more chance of that happening with Obama over Romney?

**Vic Fazio:** I think so, I think if Romney were elected he'd have an awful lot of pressure on him to do the plan that he's talked about. So I think, practically speaking, it would be better if Obama had this responsibility, but Romney, if he's elected can't shuck it, he's got to deal with it too. But the fact is that there's been no preparation of the public, and there will be none by either party leading up to the election. They are not going to talk truth to the American people about how to reduce the debt deficit. A divided government is more likely to produce a long-term, balanced deficit plan.

**Ed Zaelke:** Let's talk about a couple of energy issues. Jeff, natural gas prices we talked about yesterday, and their impact on this industry right now. Natural gas prices are at \$1.98 per million BTU in the US, yet they

are 10 to 12 dollars in Europe, and they're 12 to 15 dollars in Asia. Natural gas is a commodity, our clients tell us it costs about four bucks to liquefy it and move it someplace. If you average that in, by my math if it's a commodity it means it should be six or seven dollars in the US when you consider the transportation costs to other markets. Yet that's not happening, and one reason it's not happening is that export licenses from the Department of Energy are good for only one year. Folks are reluctant to build a zillion dollar liquification facility, if they only have a one year window. What's the policy behind that and where do you see it going?

**Jeff McMillen:** I'm going to split this in two pieces. When I go up and lobby for the extension of the PTC, I break it down into two pieces. There's the tax piece, but there's also the energy piece. So the one that I try to stress, to the tax folks, is at the end of the day, this is energy policy and we have a great short term energy policy. Natural gas is at two dollars. That's wonderful. You need to have an intermediate and a long term energy policy as well. Right now, because natural gas is so low, it's going to crowd everything else out, especially if there's no PTC, and if you kill the wind industry now, where are you going to be the next time in the natural gas cycle when it spins back up to 6, 8 or 10 dollars, and it will. When I left the hill in early 2004, natural gas was above eleven dollars and we were never going to see single digit natural gas again. Ever. I saw a graph yesterday, up here yesterday, we're never going to have greater than \$4 natural gas. Somebody else said yesterday all predictions were wrong in five years. We need to be prepared for the intermediate and long term energy policy. When I first got to the Ways and Means Committee in the late 90s, we were looking at the oil and gas industry, I think West Texas Intermediate was at \$10 a barrel. Bakersfield crude, which you could pick up with a spoon and pour it like syrup, it was costing them \$10 to bring it up, but they were only getting \$5 for it. Sooner or later, they could only take it for so long and then we started shutting wells. Once you shut these oil wells they don't come back. So after the end of a two or three year period, we wiped out the smallest, I do not remember what the percentage was, 15-20 percent of U.S. oil production. I am not saying that's why we're at \$120 today, but there is a piece of that. You crowd it out it doesn't come back. My fear is that if Congress doesn't figure out what the intermediate and long term energy needs are that we're going to crowd out things like wind and solar, because natural gas crowds them out. So when I talk to the tax guys I try to make them understand the energy side of this. We have turned some minds when you talk about energy policy.

**Hank Terhune:** I'll just add some comments about where we are right now in terms of the policy of exporting LNG. The first



export facility received its Federal licenses just in the last week or so. Cheniere Energy, as Jeff mentioned. There are probably about ten more in the queue. Many of these were import facilities. They now are being turned around to be export facilities. The federal approval process is sort of two steps. DOE has a role and FERC has a role. DOE, which is not traditionally a permitting agency, has to find that the export is in the public interest. There is a default that if we are exporting to a free trade country with whom we have a free trade agreement, that that's in the public interest so that's done, but if you're not going to an FTA country they have to make a finding that it's in the public interest. Then FERC has to approve the facilities. So Cheniere has made it through that two step process. You are seeing some opposition growing, as I think Jeff alluded to, from traditional places and some non-traditional places. The environmental community is upset about the potential for export of natural gas, because they see it as leading directly to increased production and increased fracking, which they are concerned about. But you also have major sectors of the economy, industrial sectors that see huge potential in low priced gas, like the chemical industry that uses natural gas as a feed stock and would like it to stay where they are, and they are siting the production facilities all around the gulf. There is some congressional interest in all of this. In the House, Ed Markey is trying to rally opposition to exports, which is ironic given his relationship to your industry and the effect it's going to have. In the Senate, Ron Wyden, the Senator from Oregon, who is likely to become the chairman or the ranking member, depending on the outcome of the Senate race, on the Energy

Committee, is also similarly concerned about all this. So right now DOE has taken a little bit of a step back. They are studying the issues around all of this, they want to come up with a comprehensive study about what the effect on price is and what the public interest is, before they move forward aggressively with many more licenses or permits. I wouldn't be surprised if we didn't see the results of that study until sometime after the election.

**Vic Fazio:** One other thing I would add on that, is what Markey has said, and it may be the fracking issue or it may not be, but his public statements about why we shouldn't export natural gas, is that if we export natural gas that will be a boon to the coal industry, and from his perspective, we can't possibly have a boon to the coal industry. In the meantime if it suppresses natural gas prices, the ones who take it on the chin, in my belief, will be the renewables industry.

**Ed Zaelke:** Let's talk about this for a second. So the price of energy being cheap helps our country. Natural gas at \$1.98 when the world price is \$6 could be our answer to become cost competitive with China. Should we allow it to be exported or not?

**Vic Fazio:** Well I think inevitably our country going to export. That's just where I think we'll end up. But most important thing right now in the short run is to get the fracking issue resolved and that's going to require cooperation between the states and the federal government and the industry. Many in the industry are prepared to do what's necessary to capture the methane and prevent the water pollution. The other subsid-



ence, earthquake related issues are a little more complex, but they are going to have to be dealt with, because I think we all do see the tremendous benefit of natural gas to this country. The prices are getting to a point where the incentive to keep drilling is going to be limited, so if you don't have the export market, you probably inevitably at some point shut in some of the potential production. But politically, energy is always a football that gets kicked around. There will be people like Ed Markey who will make the nationalist argument here, but the real fundamental need is to get this fracking issue resolved. It's been resolved pretty well in Wyoming and Colorado where states have taken the lead. I think we have a lot more work to do in the Appalachia area, in the shale gas there, but ultimately energy policy is always going to be of a political football, and we will kick it around for a while before this is resolved.

**Bill Paxon:** And I would just agree with Vic. I don't think there is any further to go there other than the fact that it does come back. You ask up front what a Romney presidency would be like, and I think it would be less—less choosing winners and losers, less subsidization, less regulation and faster approvals in a wide variety of areas. I think there are a lot of Republicans who traditionally were focused exclusively on one kind of energy policy who now believe all of the above is fine with me just we got to do something. So I do think that there will be a lot of Republican focus on moving forward, very little on choosing winners and losers.

**Ed Zaelke: Let's touch upon some other energy sources. Nuclear ... post Fukushima, are we going to see nuclear in the U.S., new build in the next ten years?**

**Hank Terhune:** I think it's the same issue. It's about natural gas prices. Fukushima presents a certain set of safety issues that have to be addressed and will be addressed, but they are manageable in the U.S. context. But it's the price of gas and the cost of building a nuclear plant. I mean the cost disparity is huge and the risk of building a nuclear plant is significant. There is some interest in smaller modular nuclear facilities, we'll have to wait and see when the first one is sited. So I think it's going to be very daunting to have the nuclear industry, to have the renaissance that was anticipated just as long ago as a couple of years ago, because again of the dynamic of the natural gas price and the rush of the electric power sector to natural gas which is logical given the economic dynamics.

