LENNAR®

Testimony of

Mr. Roy Willis
Executive Vice President, Lennar Urban

Before the

Congress of the United States
House Financial Services Committee
Subcommittee on Housing and Community Opportunity

Hearing on

The Green Resources for Energy Efficient Neighborhoods (GREEN) Act of 2009
H.R. 2336

June 11, 2009

Chairwoman Waters, Ranking Member Capito, and Members of the Subcommittee:

My name is Roy Willis and I am the Executive Vice President of Southern California Division of Lennar Urban, a part of Lennar Corporation, one of the nation's largest homebuilders.

On behalf of Lennar and its partners in the renewable energy and financial sectors, I sincerely appreciate the opportunity to testify this afternoon. In many ways, this hearing and the questions you sent me touch on some of the most important aspects of my life's work: housing, support for low- and moderate-income families, and urban redevelopment.

Whether it was working for the Urban Reinvestment Corporation in the 1970's to bring capital to blighted areas, or helping to execute the Watts and South Los Angeles Renaissance Program after the civil disturbances of 1992, I have tried to do my part to make life better for low- and moderate-income citizens….and I believe the next generation of this work must extend to protecting our environment.

To that end, I would like to focus my comments in this limited time on two areas:

- First, I would like to discuss Section 27 of the Bill, the renewable energy leasing provision, and
- Second, directly respond to your questions of how this section of the Bill would affect low- and moderate-income households and communities.

As we all know, it takes green to go green and, in today's trying economic times, many simply cannot afford the upfront cost of buying assets like solar panels to put on their roofs---even with the current level of federal and state incentives.

At the same time, private investment, both debt and equity, will not support the leasing of renewable energy assets because, among other things, there is no market clarity regarding what those assets are worth over time. The result is a delay in the adoption of these clean technologies when we need them most. In short, we need to make going green more affordable, especially for low- and middle-income families.

Section 27 can help fix this. By establishing a loan insurance program, paid for entirely by user fees, H.R. 2336 would help set a baseline for what renewable energy systems are worth, and therefore lay the foundation for private investment in renewable energy system leases. The result would be transformational. Renewable energy systems would become affordable. Clean technology investment would resume. Companies would sell more. Thousands of jobs would be created. And our environment would benefit --- all at no cost to the taxpayer.

To put it in perspective, if half the homes built in America annually in normalized times – about 500,000 in a non-recession year – included solar energy systems, for example, that would mean:

- Saving the equivalent of 6.6 billion barrels of oil annually;
- Reducing carbon emissions by the same amount as removing 440,000 cars from the road; and
- Producing the energy of three new nuclear power plants.

Chairwoman Waters, with your permission, I would like to submit for the record a more detailed analysis of how renewable leasing would work and an analysis we commissioned by former Congressional Budget Office Director Douglas Holtz-Eakin to analyze the budget impact of the proposed program where he concluded, and this is a direct quote, this "will not be a budget buster."

Chairwoman Waters, you also asked, in your written questions to the witnesses earlier this week, for us to comment on what effect "green" development would have on low and moderate income households and communities.

While the benefits I described would apply to everyone, they should have a pronounced positive impact in the communities you ask about for two principle reasons:

Leasing makes the enjoyment of capital intensive assets affordable. Leasing has been successfully used in other industries.

Second, with unemployment at double-digit levels in much of the country, and low-income people particularly feeling the impact of the recession, the increased demand for residential renewable energy systems would help to create new, green, clean-tech jobs. The Million Solar Roof Initiative estimates that placing solar energy systems on one million homes would create 70,000 jobs.

Chairwoman Waters, thank you again for the opportunities to share our views on this important piece of legislation. I look forward to answering your questions and to working with you and the committee.

Renewable Leasing:
Lowering Up-Front Cost of Renewable Energy Devices, Spurring Private Investment, and Protecting Taxpayers

FEBRUARY 2009

Executive Summary

- Widespread consumer adoption of renewable energy devices depends on minimizing the up-front cost of acquiring a system through consumer financing.
- Leasing provides such a financing mechanism, but is only possible when a market-accepted value of the asset is available.
- The federal government can establish that value through a loan insurance program.
  - The value of the asset can be calculated objectively using the expected energy production for the duration of the asset's useful life.
  - The federal insurance can be financed by the repossessed device's ongoing energy output and through fees paid into a fund.

