



## Fiscal Year and Q4 2016 Earnings Call

March 8, 2017

Prepared Remarks

### **LYNN JURICH**

I am pleased to share with you Sunrun's fourth quarter and full year 2016 financial and operating results and to celebrate International Women's Day and Sunrun's anniversary. It's been 10 years since Ed and I were classmates in grad school at Stanford pioneering residential solar as a service at three times today's cost structure. We are excited to help lead innovation in the decade to come.

In the fourth quarter we deployed 77 MWs, up 13% year-over-year, and closed out 2016 with 39% full-year growth in deployments and over 60% growth in customer net present value. In Q4, we were able to gain market share, increase deployments, reduce our creation costs by 8%, and generate \$67 million in net present value. In the year we grew at double the industry growth rate and improved our unit economics, all while maintaining our cash position.

We are not pleased that our full-year deployments were 3 MWs, or 1%, below our guidance from November and in early 2016, but we believe we still led the industry - a testament to the strength of our multi-channel business model. Our model makes use of the fragmented, local, solar industry paired with activities that benefit from our scale. And as we mentioned we are now in our 10th year of maintaining steady access to capital and a conservative capital structure. We continue to offer a portfolio of products customers want - leases, loans, cash sales, and storage - and we have leveraged our infrastructure to cost-effectively reach the most customers.

During the quarter, we did see demand soften, particularly in the second half of the quarter and in California. We believe the fatiguing election season and weather were significant factors and resulted in weaker-than-expected bookings, and slightly fewer MWs being installed. We are confident, however, that a rebound is occurring, as lead volumes in California, registered by our lead generation business Clean Energy Experts, have increased each month from the December lows - in January, for instance, lead volumes increased 75% month-over-month and volumes continued to gain in February. There are still five times more solar ready homes in CA than are currently installed and the emergence of storage will be a significant growth market in the state.

More importantly, key industry trends taking hold this quarter allowed our business model to outperform and to position us to thrive in the future. We remain confident the residential solar industry can sustain a growth rate of 20% over the long-term. There were some significant strategic developments that are buried under the noise of the industry's short term demand challenges. Let's run through what happened in the quarter:

- First, further validation of Solar plus Storage. We launched our BrightBox™ Solar plus storage solution at the beginning of the year. In Q4 it gained momentum. Customers have placed more than 1,000 orders for our BrightBox™ product in Hawaii and California



alone. The numbers are not small--these systems represent over 20 MWh of storage. This will be a massive growth market for us and the industry. Greentech Media estimates that behind the meter storage will grow at a CAGR of over 200% for the next four years. And once again we have been innovators by offering the first zero down solar + storage as a service package to residential customers. This technology holds incredible promise for value creation when paired with time-of-use electric rates and creates further monetization opportunities. It is the future and significantly shifts the energy sector's regulatory profile in our favor. The burden of proof will shift to utilities to justify increased capex when solar + storage is often a more efficient solution. And note that utility capex was a \$58 billion market in 2015.

- Second, we believe we are moving from utilities trying to block rooftop solar to them accepting its inevitability and investing time and capital in the sector. We are working with National Grid to co-market solar power to homeowners and develop business lines that further demonstrate the societal value of distributed energy. In addition to this partnership, 42 utilities have invested in distributed energy companies with investment dollars increasing substantially over the past two years and totaling over \$1 billion in 2016 according to Greentech Media.

Just as utilities are switching tactics to embrace distributed energy, so are policy makers. We saw policy advances in Nevada, where the regulator ordered the reinstatement of net metering in northern Nevada and raised the aggregate cap for such systems by 40%. This proves that a *"too much too fast"* retreat from net metering won't hold up against public scrutiny.