**Ed Zaelke: Given your argument Jeff, of all gas all the time is a good short term policy, but a crummy intermediate or long term policy, the nuclear guys must be making the same argument. Do you think we will see something from the nuclear front in the near future?**

**Jeff McMillen:** Way back in 2003, there was a fight between the House and the Senate over what kind of nuclear incentive to put in and Senator Domenici at the end of the day won and they put in a Section-45 like credit for new nuclear plants. We, in the House, thought that there should be an investment tax credit with progress payments going through, because if somebody was going to jump off the cliff, as they are looking at their competitors and they are watching their dividend prices and whose going to do it, giving them progress payments along the way kind of help let them—the cliff wasn't so big. We didn't do that, we got this PTC. It's ten years later, and we are still ten years away from a nuclear plant, if that. I am just shy of pessimistic on nuclear.

**Hank Terhune:** I will just add this is a place where the outcome of the election will matter, especially if Romney is elected. I think you will see a push to try and incentivize nuclear in that case. If the Senate flips and Harry Reid is no longer the majority leader, I think you're going to see a strong push in that chamber to try and incentivize nuclear, where Senator Reid has long been a critic of the industry, partly because of the efforts to site the nuclear waste repository at Yucca mountain in his state.

**Ed Zaelke: That makes sense. Bill Paxon; is Keystone dead? Is it coming back? Is it going to be a huge political issue?**

**Bill Paxon:** I think the President lost badly on Keystone, his own party is deserting him in the Congress, the vote has gone to the supporters ... even the Democratic side are deserting him and I think he knows by his body language and his actions that this was a loser issue. He was doing it to play to his left base. There is a fringe element there who, I would say, are very violently opposed to that project, but he's finding himself out there and the limb is getting cut off. Republicans have a good issue, they know they have a good issue and they are going to drive it home. And I think the, my gut tells me, if I was the president I realize I'm losing, get away from this issue as quickly as he can.

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# Feed-in Tariffs Emerge as Key Policy Driver for Solar Developers

By Elliot Hinds, Brent Schoradt  
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In 2012, both Japan and the Los Angeles Department of Water and Power (LADWP), the largest municipal utility in the United States, launched new solar feed-in tariffs (FITs). This article compares the key features of these new FITs to existing FITs in other jurisdictions, including California, Vermont, Washington, Hawaii, Ontario, Spain and Germany, with particular emphasis on the key differences in project eligibility, project output controls, and pricing mechanisms.

## Background on Feed-in-Tariffs

FIT programs typically entail streamlined long-term power purchase agreements (PPA(s)) between utilities and renewable energy generators, under which the generator receives a pre-determined price, as specified by the particular FIT program rules, for each kilowatt-hour (kW-hour) of electricity produced for the life of the PPA. FIT programs can encourage the widespread deployment of solar systems by providing price certainty to project developers and incentives for utility customers to install solar systems with capacity beyond their individual electricity needs. In the United States, solar project developers can aggregate numerous FIT PPAs to attract tax-equity investors, thereby monetizing federal and state solar investment tax credits. Under such arrangements, the tax-equity investor provides funds to finance the solar installations in exchange for the right to all federal tax benefits for the installations. By providing standardized PPAs and a guaranteed price for all solar electricity produced, FITs help attract both tax-equity investors and debt financing and facilitate the financing of solar installations.

## Program Eligibility

FIT programs across the globe have established varying maximum project size limitations. Typically, maximum project size limits are designed to exclude utility-scale projects from FIT eligibility. In addition to the maximum project size limits, most FITs have overall program capacity limits based on the total MW of installed capacity or a specified percentage of peak energy demand in the jurisdiction. For example, the initial LADWP FIT program is limited to an aggregate of 10 MW of installed capacity; however, LADWP recently announced its

intention to move forward for approvals of a larger 150 MW program by the end of 2012.

## Residential

Germany, Hawaii, Japan, Ontario, Vermont, Washington and California's investor-owned utilities all have FITs without minimum capacity requirements, making their programs available to typical residential customers. By contrast, LADWP's eligibility rules limit FIT program participation to projects with at least 30 kilowatts (kW) of installed capacity. Given that the average grid-connected residential solar system is approximately 5.6 kW,<sup>1</sup> LADWP's FIT is currently inaccessible to the typical residential customer although LADWP offers other incentives for residential customers that install solar systems. However, the current FIT is a "demonstration program," that could potentially be expanded to include residential customers in the future.

## Commercial

Nearly every FIT program allows small to mid-sized commercial projects to participate. Currently, LADWP's FIT is available to "experienced developers" seeking to build solar projects with between 30 kW and 999 kW of installed capacity. The "experienced developer" requirement can be met by demonstrating the prior successful development and construction of at least one similar project of equal system capacity by at least one member of the development team. LADWP's project size range is ideal for commercial-scale solar developers seeking to build small to mid-sized projects that qualify for the 1 megawatt (MW) exemption to the Federal Energy Regulatory Commission Qualifying Facility certification process.<sup>2</sup> Both Vermont (2.2 MW

<sup>1</sup> Interstate Renewable Energy Council (Larry Sherwood), U.S. Solar Market Trends 2010, June 2011, 7, available at: <http://irecusa.org/wp-content/uploads/2011/06/IREC-Solar-Market-Trends-Report-June-2011-web.pdf>

<sup>2</sup> Projects equal to or less than 1 MW are exempt from the Public Utility Holding Company Act Reporting requirements and projects equal to or less than 2 MW are eligible for FERC's "Fast Track" interconnection procedure.

maximum project size) and Washington state (2 MW maximum project size) have FITs aimed at commercial and smaller utility-scale solar projects. Of all solar projects, commercial-scale projects are the most widely eligible for FITs.

### Utility-Scale

Utility-scale projects, with installed capacities larger than 1 MW, increase overall renewable energy generation and can provide power at a lower per kW-hour rates. With that in mind, California has established a statewide FIT, known as the Renewable Auction Mechanism (RAM), allowing projects with up to 20 MW of installed capacity to participate. California's 20 MW cap allows projects twice the size of the successful FITs in Germany and Ontario, both of which allow projects with up to 10 MW of installed capacity but have no overall program cap on the total MW of all participating projects. Japan's FIT also contains a maximum project size of 10 MW. Hawaii's FIT permits smaller utility-scale projects of up to 5 MW on Oahu and 2.72 MW on Maui and Hawaii or 1% of the system peak load from the previous year.<sup>3</sup>

### Output Control

FIT programs generally require that all electricity output from the installed solar facility be delivered into the grid. By contrast, under solar net-metering arrangements, the utility will bill the customer for net energy usage after taking account of all energy generated by the installed solar system and energy consumed by the customer on site.<sup>4</sup> Net metering has typically been attractive to utility customers with high energy demands because of the ability to reduce monthly electricity payments. FITs, on the other hand, are more appropriate for project developers willing to deliver the entire project output into the grid. Jurisdictions that offer both a FIT and a net-metering program (including California, Hawaii, Vermont and Washington) usually require program participants to choose between participating in the FIT and net-metering program. LADWP currently does not offer a net-metering program. Generally, FITs require that all electricity generated by an installed solar facility be delivered directly into the grid upon generation, thus precluding the use of energy storage technologies that store electricity on-site.

The requirement that all electricity be delivered into the grid prevents FIT participants from utilizing third-party PPA arrangements that are often used in conjunction with net-metering.