- A solar photo-voltaic (PV) lease program, for example, would work as follows:

  - **The home owner:** elects to enter a "PV lease" for 10 years or less with a third party lessor, and grants that third party an easement: access to and use of the roof of the home, including use of the PV energy produced by the unit if the home owner does not renew his or her lease for the life of the system.
  - **The PV panel manufacturer and system installer**: guarantees a minimum amount of energy production each year over the life of the product, in this case 25 years.
  - **The third party lessor**: a private capital investor funds most or all of the upfront cost of the PV system, taking all existing state or federal economic incentives to deploy renewable energy, and any loans they enter to finance the cost of the system are insured by the federal government after a 5 year waiting period: a loan in the amount of the value of the asset 5 years into the lease term would be insured by the federal government. The lessor retains responsibility for service and maintenance of the PV system.
  - **The federal government**: insures loans made to finance renewable energy systems 5 years after the lease commences and uses the anticipated energy production, as warranteed by the PV panel manufacturer for each year, from that point in time to the end of the product life (25 years) to establish the residual value of the asset, which sets the amount insured. That insurance would, in effect, stabilize residual values and, in turn, the entire financing equation.
- The benefits to Americans of half a million new PV energy systems, for example, would be the equivalent of about three new nuclear power plants and over 440,000 cars taken off the road.
- Even if the maximum taxpayer exposure were assumed, with no energy revenue or user fees paid to the federal government, the total dollar exposure would be approximately $12,000 to $17,000 per unit. The program, however, could be managed to avoid any taxpayer cost exposure.

INTRODUCTION

Residential housing, both new construction and retrofitted units, can be a significant deployment channel for energy conservation and renewable energy systems. The technology and production capacity exist today to put these improvements into the nation's homes immediately. The problem, however, is the high up-front cost to the consumer of purchasing and installing energy-saving features. If a consumer could pay little or nothing up front, with only a monthly payment for a renewable energy system, and such monthly payments were less than that consumer's current utility bills, we would witness a massive expansion in the adoption of residential renewable energy systems in the U.S.

Congress can help to make this a reality by providing the necessary loan insurance, at minimal exposure to the taxpayer, to establish the private financing of renewable leases. Specifically, Congress can establish a federal loan insurance program that will insure the value of a renewable energy asset. This assurance will induce private capital to support the leasing of PV and other renewable energy systems, harnessing private capital markets to (i) **lower** the upfront costs of renewable energy infrastructure; (ii) **create** new green-related jobs; (iii) **spur** the flow of private capital to critical renewable energy assets; and (iv) **reduce** our nation's dependence on foreign sources of energy while improving the environment.

THE OPPORTUNITY: RENEWABLE ENERGY LEASING

Data show that widespread adoption of renewable energy systems, like solar PV systems, is limited primarily by the high upfront costs of such products. While many financing mechanisms are available to bridge this affordability gap, including the use of mortgage financing, creating a program that requires consumers to put little, if any, money down and make payments over time in exchange for immediate savings in retail energy rates will accelerate adoption. This is most clearly manifested in a "PV lease."

WHAT IS A PV LEASE?

PV leasing involves a third party paying all or most of the upfront cost of the PV energy infrastructure and leasing the full use and enjoyment back to the consumer, at costs below available retail energy prices, over a long period of time (e.g., up to 10 years). In turn, the lessee grants to that third party the right to install and operate the PV energy system on the roof and grants an easement to access such equipment. This type of transaction involves investors (i) availing themselves of current federal, state and local tax credits, grants, or other financial incentives to offset their initial investment; (ii) collecting lease payments over time from homeowners; and (iii) selling or refinancing the subject asset, as the case may be, at the market-recognized value.

The key to the success of the PV lease is point (iii), above: establishing a widely accepted residual value of the asset which, today, is non-existent. In the case of a renewable energy asset, the value can be established based upon both the energy that the device will produce in its remaining useful life (based upon a production guarantee from the subject PV manufacturer and widely available forecasts of expected electricity prices).

System size:	5.0 kWh
Upfront Payment:	$0
Retail Electrical Rate:	$0.20
Solar Electrical Rate:	$0.16 (20% Discount)
Rate Escalator:	4% (Fixed)
Term Lease Payment:	$69 - $94 Per Month
Term:	10 Years

LOAN INSURANCE CERTIFICATE
(PROVIDED BY HUD)

UPFRONT PAYMENT (THIRD-PARTY INVESTOR)

| 0 YEARS | 5 YEARS | 10 YEARS | 25 YEARS |

ENERGY GENERATED CAN BE SOLD BACK TO GRID

EXPECTED USEFUL LIFE

LEASE PAYMENTS (HOMEBUYER)

HOW CAN WE STABILIZE "RESIDUAL VALUES"?

Unlike automobile and home leasing, where the residual value can be quite subjective, the residual value of PV and other renewable energy assets can be objectively established as the discounted value of the system's expected future energy production. The problem today, however, is that there is not yet an established secondary market to value the residual renewable energy production. Congress can help change that.