- Third, we have proven our customer net present values. As part of the partnership, National Grid is making a \$100 million project equity investment. This investment supports the 6% unlevered discount rate for our long-term contracted cash flows.
- Fourth, in Arizona, widely known to be the most hostile major market for rooftop solar, we reached a settlement with the utility, APS, that further establishes precedent for grandfathering and rebukes mandatory demand charges. We believe the settlement agreement clearly undervalues the benefits of rooftop solar, and I encourage everyone to read our blog post on the subject at [www.Sunrun.com/value](http://www.Sunrun.com/value). Because AZ has a low-cost operating environment and high solar irradiance a viable offering can exist under the new rate structure. The combination of the new TOU rate structure and full retail credit for on-site consumption also presents further opportunity for our BrightBox™ storage solution.
- Finally, with the combination of SolarCity and Tesla, we have emerged as the leading stand-alone company in the industry. And with our balance sheet strength we remain on offense in a consolidating and somewhat tentative market. We plan to accelerate our lead in 2017 by executing on the priorities outlined on Slide 7.

With 10 years of operating history now under our belt, and the long-term, healthy industry dynamics that are taking hold, I am more confident than ever that Sunrun will emerge the leader and an important contributor in modernizing our \$1 trillion energy infrastructure.



I'll now turn the call over to Bob Komin, our CFO, to review Q4 performance and discuss guidance for Q1 and the year.

## **BOB KOMIN**

Thanks, Lynn.

While not all indicators were positive in this quarter, the ones that matter were - particularly the ones that we believe drive long-term value creation. In the fourth quarter, and for the year, we achieved nearly all of our key financial and operating targets and we are well-positioned in 2017. Before I describe our performance in more detail, I wanted to discuss changes we are making to our reported metrics.

We continuously evaluate and improve how we measure and operate the business, and look to do the same with how we communicate our goals and performance. We strive to be the leader in the industry including the quality and usefulness of our disclosures. When we went public in August 2015, we introduced NPV reporting to measure value creation, but our other reporting conformed to metrics commonly used by existing public company peers. Based on our growing operating experience, unique business model, and changes that are occurring in the industry, we believe there are refinements to how we report a few metrics that will provide investors with improved indicators of our performance and trends, and they are also better aligned with our current sales compensation and key operating objectives.

Instead of recording bookings at the point when a customer initially signs an agreement, we now wait until we have also received confirmation that the system has satisfied our requirements for size, equipment, and design, or what is commonly referred to as having reached "Notice to Proceed" or NTP. We believe this will improve simplicity, allowing investors to gain a better understanding of our near-term growth and trends. Because we now report bookings closer to installation, there is a meaningfully higher realization of these systems as deployments, and bookings are now a closer leading indicator for installations and less susceptible to reported seasonal fluctuations. Under the previous method, bookings were highest in peak quarters but related cancellations were reported later often during seasonally slower quarters. The revised booking method will continue to be computed as gross bookings, net of the cancellations occurring in the period.

This quarter we also modified our creation cost stack so that the single component that was not previously based on either leased or total deployments now will be. The portion of period sales and marketing expenses previously calculated by dividing net bookings will now be divided by total deployments instead. We believe this change is more appropriate for our business, focused on actions that lead to deployments with shorter cycle times and higher realization. The changes to creation cost and NPV for the current and prior quarters are available in the appendix of the earnings presentation.

Also beginning this quarter, we are discontinuing the reporting of estimated retained value, estimated retained value per watt, and nominal contracted payments remaining and replacing them. We are replacing estimated retained value with a metric we introduced on the Q1 2016



earnings call: gross earnings assets which we believe is similar and more effective. Ed will discuss this metric during his section in a few minutes.

Now moving to Slide 9 to discuss the performance of the quarter. Please note all metrics that follow reflect the changes I've just described.

### **NPV**

NPV was \$1.00 per watt in Q4, and \$0.87 per watt for the year, reaching \$213 million in aggregate for 2016. This represents 64% growth in NPV generated compared to the prior year.

We achieved our target of \$1 per watt in the second half of 2016 as lower costs more than offset the modest declines in project value as we expected.

In 2017, we expect to generate \$1 per watt in NPV, a 15% improvement to our unit-level economics compared to 2016, as we remain focused on cost efficiencies. We do expect the seasonal pattern of NPV to remain consistent with prior years, with a low-point of NPV per watt in Q1 but gradually increasing throughout the year, in-step with volumes.

As you know, NPV is calculated as Project Value less Creation Costs so let's go through each of the components next.