Third-party PPA arrangements, as used by well-known solar installers such as Solar City, Sungevity, and SunRun, allow commercial and residential electricity users to save on their electricity bills and avoid the high upfront costs of installing solar. A third-party PPA arrangement typically consists of an agreement between the commercial or residential utility customer and a third-party solar installer whereby the utility customer agrees to pay a fixed monthly charge or rate per kW for the solar power produced from a solar system that the solar installer installs, owns and operates on the utility customer's real property. The solar installer takes the value of any tax breaks, solar incentive programs, or renewable energy credits generated by the installed solar system and can attract tax-equity investors willing to provide funds to finance installations in exchange for the federal tax benefits generated by the solar system.

Since the net-metering utility customer is using the solar system to offset electricity that would otherwise be purchased from the local utility at the retail rate, solar installers can negotiate attractive PPA prices that are below retail but well above the ordinary wholesale price of electricity. In states, such as California, with high retail electricity rates, third-party PPA arrangements are particularly attractive. Third-party PPA arrangements have been a major contributor to recent growth in residential solar installations in California. According to the New York Times, more than 70% of residential solar installations in California during the first quarter of 2012 were installed as part of third-party PPA arrangements. Third-party PPAs have also been deployed in commercial-scale projects that have successfully attracted tax-equity financing to fund solar installations for commercial utility customers with high energy demands, such as school districts and shopping malls. Notwithstanding the success of third-party PPA arrangements, FITs will be particularly attractive to solar developers in jurisdictions where the FIT PPA price is higher than the retail rate of electricity such as Vermont, Ontario and Japan.

While solar developers utilizing net metering often pursue third-party PPA arrangements by seeking out utility customers with high on-site energy demand, developers seeking to develop projects under a FIT program can simply lease the real estate necessary to install the project. Instead of seeking out utility customers with high energy demands, FIT developers can identify real property owners willing to lease rooftop or

<sup>3</sup> HECO Feed In Tariff Program, available at: [www.heco.com/portal/site/heco/menuitem.508576f78baa14340b4c0610c510b1ca/?vgnnextoid=0b0a8618ce4f7210VgnVCM1000005c011bacRCD&vgnnextfmt=default&cpsexcurrchannel=1](http://www.heco.com/portal/site/heco/menuitem.508576f78baa14340b4c0610c510b1ca/?vgnnextoid=0b0a8618ce4f7210VgnVCM1000005c011bacRCD&vgnnextfmt=default&cpsexcurrchannel=1)

<sup>4</sup> Under California's net-metering program, the utility customer can now recover a fixed price for energy generated that is above and beyond the energy consumed onsite but other jurisdictions, such as Vermont, do not allow the utility customer to recoup payments for surplus energy.

other space in exchange for monthly lease payments. For example, in Hawaii, the Hawaiian Electric Company (“HECO”) has participated in a pilot program under which HECO installs solar systems on leased government-owned host sites.<sup>5</sup> The HECO lease payment is based on the total peak capacity of the solar system and all energy output is delivered into the local electricity grid.

### Pricing Mechanism

FIT programs establish the long-term PPA price for each KW-hour of electricity delivered into the local grid through either fixed-prices or market-based auctioning.

#### Fixed Price FITs

Hawaii, Spain, Germany, Ontario, Vermont and Washington have all adopted FIT programs that explicitly spell out the energy prices available to renewable generators. Many of these fixed-price FITs pay more than the retail rate of electricity for renewable power. For example, Vermont’s FIT pays 27.1 cents per kW-hour for photovoltaic solar power compared to the retail rate of approximately 12 cents per kW-hour. Ontario’s FIT pays 71.3 cents per kW-hour for the first 250 kW of installed rooftop solar compared to retail electricity rates of approximately 14 cents per kW-hour. Germany’s FIT has long provided higher prices than the retail rate of electricity, though recent proposals have emerged to significantly curtail prices for new projects.<sup>6</sup> In Hawaii, the first 20 kW of installed solar capacity is eligible to receive 21.8 cents per kW-hour, which is below the residential retail rate of electricity in Oahu (25.47 cents per kW-hour).

The market certainty and higher prices offered by the fixed-price FITs have spurred the rapid deployment of solar technologies in jurisdictions with such FITs. In 2011, Germany had over 7,500 MW of new solar capacity installed,<sup>7</sup> more than triple the 1,855 MW of new solar installed over the same period in

the United States.<sup>8</sup> Germany’s solar installations far outnumber those of the United States in absolute terms despite the fact that the United States has nearly four times the population and consumes almost twice the amount of electricity per capita.<sup>9</sup> Notwithstanding the success of the German FIT in spurring new solar installations, generous fixed priced FITs have been criticized for providing unsustainably high price supports. As mentioned above, Germany is now considering drastic reductions in FIT prices for new projects.

Spain is often mentioned as the epitome for high-priced FIT schemes. Spain’s FIT prices were set notoriously high at up to 55 cents per kW-hour.<sup>10</sup> Ultimately, Spain’s generous FIT proved unsustainable in the midst of the country’s ongoing fiscal difficulties, as the Spanish government temporarily closed the FIT program to new applicants in January 2012.<sup>11</sup> Spain’s high FIT prices led to a short-term boom in solar installations while the cessation of the Spanish FIT has contributed to a global over-supply of solar panels, playing a factor in rapidly decreasing solar panel prices.<sup>12</sup>

In order to avoid the pitfalls of the higher-priced FITs, Washington set its FIT PPA prices based on the average cost of generation plus a 10% rate of return. The Washington methodology is similar to rate-setting methods traditionally used by public utility regulatory commissions throughout the United States. Along these lines, Japan’s FIT provides for a fixed price (initially 53 cents per kW-hour) that is adjusted annually taking into consideration the costs of installation and electricity, the services life of the project, and the return on investment for project developers. In addition, the customer surcharge that Japanese utilities are required to impose to fund the FIT will be evaluated on a yearly basis to help stabilize funding of the FIT PPAs.

<sup>5</sup> Hawaii Solar Energy Association: Regulatory Proceedings, available at: <http://www.hsea.org/policy/regulatory-proceedings>

<sup>6</sup> See Renewable Energy Sources Act – EEG, Section 33; *PV Magazine: Germany unveils radical new FIT strategy*, available at: [http://www.pv-magazine.com/news/details/beitrag/germany-unveils-radical-new-fit-strategy\\_100005850/#axzz1vtmJC13z](http://www.pv-magazine.com/news/details/beitrag/germany-unveils-radical-new-fit-strategy_100005850/#axzz1vtmJC13z)

<sup>7</sup> *Reuters*, German Solar power output up 60 pct in 2011, December 29, 2011, available at: <http://af.reuters.com/article/commodities-News/idAFL6E7NT1WK20111229?sp=true>

<sup>8</sup> Solar Energy Industries Association, Facts on America’s Solar Industry, March 5, 2012.

<sup>9</sup> World Bank: United States/Data, available at <http://data.worldbank.org/country/united-states> (U.S. population of 309,349,000 as of 2010); World Bank: United States/Data, available at <http://data.worldbank.org/country/germany>; World Bank: Electric power consumption (kWh per capita)/Data/Table, available at <http://data.worldbank.org/indicator/EG.USE.ELEC.KH.PC>;

<sup>10</sup> *New York Times Spain’s Solar Market Crash Offers a Cautionary Tale About Feed-In Tariffs*, August 18, 2009, available at <http://www.nytimes.com/gwire/2009/08/18/18greenwire-spains-solar-market-crash-offers-a-cautionary-88308.html?pagewanted=all>

<sup>11</sup> *PV Magazine, Spain Suspends FITs*, January 28, 2012, available at: [http://www.pv-magazine.com/news/details/beitrag/spain-suspends-fits\\_100005605/#axzz1ut5LeJFT](http://www.pv-magazine.com/news/details/beitrag/spain-suspends-fits_100005605/#axzz1ut5LeJFT)

<sup>12</sup> *Supra*, note 6.