A government program, much like many loan guarantee programs, can be created to insure the residual value of renewable energy assets, using those assets' future energy production as an objective valuation yardstick. In this instance, the government would insure loan financing in the event of default or abandonment. The future production of the system then can be used to pay off such loan if these events occur. Thus, in the worst case scenario, if the government were to pay an insurance claim, the energy revenue from the asset would revert to the government itself, posing little taxpayer exposure. In addition, the program would be supported by an initial fee (up to 3% of the principal amount insured) that the investor would pay for the loan insurance.
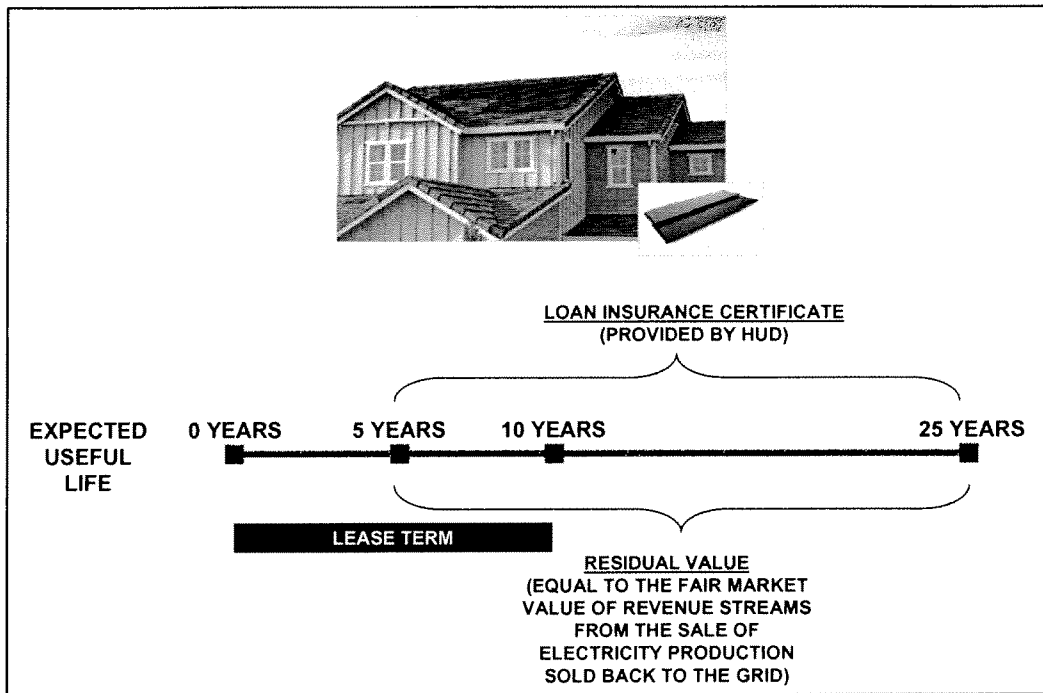
PROGRAM SPECIFICS

The following illustration of a PV lease demonstrates how the program would work, although it could be applied to any form of renewable energy device:

1. **The home owner.** Either when purchasing a new home or upgrading an existing home, the home owner elects to enter a "PV lease." The term of the lease is 10 years or less. The home owner enters an agreement with a third party lessor and grants that third party an easement: access to and use of the roof of the home, including use of the PV energy produced by the unit if the home owner does not renew his or her lease. The home owner makes monthly lease payments to the third party that are less than what the home owner's utility bills would have been. At the end of the lease term, the home owner may (a) purchase the PV energy system; (b) renew the lease for an additional term; or (c) stop using the PV energy system, with the energy from the system going back to "the grid" and

the revenues from that energy accruing to the third party lessor or lender, as the case may be.

2. **The PV panel manufacturer and system installer**. In selling the PV device to the third party lessor, the PV manufacturer guarantees a minimum amount of energy production per year over the life of the product, in this case 25 years. In some instances, the PV panel manufacturer may also be the system installer.

3. **The third party lessor**. Private capital investments will fund most or all of the upfront cost of PV, taking all existing state or federal economic incentives to deploy renewable energy (making their investment returns more palatable to investors). The third party lessor's loan to fund the investment in the PV lease would be the subject of the federal government's insurance beginning after 5 years: insurance in the amount of the value of the asset each year during the life of the system beginning with the fifth year would be insured by the federal government. The third party lessor would retain responsibility for service and maintenance.

4. **The federal government**. The Department of Housing and Urban Development would insure loans made for renewable energy systems. In this example, the government entity would use the anticipated energy production, based on the PV panel manufacturer's warranty and government forecasts of electricity prices, for each year beginning with the fifth year of the lease term to the end of the product life (25 years) to establish the residual value of the asset for each year. Insurance in that amount for each year would, in effect, stabilize residual values and , in turn, the entire financing equation.

LOAN INSURANCE CERTIFICATE
(PROVIDED BY HUD)

EXPECTED USEFUL LIFE | 0 YEARS | 5 YEARS | 10 YEARS | 25 YEARS

LEASE TERM

RESIDUAL VALUE
(EQUAL TO THE FAIR MARKET
VALUE OF REVENUE STREAMS
FROM THE SALE OF
ELECTRICITY PRODUCTION
SOLD BACK TO THE GRID)

This program will:

- Pose no cost to the taxpayer during the first 5 years of the lease term;

- Give investors and lenders the confidence to make large upfront investments today based upon a very structured and certain cash flow (lease payment and residual revenue stream or "take out" loan) in the future; and

- Protect taxpayers and lenders by relying on the origination fee and future production of the system to cover any government administrative costs or insurance claims.