### **Project Value**

Q4 project value of \$4.41 per watt was approximately flat from Q3, and we achieved a full-year project value of \$4.48, roughly in-line with our annual guidance of approximately \$4.50 per watt.

This quarter, we have also begun to separately provide the portion of project value from the renewal period. In Q4, \$0.60 of the \$4.41 per watt came from the renewal period. While we continue to believe there is significant value over the life of the asset, which we expect to extend beyond the initial contract period, we aim to increase disclosure and transparency into the value drivers of our business.

As a reminder, project value is very sensitive to modest changes in geographic, channel, and tax equity fund mix. We continue to expect project value will decline slightly over time but costs should decline more, although in the short run there can be quarterly fluctuations.

### **Creation Costs**

Turning now to Creation Costs on Slide 11.

In Q4, total creation costs were \$3.41 per watt, an improvement of \$0.31 or 8% year-over-year.

As a reminder, our cost stack is not directly comparable to those of peers because of our channel partner business. Blended installation cost per watt, which includes both solar projects deployed by our channel partners, as well as by Sunrun, decreased by \$0.10 year-over-year to \$2.71 per watt. Install costs for systems built by Sunrun remained roughly flat with Q3 as expected at \$2.04 per watt, a reduction of \$0.29 or 12% year-over-year. We expect installation



costs will continue to decline as we realize the benefits of lower panel and inverter prices. For context, the pricing we are seeing on modules and inverters alone is likely to deliver more than \$0.15 per watt of equipment cost savings in 2017.

In Q4, our sales and marketing costs were \$0.58 per watt, a 9% decline from Q3 and a 20% decline from the prior year as we reduced our sales and marketing expenses as part of deliberate efforts to focus on the most cost effective customer acquisition channels.

Next, G&A cost per watt was \$0.28, a \$0.04 or 17% increase from Q3. We continue to tightly manage costs in this area, which have been largely flat for the last several quarters. In 2017, we expect to realize further operating leverage, with volume growth exceeding G&A cost increases.

Finally, when we calculate creation costs, we subtract the GAAP gross margin contribution realized from our platform services. This includes our distribution, racking, and lead generation businesses as well as solar systems we sell for cash or with a third party loan. We achieved platform services gross margin of \$0.16 per watt, roughly flat with Q3.

### **Deployments**

In the fourth quarter, deployments increased 13% year-over-year to 77 MW resulting in total deployments of 282 MW for 2016, a 39% annual growth rate which indicates that we have been able to significantly increase our market share.

Deployments were 3 MWs or 1% shy of our annual guidance driven primarily by weaker than expected demand in late Q4, which given improved cycle times, had an impact on installations late in Q4. Even with these headwinds, the strength of our multi-channel business model and healthy capital position were evident, with others in the industry faring much worse based on our market observations.

Our channel partner mix grew in the 4th quarter and we expect it to remain at a similar level in the first quarter of 2017. We had previously expected a moderate decline in channel partner deployment mix during last year, but in the current market environment we are seeing more opportunities that are favorable to work with partners while meeting our NPV and cash contribution goals. As we have previously described, this trajectory can fluctuate quarter to quarter since we do not manage to a mix target, we instead prioritize unit level margins.

Our cash and third party loan mix was 13% in Q4, relatively flat with Q3. We expect this to remain at about this level for the year. As discussed previously, we believe our PPA and lease product mix of over 80% better matches consumer preferences and delivers our customers significant value, which is one of the reasons we have been able to grow faster than the market in 2016.

### **Bookings**

In Q4, our net bookings were 72 MW, down 13% from Q3 and 13% from the prior year, a strong achievement in our view given challenging market conditions, and the difficult comparison with Q4 2015 due to Nevada and the ITC related pull-forward. We've also made deliberate efforts



over the last year to focus on the most attractive markets, shifting away from lower cash contributing markets and higher cost acquisition channels.

We believe four factors influenced the lower bookings this quarter:

- First, the intense election season was fatiguing for customers, making them less receptive across most of our acquisition channels.
- Second, the holiday calendar this year was sub-optimal, leading to fewer high-productivity sales days. While many enjoyed the full week between Christmas and New Years that also meant fewer people were learning how to save money by going solar.
- Third, in California, our largest market, we experienced significant rain. While a welcome relief from the historic drought conditions, the inclement weather likely reduced new customer engagement levels.
- Lastly, the transition to time-of-use rates in two of the three largest utilities in California likely resulted in some demand pull-in, but we are seeing strong signs that customers are engaging with us and a rebound is beginning.