### Market-Based Pricing

Market-based FITs seek to take advantage of the benefits of a competitive bidding process and avoid the pitfalls of the high fixed-price FITs by requiring developers to submit bids that will be ranked based on price. Given that a high-priced bid may be rejected, developers have an incentive to submit competitive bids with lower PPA prices.

LADWP has established a market-based mechanism to determine the long-term price of the solar electricity it will purchase via its FIT program. As part of the application process, LADWP requires solar project developers to submit a competitive bid for the price of energy in the non-negotiable PPA for the project. LADWP will rank applications based on the bid price so that developers have an incentive to submit lower bids.

LADWP's pricing mechanism is similar to the California Public Utility Commission (CPUC) Renewable Auction Mechanism (RAM), which requires California's investor-owned utilities to hold bi-annual competitive auctions for renewable energy projects up to 20 MW in size. Under the RAM rules, the utility must rank proposals based on the proposed price per unit of electricity, and automatically select the lowest price bids until the predetermined total MW cap for the auction is met.<sup>13</sup>

The CPUC is also implementing a FIT for renewable energy projects with a project capacity of 3 MW or less, known as the Renewable Market Adjusting Tariff ("Re-MAT"). The Re-MAT will offer participating developers a fixed-price PPA initially based on the average price of the winning RAM bids. While the Re-MAT PPA prices are fixed for the PPA term, the PPA price offered to new projects will be adjusted every two months based on the number of eligible developers that accept the price offered in the previous two-month period. If 100% of participating developers accept the current PPA price for any two-month period, the PPA price offered in the subsequent two-month period will decrease. The PPA price offered as part of the Re-MAT will increase for the subsequent two-month period if less than 50% of participating developers accept the then-current price. Vermont is also in the process of developing a market-based mechanism, which must be finalized by March 2013, to determine the long-term PPA prices for its FIT.

The results of Southern California Edison's ("SCE") first RAM auction demonstrate that larger solar projects are more likely to receive awards under the auction method. The average installed capacity of SCE's winning bids was 9.57 MW and the smallest winning bids were for 2 MW of installed capacity.<sup>14</sup> While PPA price bids submitted under the RAM are considered proprietary and not publicly disclosed, the Re-MAT starting

<sup>13</sup> Decision 10-12-048, Public Utilities Commission of the State of California, 35 filed August 21, 2008.

<sup>14</sup> See State of California Public Utilities Commission Advice Letter 2712-E, May 2, 2012, available at: <http://www.sce.com/NR/sc3/tm2/pdf/2712-E.pdf>



## Feed-in Tariffs Emerge as Key Policy Driver for Solar Developers

price will be based on the average winning RAM bid, thus providing an important benchmark for project developers. In an effort to protect smaller projects from competing against larger projects (which typically have a lower price per kW), under the LADWP FIT, similarly sized projects (up to 150 kW and 151 kW to 999 kW) will be ranked against each other and a specified number of MWs must be awarded in each category.

- FITs and net metering both allow developers to aggregate and finance various solar installations while monetizing the U.S. federal tax benefits for solar projects; and
- The establishment of the Re-MAT starting PPA price for California projects with 3 MW or less of installed capacity will serve as an important benchmark for developers submitting future bids as part of California's RAM.

### Observations

- Third-party PPA arrangements used in conjunction with net-metering may be more lucrative than FITs in states with high retail electricity prices but relatively low FIT prices;

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Jurisdiction	Maximum Project Size	Pricing Mechanism
Los Angeles Department of Water and Power	999 KW	Auction
Washington	2 MW	Fixed-price based on average cost of generation plus 10% rate of return
Vermont	2.2 MW	Fixed-price but adopting "market-based" mechanism by 2013
California's Renewable Market Adjusting Tariff	3 MW	Fixed-price based on Renewable Auction Mechanism results with adjustments based on developer participation
Hawaii	5 MW*	Fixed-price
Japan	10 MW	Fixed-price with annual declines
Ontario	10 MW	Fixed-price
Spain	10 MW for ground-mounted systems; 2 MW for rooftop (program currently closed to new projects)	Fixed-price (program currently closed to new projects)
Germany	10 MW	Fixed-price with annual declines**
California Renewable Auction Mechanism	20 MW	Auction

\*5 MW projects allowed on Oahu and 2.72 MW and Maui and Hawaii or 1% of the system peak load from the previous year  
 \*\*Current legislative proposals would significantly curtail German FIT prices for new projects

# Islamic Project Finance

By Oli Charlesworth and  
Catriona McDevitt

Islamic finance consists of various financing structures which are compliant with Shari’ah law, the legal and moral system which guides observant Muslims. Islamic financing of international projects began in the early 1990’s. Since then, it has rapidly evolved and become a key source of funding in many project financings, particularly in the Middle East. As a result of the global financial crisis, the use of Islamic finance as a source of funding for projects has become even more widespread, as international banks have lost appetite for Middle East projects, creating a liquidity issue in the market, and from increasing local demands on Middle East-based banks to provide financing in accordance with Shari’ah compliant structures. Increasingly, it is also being used as a source of funding in new markets into which Middle East capital is flowing, including places as diverse as Uzbekistan, the U.K. and Hong Kong.

Many projects in the Middle East are now either entirely financed with Shari’ah compliant funding, or have a Shari’ah compliant tranche, in which an Islamic tranche forms part of a wider multi-sourced financing. Although the latter is more common, the market increasingly is seeing wholly-Islamic financed projects, the first of which was the Al Waha petrochemical project in 2006. Having an Islamic tranche in a multi-sourced financing can be challenging for both the banks (normally comprised of commercial banks, export credit agencies and development finance institutions) and the sponsors, as the parties need to apply traditional, market-recognized project financing principles to a Shari’ah compliant framework.

All Shari’ah compliant project financings need to be structured with the following prohibitions in mind:

**Interest (Riba):** No interest can be earned. Any return on funds provided by banks has to be earned by way of profit derived from a commercial risk taken by the banks.

**Unfair enrichment/ Unfair exploitation:** Contracts where one party is regarded as having unjustly gained at the expense of another are prohibited under Shari’ah law.

**Speculation (Misr):** The contract should not rely on chance or speculation. Ordinary commercial risk taking is acceptable, but transactions that amount to gambling are not permitted. Hedging is generally permitted provided it is used to hedge a particular risk and not used in a purely speculative manner.

**Uncertainty (Gharrar):** There must not be uncertainty in the contract. The subject matter, price and time for delivery must be known at the outset.

**Prohibited Investments:** Certain investments are prohibited, including those involving alcohol and gambling. The extent to which the prohibition is applied to projects depends on the views of the scholars on the Islamic bank’s Shari’ah supervisory board.

The type of Islamic financing products used in a project financing largely depends on the views of the Shari’ah advisory board of the Islamic bank (conservative or more liberal), the nature of the project and assets involved, local law considerations (including tax issues) and whether the product is to be used to fund the construction phase or the operating phase of the project. In the Middle East, projects are most often structured by combining the use of *Istisna’a* and *Ijara* arrangements, although other Islamic financing products are also used.

An *Istisna’a* arrangement is essentially a procurement contract where the project company requests phased payments (disbursements) from the banks to pay for construction of the Islamic assets. The price of the assets and the date of delivery are specified in the contract at the outset, although actual payment and delivery of the assets are deferred to future dates. Upon delivery of the assets to the banks, title to those assets will transfer (directly or indirectly) to the banks, who will then be responsible for all rights and obligations associated with the assets.