BENEFITS

By spurring adoption of residential renewable energy systems, the proposed program would accelerate the adoption of PV energy systems above current growth projections. The energy savings to consumers would be significant. In a typical non-recession year, over 1 million new homes are built and purchased annually. If half those homes had renewable energy devices financed by little or no up-front cost leases, consumers would save almost 3.4 billion kWh/year in energy, the equivalent of about 6.6 million barrels of oil. The environment would benefit from over 2.4 million fewer metric tons of carbon dioxide in the atmosphere, the equivalent of over 440,000 fewer cars on the road.

Utilities would benefit by not having to construct the equivalent of about 3 new nuclear power plants.

PV EQUIVALENCY STUDY[a]

Number of Homes	kWh/year generated	Metric tons of CO2e	Barrels of Oil	Cars	Acres of Trees	Nuclear Plants
1	6,750	4.82	13.27	0.88	2.04	0.00
100	675,000	482	1,327	88	204	0.00
5,000	33,750,000	24,111	66,333	4,416	10,217	0.03
500,000	3,375,000,000	2,411,136	6,633,283	441,600	1,021,668	2.59

The taxpayer benefits by having a self-funded program that does not rely on general revenues, yet produces tangible benefits to the nation, including significant job creation and its resulting tax revenue.

RISKS

The federal government would take on limited risk in establishing the renewable energy loan insurance program. For example, there may be some minimal level of defaults on the underlying loans being insured. Leased equipment may be abandoned in foreclosure or other scenarios. In such cases, the federal government's insurance costs would be covered by (a) energy revenues from the system itself for the system's remaining useful life; (b) user fees paid by insured investors; or (c) some combination of the two. The program would pose no significant risk to taxpayers, thanks to these revenues. Moreover, the federal government's insurance typically would come into effect only at the end of the first 5 years.

Even in light of these risk-mitigating factors, however, the maximum exposure to the taxpayer of the loan insurance program can be established as follows:

- A 5.0 kWh PV energy system on a new home typically costs $35,000, while on a retrofitted home it costs $50,000.

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[a] Based on 5.0 kWh photovoltaic system per home, annual production = 1,350 kWh. Emission factors from eGRID 2007 Version 1.0 (U.S. average values). Site to source conversion factor = 3.34. IPCC Global Warming Potential Values used. Source: ConSol Energy 2008.

- The residual value of such systems after five years, which is the value underwritten by the insurance program, would be $12,000 to $17,000.
    - This value is the net present value ("NPV") of the energy produced in the remaining life of the asset (years 6 through 25).[b]
- The expected future production of such systems would be well above the total value of the repossessed assets. In addition, the up to 3% fee paid by investors to obtain the insurance would also be available to cover any costs of the program or insurance claims.

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[b] Energy values are from publicly available Department of Energy (EIA) national estimates. The productivity of the Solar PV systems are assumed to be 0.5% annually. NPV here is based on a discount rate of 6%.

CONCLUSION

Widespread consumer adoption of renewable energy devices depends on minimizing the up-front cost of acquiring a system through consumer financing. Leasing provides such a financing mechanism, but is only possible with a market-accepted value of the asset. The federal government can establish that value through a loan insurance program. The value of the asset could be calculated objectively using the expected energy production for the duration of the asset's useful life. The federal insurance could be financed by the repossessed device's ongoing energy output or through lessees' fees paid into a fund. The benefits to Americans of half a million new PV energy systems, for example, would be the equivalent of about three new nuclear power plants and over 400,000 cars taken off the road. Even if the maximum taxpayer exposure were assumed, with no energy revenues or user fees paid into the federal government, the total dollar exposure for each unit after five years would be $12,000 to $17,000. The program, however, would be managed to avoid any taxpayer exposure.

DHE Consulting, LLC
901 North Pollard Street, #1807
Arlington, VA 22203

April 30, 2009

David Kaiserman, President
Lennar Ventures
700 NW 107th Avenue
Suite 400
Miami, FL 33172

Dear David:

Thank you for the opportunity to analyze the budgetary impacts of a federal insurance program for loans for financing of renewable energy systems leased for residential use. Having looked at the draft specifications, I believe it is safe to say that this should not be a budget-busting program.

The most important budgetary feature of the program is the fact that premiums are collected at the time loans are insured, while <u>any</u> budgetary outlay is deferred for five years after that. The current Congressional budget resolution is a 5-year window covering 2010-14. As a result, if premiums are levied at all, this program will be a net surplus and source of revenues in the current budget window.

Over the longer term, the net fiscal implications will depend on the extent to which premiums are charged on an actuarially-fair basis that reflects accurate information on experienced and expected default rates. A more complete description of the budgetary and sensitivity analysis is attached.

This analysis highlights two aspects of the program as currently drafted. First, it would be possible to draft the program with the requirement that in be implemented on a zero-subsidy basis. If written that way, the Office of Management and Budget would be obligated to ensure that premiums are set on an actuarially-appropriate basis.

Second, the draft shows all insurance payments subject to annual appropriation, thereby raising the possibility that any year-to-year surplus may be appropriated for other purposes, and undercutting the overall balance in the program. Again, it would be possible to draft stronger protections that ensure premiums are used only to liquidate insurance obligations.

Finally, especially with consideration of the two drafting options, I think the analysis strongly supports the notion that this program should be evaluated on its policy merits. If one wishes to move to a cleaner energy portfolio and seeks to provide federal leadership in financial products that support this portfolio, this program offers as way to do so in a responsible budgetary manner.

Sincerely,

Douglas Holtz-Eakin
President, DHE Consulting LLC

Framework for the Scoring Analysis

DHE Consulting, LLC built a basic national economic, housing, and energy outlook for 2010 to 2044 that consisted of the following variables (and their sources):

- Treasury Interest Rate (CBO, year-to-year smoothing by DHE)
- CPI Inflation (CBO – also smoothed)
- Residential Electricity Prices ($per KWH from EIA)
- Housing Starts (Based on Macroeconomic Advisers, LLC Long-Term Projection)
- Stock of Owner Occupied Homes (DHE Consulting, LLC)

These projections allow one to compute the KWH per system (assuming productivity growth of 0.5 percent annually), the residual value per energy system (assuming CBO inflation, CBO interest rates, and a manufacturer's warranty of 95 percent of the rated output), and the loan value per insured unit.

Assumptions regarding the takeup rates for new homes and existing homes are combined with the housing starts and existing homes projections, respectively, to determine the total number of loans issued and insured. As a rough starting point, wI chose takeup rates of 10 percent and 0.5 percent respectively. Because the stock of housing is so large relative to new construction, the latter number is the most important for determining the scale of the program.

The key variable is the difference between the default rate on loans and the rate of insurance premiums charged. We assumed as a rough benchmark that the default rate on new construction would reflect the overall default rate on first mortgages of single-family homes. The basic argument is that we are drawing from the same pool of homeowners. Given market conditions, we have this starting at 7 percent and declining to 2 percent at the end of the budget window.

Finally, as a benchmark, we set the premiums at a common value of 1.5 percent of the loan amount. This reflects a rough-justice assessment that historically premiums have been below the actuarially-fair level in federal programs.

Preliminary Scores

See Table 1. Obviously, the key bottom line is that there is an annual surplus for the startup of the program – a feature that will be robust to any of the key assumptions because of the design. Over the long-haul, the program as we have assumed implemented runs a deficit, but that is easily fixed with actuarial premiums.

Sensitivity Analysis

A sensitivity analysis is in Tables 2 and 3. Table 2 looks at how much the default rate can exceed the premium rate and still have the program break even over the 10-year budget window. Because the premiums build up over the initial five years, the default rate can exceed the premium rate by over 2 percentage points and still break oven.

In contrast, Table 3 looks at the more stringent test of having the program break even over the final 5 years, 2015-2019. This precludes using the build up of premiums to help the budget picture. The result is that the default rate can exceed the premium rate by only 0.55 percentage points and have the program roughly break even.