As the use of an *Istisna’a* arrangement does not provide a profit component to the banks as would an interest payment on a conventional loan, it is usually combined with an *Ijara* arrangement, which is the Islamic finance equivalent of a lease. In order to enable banks to receive a return during the construction phase of a project, a form of *Ijara* known as *Ijara Mawsuffah fi Al Dhimma* may be used. This is a forward lease arrangement where advance rental payments (equivalent to interest during construction) are made prior to project completion and actual rental payments (equivalent to principal plus interest) commence on project completion.

Other types of structures make use of a *Musharaka* arrangement which involves co-ownership of the assets between the sponsors and the banks. This may be combined

with *Ijara* and purchase and/or sale arrangements. Under this structure, for the term of the *Ijara* arrangement, the banks sell incremental units of their ownership interest in the leased assets to the project company, which is the economic equivalent of repayment of principal. The banks also lease their ownership interest to the project company, which is the economic equivalent of interest. As time passes, the banks continue to lease a decreasing share of the leased assets to the project company, with payment streams under the lease being structured accordingly.

A reverse *Murabaha* (*Tawarruq*) may also be used both in respect of the construction phase and operating phase of a project. This is essentially a synthetic product involving the sale of commodities by the lender to the project company at cost plus a mark-up, on deferred terms. This product can be used to replicate closely a term loan facility. Some Shari'ah scholars consider this financing technique a sham and do not approve of its use.

Banks need to review a project in detail in order to satisfy themselves as to various issues which may arise on any project funded by Islamic finance. For example, in multi-sourced financings, all banks (including conventional and Islamic) are usually treated equally, so the Islamic banks (which will own the assets in lease-based structures) will grant security over the Islamic assets in favor of all the finance parties. In the event of enforcement against the collateral, proceeds will be shared pro-rata among all the banks. Both the Islamic and conventional finance documents must be drafted in a manner whereby all draw-downs and prepayments are made pro rata across the tranches and all payment obligations are *pari passu* at all times. Occasionally, banks may agree to draw-downs and prepayments not being pro-rata in order to accommodate a given Shari'ah compliant financing structure.

Commitment fees are not permitted in Islamic financings. They may, however, be structured as part of the upfront or arrangement fee or as a component of advance rentals in an *Ijara* structure. Although some Islamic banks may keep these amounts, others will donate them to a charity nominated by the Shari'ah supervisory board of that bank.

Banks need to consider legal issues arising from ownership of the assets, including whether local law allows for ownership of the assets by foreign companies, and whether appropriate assets can be identified to form the basis of the Islamic portion of the financing. The transfer of title to the assets—initially from the contractor to the banks, and then from the banks to the project company—may have tax and/or accounting implications which will need to be considered on a case by case basis.

Proceeds generated under an Islamic financing should not be used to repay interest to conventional banks. This can usually



be achieved through effective drafting in the financing documents with regard to the payment waterfall and segregating "Islamic proceeds" into separate accounts.

Given capital restrictions and lack of appetite for financing long-term projects, a large number of international banks have realized that global funding for projects needs to be diversified. Islamic financing has proved to be, and will continue to be, an effective source of funding, as long as all parties carefully consider the particular issues that arise when using Shari'ah compliant techniques in a traditional project financing.

Islamic finance has seen a steady rise in prominence in the Middle East over the last decade. The double impact of globalization and decreasing availability of conventional funds makes it very likely that the markets will see an increasing use of Islamic finance in non-Islamic countries in the future.

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# Hunting Unicorns

## Individuals as Tax Equity Investors

By David Burton

As tax equity yields remain high and renewable energy is touted by the White House, the phone rings several times a month with the request to structure a fund that permits tax credits and accelerated depreciation to be passed through to individual investors. I call these eager, hopeful fund managers, unicorn hunters, as they are pursuing a valuable quarry that does not exist.

The best proof that tax equity for individuals is not feasible under current law is that the bulge bracket investment banks have yet to launch such a fund. Every investment bank in the country has retail clients asking to invest in green energy, and the banks would be thrilled to provide these clients with a fund that generated a 6% after-tax yield (which is significantly below current tax equity rates).

The obstacles in the tax law for tax equity for individuals stem from the fact that in the 1980s tax shelter promoters ran amuck peddling transactions that required little equity investment or operating risk but purported to produce substantial tax benefits. Congress was not pleased and took decisive action to preclude individuals from using tax benefits associated with tax credit, depreciation and non-recourse debt deals. Congress determined that such exotic species were suited only for widely-held C-corporations, which were already subject to two layers of tax and presumably had management sophisticated enough to sort through the good, the bad and the ugly.

Congress excluded individuals from this arena by enacting the passive activity loss rules and the at-risk rules. At a high level, the passive activity loss rules provide that individuals cannot use depreciation, tax credits, or interest expense (other than the home mortgage deduction) to reduce their taxes on income from their jobs or investment portfolios. The at-risk rules provide that individuals may not deduct interest from non-recourse debt (broadly defined) or claim depreciation deductions funded thereby.

The passive activity loss rules have an exception for activities in which individual taxpayers “materially participate.” When the aspiring renewable energy fund managers hear that, they think they have caught a glimpse of the unicorn’s tail. Certainly, if there’s an exception, they can meet it by having their investors oversee the investment by holding a few management meetings, preferably in a location with a PGA golf course.

The problem is the passive activity loss rules define “material participation” narrowly. There are three ways to “materially participate” that are relevant in this context:

1. spend more than 500 hours a year working at it: obviously not realistic for most individuals investors;
2. the individual’s participation consists of substantially all of the participation in the activity for all individuals (including individuals who are not owners): this means when the blade on the wind turbine breaks, the investor has to tie a rope around her waist and climb up to fix it; or
3. the individual participates in the activity for more than 100 hours and no other individual participates more (including individuals who are not owners): this means no one can work even part-time at the renewable energy project.<sup>1</sup>

The challenge of meeting this material participation standard is demonstrated by a recent trilogy of Tax Court cases involving solar hot water heaters in Hawaii.<sup>2</sup> The individual taxpayers purchased solar hot water heaters that were installed at the homes of third-party customers. The customers made monthly payments for the hot water heaters. The payments were collected and accounted for by a contractor affiliated with the manufacturer of the hot water heaters. The taxpayers asserted that they were entitled to use the federal investment tax credits and depreciation deductions from the hot water heaters to offset their other taxable income. The Tax Court disagreed, even though one of the taxpayers solicited potential customers and handled the collections for the first year, because the taxpayers did not materially participate as

<sup>1</sup>Temp Reg. §1.469-5T(a).

<sup>2</sup> *Lum v. Commissioner*, T.C. Memo. 2012-103; *Wilson v. Commissioner*, T.C. Memo. 2012-102; and *Nelson v. Commissioner*, T.C. Memo. 2012-102.





the contractor “collected most of the ratepayer’s payments, maintained records regarding the income, and made ... excise tax payments.”<sup>3</sup>

The way to enable individual investors to invest in these transactions is to exempt renewable energy deals from the passive activity loss at-risk rules. Proposals to change these rules actually achieve initial traction with the renewable energy industry’s friends in Congress, until the politicians discuss it with the lawyers employed by Congressional committees to advise on tax issues. Those technicians remember, or at least read about in law school, the 1980s cattle farm and Andy Warhol lithograph tax shelters sold in shopping malls. They find the idea of waiving these rules for renewable energy about as appealing as removing modern plumbing from the Capitol.

Here’s what the technicians do not understand. Tax equity under the current rules is expensive—a very good rate is 8% after-tax and many deals require double-digit returns. Introducing retail investors to the market will bring down returns – lower tax equity returns mean each dollar of tax benefit results in more watts of green energy. For example, one developer recently estimated that a 1% reduction in a project’s cost of capital reduced project costs by 10%.