Table 1
Fiscal Years

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
New Homes										
Loans Insured	76,200	125,525	152,400	184,500	214,400	220,300	208,200	190,950	174,125	161,075
Average Value Insured	$ 13,142	$ 13,456	$ 13,885	$ 14,330	$ 14,789	$ 15,262	$ 15,749	$ 16,258	$ 16,787	$ 17,333
Premium per Insured	$ 197.14	$ 201.83	$ 208.28	$ 214.96	$ 221.84	$ 228.92	$ 236.24	$ 243.87	$ 251.80	$ 259.99
Default Rate	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Total Defaults	5,334	8,286	9,311	10,346	10,961	10,190	8,603	6,239	3,949	3,222
Value of Defaulted Loans	$ 70,101,607	$ 111,494,630	$ 129,285,407	$ 148,260,650	$ 162,112,198	$ 155,522,046	$ 135,487,991	$ 101,436,325	$ 66,286,652	$ 55,838,240
Premium Income	15,021,773	25,372,641	31,772,824	39,702,825	47,599,658	50,430,018	49,163,040	46,540,584	43,820,101	41,860,259
Insurance Outlays	-	-	-	-	23,367,202	99,518,272	121,562,479	138,284,312	156,308,829	161,854,289
Insurance Fund Surplus (deficit)	18,988,238	31,697,687	39,022,228	47,944,528	33,127,174	(40,654,629)	(65,101,934)	(86,304,849)	(108,943,043)	(116,999,313)
Insurance Fund Balance	18,988,238	50,685,925	89,708,153	137,652,682	170,779,856	130,125,227	65,023,293	(21,281,556)	(130,224,599)	(247,223,912)
Value of Electricity Sales	$ 3,966,465	$ 6,325,046	$ 7,249,404	$ 8,241,704	$ 8,894,718	$ 8,433,625	$ 7,297,506	$ 5,438,879	$ 3,545,685	$ 2,994,716
Existing Homes										
Loans Insured	322,500	435,006	442,626	451,851	462,571	473,586	483,996	493,544	502,250	510,304
Average Value Insured	$ 13,142	$ 13,456	$ 13,885	$ 14,330	$ 14,789	$ 15,262	$ 15,749	$ 16,258	$ 16,787	$ 17,333
Premium per Insured	$ 197.14	$ 201.83	$ 208.28	$ 214.96	$ 221.84	$ 228.92	$ 236.24	$ 243.87	$ 251.80	$ 259.99
Default Rate	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Total Defaults	1,613	2,175	2,213	2,259	2,313	2,368	2,420	2,468	2,511	2,552
Value of Defaulted Loans	$ 21,192,134	$ 29,266,310	$ 30,730,256	$ 32,376,073	$ 34,205,764	$ 36,138,563	$ 38,112,654	$ 40,119,617	$ 42,155,708	$ 44,225,459
Premium Income	63,576,401	87,806,769	92,200,453	97,140,402	102,631,697	108,430,395	114,352,081	120,372,341	126,479,888	132,688,614
Insurance Outlays	-	-	-	-	7,064,045	28,593,760	29,982,165	31,532,807	33,272,720	35,167,481
Insurance Fund Surplus (deficit)	64,775,487	89,465,259	93,923,197	98,939,463	97,444,339	81,797,439	86,424,937	90,995,760	95,469,562	99,894,302
Insurance Fund Balance	64,775,487	154,240,746	248,163,943	347,103,407	444,547,746	526,345,185	612,770,122	703,765,882	799,235,444	899,129,746
Value of Electricity Sales	1,199,086	1,658,490	1,722,745	1,799,062	1,876,687	1,960,804	2,055,020	2,156,227	2,262,394	2,373,169
Insurance Program										
Loans Insured	398,700	560,531	595,026	636,351	676,971	693,886	692,196	684,494	676,375	671,379
Average Value Insured	$ 13,142	$ 13,456	$ 13,885	$ 14,330	$ 14,789	$ 15,262	$ 15,749	$ 16,258	$ 16,787	$ 17,333
Premium per Insured	$ 197	$ 202	$ 208	$ 215	$ 222	$ 229	$ 236	$ 244	$ 252	$ 260
Default Rate	1.7%	1.9%	1.9%	2.0%	2.0%	1.8%	1.6%	1.3%	1.0%	0.9%
Total Defaults	6,947	10,461	11,524	12,605	13,274	12,558	11,023	8,707	6,460	5,773
Value of Defaulted Loans	$ 91,293,740	$ 140,760,940	$ 160,015,663	$ 180,636,723	$ 196,317,962	$ 191,660,609	$ 173,600,644	$ 141,555,942	$ 108,442,360	$ 100,063,699
Premium Income	78,598,174	113,179,411	123,973,277	136,843,226	150,231,355	158,860,413	163,515,121	166,912,925	170,299,988	174,548,873
Electricity Sales	5,165,552	7,983,536	8,972,149	10,040,766	10,771,405	10,394,429	9,352,526	7,595,105	5,808,079	5,367,885
Insurance Outlays	-	-	-	-	30,431,247	128,112,032	151,544,644	169,817,119	189,581,548	197,021,769
Insurance Fund Surplus (deficit)	83,763,725	121,162,946	132,945,425	146,883,992	130,571,513	41,142,810	21,323,003	4,690,911	(13,473,481)	(17,105,011)
Insurance Fund Balance	83,763,725	204,926,672	337,872,097	484,756,089	615,327,602	656,470,412	677,793,415	682,484,326	669,010,845	651,905,834