Further, the problems of the 1980s will not be repeated. The industry is content to have the tax benefits only be able to be

passed through by “master limited partnerships” (MLPs).<sup>4</sup> An MLP is a publicly traded entity with a board, general counsel, CFO and tax manager. Therefore, it has the necessary professionals to make prudent investments and comply with complex tax rules. It files financial statements with the SEC and tax disclosures with the IRS.

Further, the MLP could be made subject to the “uncertain tax position” rules which require accounting reserves and financial statement and tax return disclosures for any tax position that is not likely to survive IRS scrutiny. In addition, the IRS audit rules could be changed to empower the IRS to audit and collect tax underpayments from the MLP directly, rather than having to chase thousands of individual investors. Thus, such transparency and accountability will preclude a repeat of tax problems of the 1980s, while resulting in more green energy for each dollar of tax benefits. Rather than hunting unicorns, the renewable energy industry should coalesce in support of the necessary MLP legislative changes.

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<sup>3</sup> *Lum v. Commissioner*, T.C. Memo. 2012-103.

<sup>4</sup> The annual 90% qualifying income “test for MLPs would also need to be amended to deem gross income for renewable energy to be qualifying income. The investment tax credit recapture rules would also need to be amended to have transfer of MLPs interests not trigger recapture of the investment tax credit.

# Desert Renewable Energy

## Conservation Plan Update *By Matt Nesburn*

California's promotion of renewable energy projects has taken on many forms. Perhaps the most well-known is the most aggressive Renewable Portfolio Standard in the country, which mandates California utilities to procure 33 percent of all energy from renewable sources by 2020.<sup>1</sup> A lesser known centerpiece of California's renewable project strategy the Desert Renewable Energy Conservation Plan (DRECP) that is structured to coordinate and expedite the federal and state permitting process in the resource-rich Mojave and Colorado desert regions of California while establishing an integrated conservation strategy for the region.<sup>2</sup> This article examines the current status of the DRECP's implementation.

### Background

Both the DRECP's conservation plans and the permitting process for solar thermal, utility-scale solar photovoltaic, wind and other forms of renewable energy and associated infrastructure such as electric transmission lines will be implemented to cover certain identified areas within the initial 35,000 square miles of desert in southeastern CA being examined for such purposes.

The DRECP is managed by a "Renewable Energy Action Team" (REAT) comprised of the U.S. Bureau of Land Management (BLM), U.S. Fish and Wildlife Service (USFWS), the California Energy Commission (CEC) and California Department of Fish and Game (CDFG), which was formed in order to facilitate responsible development of renewable energy in California, including the development of the DRECP. An initial comprehensive Planning Agreement was signed in 2010 by each member of the REAT for the implementation of the DRECP. Subsequent to the issuance of the Planning Agreement, the National Parks Service, U.S. Environmental Protection Agency, Department of Defense, California Public Utilities Commission and California Independent System Operator also have joined in the process. Additionally, a DRECP Stakeholder Committee, comprised of renewable energy developers, the affected counties, environmental organizations, electric utilities, and Native American organizations, has been formed to provide

a forum for public participation and input in the planning process. Specific working groups, comprised of DRECP Stakeholder Committee members, have been established and meet regularly to address specific issues such as covered species, covered activities, resource mapping, transmission planning and cultural resources.

In the time since the DRECP Planning Agreement was signed in 2010, the REAT has been working to complete the following four major initiatives to bring the DRECP to fruition: (i) issuance of a Best Management Practices and Guidance Manual, (ii) development of a Framework Conservation Strategy that identifies geographic areas for renewable project development and areas for long-term natural resource conservation, (iii) issuance of a Desert Renewable Energy Conservation Plan comprised of a state level Natural Communities Conservation Plan (NCCP) and one or more federal level Habitat Conservation Plans (HCP) and (iv) obtaining a record of decision / notice of decision for a joint state and federal Environmental Impact Report/Environmental Impact Statement (Joint EIR/EIS).

### Status.

**Best Management Practices Guide.** In December of 2010, the REAT published the Best Management Practices Guide,<sup>3</sup> which is intended to improve the efficiency of the regulatory process and support renewable energy developers' efforts to comply with the National Environmental Policy Act (NEPA), the California Environmental Quality Act (CEQA) and other federal and state laws. The guide sets out voluntary best management practices for development, permitting, construction, operation and decommissioning of renewable energy projects in the California desert and includes detailed check lists and timelines for meeting with required agencies and stakeholders to ensure smooth permitting with the applicable lead agency in the permitting process. It also sets forth best management practices for projects in their post-application phases. Compliance with the guide is voluntary and does not duplicate, modify, supersede or provide a safe harbor under any existing

<sup>1</sup> SB X1-2, which codified the 33% goal set forth in Executive Order #S-14-08 (EO s-14-08).

<sup>2</sup> The federal and state agencies are acting pursuant to an October 2009 MOU between the Department of the Interior ("DOI") and the State of California directing such agencies to work together to further the implementation of EO S-14-08 and Secretarial Order No. 3285 (establishing renewable energy as a priority for the Department of the Interior).

<sup>3</sup> Available at: <http://www.energy.ca.gov/2010publications/REAT-1000-2010-009/REAT-1000-2010-009-F.PDF>

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law or regulation but is merely intended to help improve the efficiency of the regulatory process.

**Framework Conservation Strategy.** In May of 2011, the REAT produced its latest draft of a Framework Conservation Strategy in order to clearly identify and map areas maximizing commercial viability for renewable energy project development and also areas intended for long-term natural resource conservation within the DRECP. This strategy is intended to establish a framework for conservation planning principles and to define the biological goals and objectives of the DRECP, focusing on identifying and protecting covered species and natural communities occurring within the DRECP and identifying the best ways to minimize energy project impacts on the DRECP area's natural habitat. As part of the process, certain areas in the Owens Valley, Barstow, Blythe, the Imperial Valley and West Mojave have been identified as "Renewable Energy Study Areas" which have been the focus of the majority of the energy development planning based on a preliminary balancing of biological and commercial factors. The Framework Conservation Strategy also lists species considered for "covered species" status within the DRECP (i.e., plants and animals for which conservation and management are provided and for which "take" will be authorized over a long-term permit period) as well as activities that would be considered "covered activities" for the purposes of issuing incidental take permits, as further described below. These activities include the construction, operation, maintenance and decommissioning of qualifying renewable energy projects and related transmission lines as well as conservation related activities within the DRECP plan area.

#### **Desert Renewable Energy Conservation Plan.**

Following on the Framework Conservation Strategy, the REAT has been working to develop NCCP/HCP Implementing Agreement(s) that would establish the DRECP both as an NCCP under California's Natural Community Conservation Planning Act<sup>4</sup> and one or more HCPs under the federal Endangered Species Act.<sup>5</sup> The approved NCCP/HCP Implementing Agreement(s) and associated permits would provide renewable energy developers and entities undertaking conservation efforts in the DRECP with authorization for incidental take of certain endangered, threatened or special status animals and plants while performing covered activities associated with such endeavors. This DRECP-wide take permit would obviate the need for each such party to apply to the applicable governmental agencies individually. An official public draft of the NCCP/HCP Implementing Agreement(s) are anticipated to be released for public comment by the third quarter of 2012

with final versions anticipated for the first quarter of 2013 and signed NCCP/HCP Implementing Agreement(s) and issuance of associated permits anticipated in the second quarter of 2013.