Table 2

Fiscal Years

		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2010-2014	2015-2019	2010-2019
New Homes														
	Loans Insured	76,200	125,525	152,400	184,500	214,400	220,300	208,200	190,950	174,125	161,075			
	Average Value Insured	$ 13,142	$ 13,456	$ 13,885	$ 14,330	$ 14,789	$ 15,262	$ 15,749	$ 16,258	$ 16,787	$ 17,333			
	Premium per Insured	$ 197.14	$ 201.83	$ 208.28	$ 214.96	$ 221.84	$ 228.92	$ 236.24	$ 243.87	$ 251.80	$ 259.99			
	Default Rate	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%			
	Total Defaults	2,724	4,488	5,448	6,596	7,665	7,876	7,443	6,826	6,225	5,758			
	Value of Defaulted Loans	$ 35,801,892	$ 60,382,174	$ 75,651,932	$ 94,521,605	$ 113,357,820	$ 120,196,643	$ 117,223,305	$ 110,983,094	$ 104,496,951	$ 99,810,854			
	Premium Income	15,021,773	25,372,641	31,772,824	39,702,825	47,599,658	50,430,018	49,163,040	46,540,584	43,820,101	41,860,259			
	Insurance Outlays	-	-	-	-	11,933,964	51,981,058	68,386,186	84,471,524	104,283,175	118,748,641			
	Insurance Fund Surplus (deficit)	17,047,503	28,799,475	36,015,828	44,959,150	41,887,160	4,969,788	(12,905,495)	(31,969,798)	(54,858,592)	(71,535,327)			
	Insurance Fund Balance	17,047,503	45,846,978	81,862,806	126,821,956	168,709,116	173,678,904	160,773,409	128,803,611	73,945,020	2,409,693			
	Value of Electricity Sales	$ 2,025,731	$ 3,426,833	$ 4,243,003	$ 5,256,325	$ 6,221,466	$ 6,520,828	$ 6,317,651	$ 5,961,142	$ 5,604,482	$ 5,353,055			
Existing Homes														
	Loans Insured	322,500	435,006	442,626	451,851	462,571	473,586	483,996	493,544	502,250	510,304			
	Average Value Insured	$ 13,142	$ 13,456	$ 13,885	$ 14,330	$ 14,789	$ 15,262	$ 15,749	$ 16,258	$ 16,787	$ 17,333			
	Premium per Insured	$ 197.14	$ 201.83	$ 208.28	$ 214.96	$ 221.84	$ 228.92	$ 236.24	$ 243.87	$ 251.80	$ 259.99			
	Default Rate	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%			
	Total Defaults	11,529	15,551	15,824	16,154	16,537	16,931	17,303	17,644	17,955	18,243			
	Value of Defaulted Loans	$ 151,523,756	$ 209,254,117	$ 219,721,332	$ 231,488,919	$ 244,571,215	$ 258,390,728	$ 272,505,475	$ 286,855,263	$ 301,413,316	$ 316,212,033			
	Premium Income	63,576,401	87,806,769	92,200,453	97,140,402	102,631,697	108,430,395	114,352,081	120,372,341	126,479,888	132,688,614			
	Insurance Outlays	-	-	-	-	50,507,919	204,445,383	214,372,477	225,459,572	237,899,948	251,447,486			
	Insurance Fund Surplus (deficit)	72,149,867	99,664,970	104,518,077	110,003,694	65,542,088	(81,995,240)	(85,327,003)	(89,670,212)	(95,243,943)	(101,790,714)			
	Insurance Fund Balance	72,149,867	171,814,837	276,332,914	386,336,608	451,878,696	369,883,455	284,556,452	194,886,241	99,642,298	(2,148,416)			
	Value of Electricity Sales	8,573,466	11,858,201	12,317,624	12,863,292	13,418,310	14,019,747	14,693,392	15,417,020	16,176,117	16,968,159			
Insurance Program														
	Loans Insured	398,700	560,531	595,026	636,351	676,971	693,886	692,196	684,494	676,375	671,379			
	Average Value Insured	$ 13,142	$ 13,456	$ 13,885	$ 14,330	$ 14,789	$ 15,262	$ 15,749	$ 16,258	$ 16,787	$ 17,333			
	Premium per Insured	$ 197	$ 202	$ 208	$ 215	$ 222	$ 229	$ 236	$ 244	$ 252	$ 260			
	Default Rate	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%			
	Total Defaults	14,254	20,039	21,272	22,750	24,202	24,806	24,746	24,471	24,180	24,002			
	Value of Defaulted Loans	$ 187,325,648	$ 269,636,291	$ 295,373,264	$ 326,010,525	$ 357,929,034	$ 378,587,371	$ 389,728,779	$ 397,838,357	$ 405,910,266	$ 416,022,887			
	Premium Income	78,598,174	113,179,411	123,973,277	136,843,226	150,231,355	158,860,413	163,515,121	166,912,925	170,299,988	174,548,873	602,825,442	834,137,321	1,436,962,764
	Electricity Sales	10,599,196	15,285,034	16,560,628	18,119,618	19,639,776	20,540,576	21,011,044	21,378,162	21,780,600	22,321,214	80,204,252	107,031,595	187,235,846
	Insurance Outlays	-	-	-	-	62,441,883	256,426,441	282,758,663	309,931,096	342,183,122	370,196,128	62,441,883	1,561,495,450	1,623,937,333
	Insurance Fund Surplus (deficit)	89,197,370	128,464,445	140,533,905	154,962,844	107,429,248	(77,025,452)	(98,232,498)	(121,640,010)	(150,102,534)	(173,326,041)	620,587,812	(620,326,534)	261,277
	Insurance Fund Balance	89,197,370	217,661,815	358,195,719	513,158,564	620,587,812	543,562,360	445,329,862	323,689,852	173,587,318	261,277			
	Differential between Premium Rate and Default Rate	2.08%	2.08%	2.08%	2.08%	2.08%	2.08%	2.08%	2.08%	2.08%	2.08%			

<p style="text-align:center">Table 3</p>
<p style="text-align:center">Fiscal Years</p>

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2010-2014	2015-2019	2010-2019
New Homes													
Loans Insured	76,200	125,525	152,400	184,500	214,400	220,300	208,200	190,950	174,125	161,075			
Average Value Insured	$ 13,142	$ 13,456	$ 13,885	$ 14,330	$ 14,789	$ 15,262	$ 15,749	$ 16,258	$ 16,787	$ 17,333			
Premium per Insured	$ 197.14	$ 201.83	$ 208.28	$ 214.96	$ 221.84	$ 228.92	$ 236.24	$ 243.87	$ 251.80	$ 259.99			
Default Rate	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%			
Total Defaults	1,562	2,574	3,125	3,783	4,396	4,517	4,269	3,915	3,570	3,303			
Value of Defaulted Loans	$ 20,534,764	$ 34,633,188	$ 43,391,409	$ 54,214,420	$ 65,018,240	$ 68,940,760	$ 67,235,353	$ 63,656,178	$ 59,935,943	$ 57,248,156			
Premium Income	15,021,773	25,372,641	31,772,824	39,702,825	47,599,658	50,430,018	49,163,040	46,540,584	43,820,101	41,860,259			
Insurance Outlays	-	-	-	-	6,844,921	29,814,590	39,224,021	48,450,031	59,813,329	68,110,235			
Insurance Fund Surplus (deficit)	16,183,664	27,338,158	34,206,468	42,717,677	44,323,161	24,355,556	13,562,612	1,509,664	(12,778,685)	(23,179,642)			
Insurance Fund Balance	16,183,664	43,521,822	77,728,290	120,445,967	164,769,128	189,124,684	202,687,296	204,196,960	191,418,275	168,238,633			
Value of Electricity Sales	$ 1,161,891	$ 1,965,517	$ 2,433,644	$ 3,014,852	$ 3,568,424	$ 3,740,128	$ 3,623,593	$ 3,419,111	$ 3,214,543	$ 3,070,333			
Existing Homes													
Loans Insured	322,500	435,006	442,626	451,851	462,571	473,586	483,996	493,544	502,250	510,304			
Average Value Insured	$ 13,142	$ 13,456	$ 13,885	$ 14,330	$ 14,789	$ 15,262	$ 15,749	$ 16,258	$ 16,787	$ 17,333			
Premium per Insured	$ 197.14	$ 201.83	$ 208.28	$ 214.96	$ 221.84	$ 228.92	$ 236.24	$ 243.87	$ 251.80	$ 259.99			
Default Rate	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%			
Total Defaults	6,613	8,920	9,076	9,265	9,485	9,711	9,924	10,120	10,299	10,464			
Value of Defaulted Loans	$ 86,908,940	$ 120,021,138	$ 126,024,781	$ 132,774,274	$ 140,277,839	$ 148,204,248	$ 156,299,993	$ 164,530,550	$ 172,880,560	$ 181,368,608			
Premium Income	63,576,401	87,806,769	92,200,453	97,140,402	102,631,697	108,430,395	114,352,081	120,372,341	126,479,888	132,688,614			
Insurance Outlays	-	-	-	-	28,969,647	117,263,009	122,956,857	129,316,043	136,451,425	144,221,838			
Insurance Fund Surplus (deficit)	68,493,853	94,608,235	99,265,429	104,518,354	81,358,342	(791,357)	(177,139)	(101,017)	(693,459)	(1,800,858)			
Insurance Fund Balance	68,493,853	163,102,088	262,367,517	366,885,871	448,244,213	447,452,856	447,275,717	447,174,700	446,481,241	444,680,383			
Value of Electricity Sales	4,917,452	6,801,466	7,064,976	7,377,953	7,696,292	8,041,256	8,427,637	8,842,685	9,278,078	9,732,366			
Insurance Program													
Loans Insured	398,700	560,531	595,026	636,351	676,971	693,886	692,196	684,494	676,375	671,379			
Average Value Insured	$ 13,142	$ 13,456	$ 13,885	$ 14,330	$ 14,789	$ 15,262	$ 15,749	$ 16,258	$ 16,787	$ 17,333			
Premium per Insured	$ 197	$ 202	$ 208	$ 215	$ 222	$ 229	$ 236	$ 244	$ 252	$ 260			
Default Rate	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%			
Total Defaults	8,175	11,494	12,201	13,048	13,881	14,228	14,193	14,036	13,869	13,767			
Value of Defaulted Loans	$ 107,443,704	$ 154,654,326	$ 169,416,189	$ 186,988,694	$ 205,296,080	$ 217,145,008	$ 223,535,346	$ 228,186,728	$ 232,816,504	$ 238,616,763			
Premium Income	78,598,174	113,179,411	123,973,277	136,843,226	150,231,355	158,860,413	163,515,121	166,912,925	170,299,988	174,548,873	602,825,442	834,137,321	1,436,962,764
Electricity Sales	6,079,343	8,766,982	9,498,620	10,392,805	11,264,716	11,781,385	12,051,229	12,261,796	12,492,621	12,802,699	46,002,467	61,389,730	107,392,197
Insurance Outlays	-	-	-	-	35,814,568	147,077,599	162,180,878	177,766,074	196,264,753	212,332,073	35,814,568	895,621,376	931,435,944
Insurance Fund Surplus (deficit)	84,677,517	121,946,393	133,471,897	147,236,031	125,681,503	23,564,199	13,385,473	1,408,647	(13,472,144)	(24,980,500)	613,013,341	(94,325)	612,919,016
Insurance Fund Balance	84,677,517	206,623,910	340,095,807	487,331,838	613,013,341	636,577,540	649,963,013	651,371,660	637,899,516	612,919,016			
Differential between Premium Rate and Default Rate	0.55%	0.55%	0.55%	0.55%	0.55%	0.55%	0.55%	0.55%	0.55%	0.55%			