**Environmental Impact Report/Environmental Impact Statement.** Concurrently with processing the NCCP/HCP Implementing Agreement(s), the REAT is working toward obtaining final approval of the Joint EIR/EIS (required at the state level by CEQA) and Environmental Impact Statement (required at the federal level by NEPA for development on federal lands). The Joint EIR/EIS should considerably reduce the time and cost of the most arduous EIR/EIS processes (such as obtaining incidental take permits) for renewable energy projects located within the DRECP by allowing incorporation of the Joint EIR/EIS by reference into a project's EIR/EIS where applicable. A scoping report for the Joint EIR/EIS has been made available for public comment and is being revised, with a complete draft of the Joint EIR/EIS anticipated for public comment by the third quarter of 2012, a final version anticipated for the first quarter of 2013 and a record of decision/notice of decision anticipated to be issued in the second quarter of 2013. The California Energy Commission is the lead agency under CEQA considering approval of the Joint EIR/EIS and the U.S. Fish & Wildlife Service and the Bureau of Land Management are the federal co-lead agencies under NEPA. Following the record of decision/notice of decision, Projects already in the permitting process may choose to incorporate the Joint EIR/EIS in their permitting documentation or may continue to pursue independent EIR/EIS approval, depending on what makes sense for each individual project. Additionally, projects in the DRECP plan area undergoing permitting review prior to the final record of decision/notice of decision are subject to review by these lead agencies to insure consistency with the DRECP.

#### **Other Developments.**

**Senate Bill X8 34 (Padilla) and Assembly Bill X1 13 (Perez).** In addition to the developments outlined above, Senate Bill X8 34 (Padilla) was enacted in March of 2010 to facilitate mitigation actions for solar renewable energy projects in the DRECP seeking funding under the American Recovery and Reinvestment Act (ARRA). Under this regime, the CEC and CDFG, working together with other REAT agencies, implement streamlined mitigation processes for such qualified projects through two different processes: (i) "advanced mitigation" where a "land bank" (the Renewable Energy Resources Fee Trust Fund) was established using the initial \$10 million authorized under the bill (as a loan to be repaid

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<sup>4</sup> Cal. Fish & Game Code, Section 2800 et seq.

<sup>5</sup> Federal Endangered Species Act Section 10(a)(1)(B)





by 12/31/2012) to purchase mitigation lands and which qualified projects then purchase credits in to satisfy their mitigation obligations, thereby repaying the loan and replenishing the land bank's coffers, and (ii) "in-lieu fee" mechanisms whereby a project would pay a fee to the CDFG and the CDFG (working with the other REAT agencies) would implement individual permit-specific project mitigation actions, including acquiring mitigation lands, in order to facilitate such project meeting its mitigation requirements. The bill authorizes the CEC and CDFG, in conjunction with the other REAT agencies, to design and implement such advanced mitigation measures and the CDFG issued an Interim Mitigation Strategy to do so. Additionally, land has been purchased to serve as advanced mitigation property. The agencies anticipate that most, if not all, land-based mitigation or restoration requirements arising from review under the California Environmental Species Act would be able to be met through one of these two methodologies, however project developers may chose to implement mitigation on their own behalf instead of participating in such programs. These mitigation strategies are intended to be applicable to qualifying projects currently undergoing permitting.

Assembly Bill X1 13, enacted a year later, expanded SB X8 34 to apply to wind and geothermal power plants within the DRECP planning area in addition to solar projects and also eliminated the requirement that the applicable project must be seeking ARRA stimulus funding. Additionally, the bill standardizes permit processing fees charged by CDFG for incidental take permits based on project size and authorizes the CEC to provide up to \$7 million in grants to the eight San Joaquin Valley counties to update policies such as general plans, zoning ordinances, or natural community conservation plans to encourage renewable energy development.

**Senate Bill 16 (Rubio) and Senate Bill 618 (Wolk).** SB 16, enacted in September of 2011, provides for procedures for the CDFG to assist developers of renewable energy projects to submit timely and complete applications for incidental take permits (SB 16 applies to all RPS-eligible projects, rather than the limited set covered under AB X1 13). The bill requires that CDFG respond to applications within 45 days. Once the application is complete, CDFG must render a determination on complete applications within 60 days. SB 618, enacted in October of 2011, allows a project to obtain coverage for an incidental take of a California "fully protected species" by expanding the scope of the NCCPA to allow the issuance of a take permit for fully protected species through an NCCP. While not expressly aimed at renewable energy projects, the DRECP, as an NCCP, would be able to incorporate take authorization for fully protected species for the renewable projects covered under the plan.

### Conclusion

The DRECP is an ambitious effort requiring an almost unprecedented level of cooperation between state and federal agencies. Amidst a chorus of complaints of pervasive government dysfunction, it is heartening to see this complex process moving steadily toward achieving its stated goals. While there are complaints from developers that the anticipated size and scope of the energy development areas within the DRECP may be too constrained, the DRECP should be largely implemented in the next 6 to 12 months, providing a much needed boost to utility scale renewable energy projects that have been hit hard by a slowdown in available capital caused by the European debt crises and an unpredictable domestic federal tax regime.

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# State Tax Credits

By David Burton and Adam Krotman

## Results of Oregon's Auction of Income Tax Credits May Indicate Lack of Appetite In Market

This past summer, Oregon enacted a law authorizing the state Department of Energy to establish a grant program for renewable energy funded with the proceeds from a state income tax credit auction administered by the state Department of Revenue. Through an online auction October 24 - November 4, 2011, \$1.5 million worth of such tax credits were made available to corporations and individuals with tax liability in the state at an initial minimum bid price of \$950 per \$1,000 credit. A second auction round with similar minimum bid price terms was held December 1 - December 9, 2011.

Auction results fell considerably short of the state's expectations. In the first round of bidding, bidders purchased less than one-third of the available credits, leaving the state more than \$1 million short of its anticipated proceeds. In the second round, just seven individuals bid on 43 \$1,000 credits valued at \$41,190. Although the value of such credits may be augmented by a recent decision by the Oregon Tax Court holding that a corporation may apply purchased business energy tax credits against its corporate minimum tax obligation,<sup>1</sup> we believe that the auction results may be indicative of a deeper bearish sentiment in the market on income tax credits at the present time. Such a bearish sentiment may be due to possible concerns regarding the economy and taxpayer uncertainty as to whether they will have sufficient income to utilize the tax credits. This current bearish sentiment may offer opportunities for potential investors in tax credits, who may be able to invest in tax credits at a substantial discount.

The Oregon auction also raises a question of interest to purchasers of state tax credits regarding the tax treatment of both the costs incurred to purchase such credits and the subsequent use of such credits.

## Federal Tax Treatment of Purchasers of State Renewable Tax Credits

Some states allow the original recipient of certain state renewable energy tax credits to transfer such credits to other taxpayers through a direct sale (e.g. Oregon, Iowa, and New Mexico); Oregon recently held an auction for state renewable energy tax credits (see previous article). Such purchases may avoid the complexities and transaction costs inherent in structures such as the so-called "flip partnership,"<sup>2</sup> a commonly used technique for investors in federal renewable energy tax credits, which are not currently transferrable. In considering purchases of transferrable state renewable energy tax credits, investors should be mindful of the attendant U.S. federal tax consequences, including if and when the purchaser will be subject to tax on the difference between the face value of the credit and the amount paid for the credit, the purchaser's federal tax basis in the credit, and the deductibility for U.S. federal income tax purposes of any state taxes against which the purchaser applies the credit. A recent Chief Counsel Advice 201147024 (CCA) released by the U.S. Internal Revenue Service (IRS) in November of 2011, although non-binding on the IRS, provides some helpful guidance on this point.

Based on the CCA, a purchaser of a transferable state tax credit is treated as acquiring an intangible property right to reduce its future state tax liability. The purchaser generally takes a federal tax basis in the credit equal to the consideration paid to acquire such credit plus the transaction costs incurred in connection with the purchase. By contrast, the original recipient of the credit generally has a zero cost basis in the credit and is therefore subject to tax on the full amount received from the purchaser less the transaction costs incurred by the original recipient in connection with the sale.

The CCA also clarifies that the purchaser does not recognize any gain upon purchasing the credit even though the face value of the credit exceeds the purchaser's federal tax basis in the credit.<sup>3</sup> However, the future use of the tax credit by the

<sup>1</sup> *Con-Way, Inc. & Affiliates v. Department of Revenue, State of Oregon*, Or. Tax Ct., No. TC 5003, December 27, 2011.

<sup>2</sup> Rev. Proc. 2007-65, 2007-45 IRB 967.

<sup>3</sup> By contrast, in Chief Counsel Advice 201220026, released by the IRS in May of 2012, the IRS concluded that where pursuant to a state incentive program, a state government transferred certain state tax credits to creditors of the taxpayer in satisfaction of a specified amount of principal and interest, the taxpayer was subject to federal income tax on such amounts. The IRS did not analyze the character of such income.



purchaser will be treated as a transfer of property to the state in satisfaction of the purchaser's state tax liability. Accordingly, if and when the purchaser uses the credit, the purchaser recognizes gain equal to the difference, if any, between the amount of state tax liability satisfied by the credit and the purchaser's tax basis in the credit. Although the law is not clear on this point, a strong position may exist under certain circumstances to treat any such gain as capital gain. Depending on the purchaser's holding period of the credit, such capital gain may be taxed at preferential rates.

Further, the CCA instructs that when the purchaser uses the credit, the purchaser will still be able to deduct for U.S. federal income tax purposes the full amount of the state tax liability satisfied by the credit, although we note that state taxes are not deductible for individuals subject to the alternative minimum tax. Thus, in certain scenarios, upon using the credit,

it may be possible for the purchaser to both recognize capital gain taxed at preferential rates on the difference between the amount of state tax liability satisfied by the credit and the purchaser's tax basis in the credit, and deduct the amount of state tax liability satisfied by the credit against ordinary income.

With proper structuring, parties considering investing in state renewable energy tax credits through direct purchases may be able to take advantage of the favorable U.S. federal tax treatment outlined above.

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# Japan's New Energy Market

## How the Great Earthquake of 2011 Has Changed Japan's Energy Mix and Created New Business Opportunities

By Kerin Cantwell, Miles Killingsworth, Gregory Puff and Andrew Abernethy

It used to be that Japan's energy market was not much of a target for energy investors. Unlike most developed countries, the energy sector was not, until recently, deregulated to any degree; for decades, the 10 vertically integrated utilities in Japan have exercised monopoly control over the generation and distribution of electric power in their respective regions. This arrangement has been overseen by the Ministry of Economy, Trade and Industry (METI), which championed nuclear power as part of the country's industrial policy, both for purposes of energy security—as Japan developed its nuclear enrichment, recycling and utilization capabilities and consequently reduced its need to import uranium—and for promotion of the domestic development, use and export of nuclear power technology, design and construction by Japanese industrials.

The catastrophic earthquake and tsunami of March 11, 2011, abruptly changed more than 40 years of government policy. In the aftermath of the disaster, the status quo of Japan's energy market and regulatory regime is being questioned domestically; the energy mix has changed dramatically; and, where there once was little opportunity for foreign players in Japan's energy sector, the market now seems ripe for international trade and investment.

Prior to the earthquake, nuclear power constituted approximately 27 percent of Japan's energy resources, with the balance being supplied by coal (27 percent), gas (27 percent), oil (9 percent), hydro (7 percent) and renewables (3 percent, most of which consisted of combustible waste). METI's 2010 electricity supply plan called for nuclear power to constitute 41 percent of all electricity supply by 2019, furthering national policies of reducing greenhouse gas emissions in accordance with the Kyoto Protocol, reducing dependence on fuel imports and increasing energy security.

However, the meltdown of the Fukushima Dai-Ichi nuclear power plant shook public confidence in the safety of nuclear power to such a degree that, currently, all of Japan's 54 nuclear power plants have been shut down, either by the earthquake or for scheduled maintenance, and it is unknown when, or how many, will come back online. Some business leaders are calling for some of the reactors to be restarted to stabilize energy supply and avert further economic damage. One nuclear plant was restarted in June of this year by the order of Japan's Prime Minister, Yoshihiko Noda. Mr. Noda said he ordered

the plant back online to avoid blackouts and harm to industry. The move sparked the largest public protest rallies in Tokyo since the 1960s. Prior to the recent public protests, on the face of less vehement public outcry over nuclear safety and criticism of the cozy ties between METI and the utilities it oversees following the Fukushima disaster, the government approved a white paper in October 2011, calling for a reduction in Japan's reliance on nuclear energy and expressing regret over its past energy policy. Japan now has a huge energy deficit, which begs the question: what energy sources will fill the void?

In the short term, the answer is natural gas. Currently, oil, coal and natural gas account for about 90 percent of Japan's energy resources, but the cost of the increased demand for oil and gas is estimated to be about \$100 million per day. Japan produces less than 4 percent of the gas it consumes, the balance of which it imports in the form of liquefied natural gas. With record low prices for natural gas in North America, increased supply from shale gas sources in the United States and Canada, and the combination of high demand and prices in Japan, the shutdown of nuclear facilities in Japan could be a boon for U.S. and Canadian exporters of LNG. North American suppliers have an advantage over some of Japan's existing suppliers, since those suppliers' LNG prices are often tied to the price of oil, and Japanese energy producers prefer natural gas over oil and coal for both environmental and cost reasons. However, Japan is also looking after its own interests by taking equity stakes in natural gas projects overseas to gain control over the fuel source.





In both the short and long term, renewable energy will also help fill the hole left by the reduction of nuclear power in Japan. The Japanese government recently enacted an aggressive new law to encourage investment in renewable energy which, as of July 1, 2012, put into effect a feed-in tariff (FiT) that Japanese utilities will be required to pay for energy produced by qualifying renewable energy projects with what are believed to be some of the highest rates in the world by a substantial margin (see related article in this issue for an overview of FiTs). The government's stated goal of the FiT is to obtain 13 percent of its energy from renewable sources by March of 2013, with a possible long-term goal of obtaining 25 percent to 35 percent of its energy from renewable sources by 2030. Independent analysts anticipate that the FiT will spur at least \$9.6 billion in new solar installation in Japan. Under the FiT, renewable generators that are approved by METI may enter into long-term (20-year) power purchase agreements with utilities at the 42 yen (53 cents) per kilowatt-hour price (for solar; rates are lower for wind and geothermal projects) set by the FiT program. The government has suggested that power prices will be reviewed annually, but producer profits will be given special consideration during the first three years of the program, with rate decreases likely to follow in later years, giving a major incentive to early entrants in the program. The FiT program, and the domestic and foreign investment attracts, will have a dramatic and lasting effect on the energy industry in Japan.

One of the most significant possible outcomes of the FiT program is that it could be the first step in deregulation of Japan's energy market. Historically, the utilities and METI, their regulator, have had very close relations. The Nuclear and Industrial Safety Agency (NISA), Japan's nuclear watchdog, which is under METI, has been criticized for its involvement with the utilities' attempt to influence public opinion on nuclear energy and for its slow response to the Fukushima disaster. In late May, the government began a debate on moving NISA to the Ministry of the Environment. This structural change could signal a major overhaul of Japan's energy regulatory structure, and introducing independent power in the renewable sector could lead to independent power in other areas of Japan's energy market.

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