### **Turning now to our Liquidity, Balance Sheet & Cash Flow**

Our liquidity position remains strong. We ended 2016 with \$206 million in unrestricted cash, an increase from 2015 and the 6th consecutive quarter we have been above \$200 million. We believe we will be able to maintain, or potentially increase our cash position, by the end of 2017 without issuing additional equity. This excludes any strategic opportunities or accelerated market entries beyond our current plan. I'll note, however, that the timing of project finance proceeds can vary quarter to quarter, and our ultimate objective is to optimize for the lowest cost of capital and, as such, we will focus first and foremost on the best execution of financing which could impact the timing of our cash balance throughout the year.

### **Guidance**

Moving on to guidance on Slide 12.

We remain confident in our growth trajectory, with strong visibility to our Q1 guidance of 69 MWs, which reflects 15% growth year over year.

For the full year, we are guiding to 325 MWs, reflecting a 15% growth rate. We expect the year will show higher deployments in Q3 and Q4, similar to seasonal influences we've experienced in the past.

Our primary focus will remain on NPV generation of about \$1 per watt. We believe we can generate more than \$290 million in NPV in 2017, a more than 35% increase from the prior year.

We know the market will have ups and downs. Our strategy is to use our vertically integrated business to maximize efficiencies in core markets while also using a channel model to extend our reach. The trends in the fourth quarter highlight the strength of our model: our creation costs fell, our NPV increased and our market share grew.



Now let me turn it over to Ed.

## **ED FENSTER**

Thanks Bob.

Today I want to touch on four items.

- First, I will introduce some additional information we are now disclosing regarding Gross Earning Assets and explain why we are phasing out Retained Value.
- Second, I will recap certain financial implications of the transaction we entered into with National Grid.
- Third, I plan to discuss the broader financial strategy for how we optimize our capital structure to maximize value over time and minimize interest rate risk.
- Lastly, I want to report out on what we see as a strong project finance environment generally.

### **Gross & Net Earning Assets, Alternative Renewal Value Sensitivity Table**

Turning first to our installed asset base, we're pleased to report that as of December 31, Net Earning Assets exceeded \$1 billion, or more than \$9/share.

Turning to Slide 13, you will see that we have included additional disclosure of both the Contracted and Renewal portion of Gross Earning Assets, along with a discount rate sensitivity table. Unlike Retained Value, which included the value of our backlog, Gross Earnings Assets includes only the value of deployed systems. Gross Earnings Assets represents the state of our deployed assets as of the reporting date.

On Slide 14, you'll see that we now provide a table that calculates the present value of our renewal cash flows as a function of the number of years of renewal payments received and the per kWh rate realized in the renewal period. For instance, if you assume ten years of renewal cash flows with a \$0.16 power rate, in 2016 dollars, the renewal value of our portfolio would be \$608 million at a 6% discount rate. As you can tell from the table, even very low real PPA prices -- below even wholesale power rates -- provide significant unlevered NPV for Sunrun, given our large and growing fleet.

### **National Grid Transaction**

Turning to Slide 15, I want quickly to touch on the multi-faceted partnership we closed with National Grid in December. As Lynn mentioned, a key financial component of our partnership is a \$100 million cash equity investment that National Grid will make in a portfolio of approximately 200 MW of residential solar assets. Taken together with back-leverage, customer prepayments, and utility rebates, we expect total proceeds raised against the assets in this transaction of approximately 95% to 100% of contracted project value. As such, the transaction is supportive of discounting our long-term contracted cash flows at 6%.



Looking at our Q4 2016 results, we recorded contracted project value of \$3.80 per watt. Illustratively using this quarter as a guide, we would expect cash proceeds of approximately \$3.61 to \$3.80 per watt on assets placed into this partnership. Assuming no timing differences in upfront cash flows, such as creation costs and receipt of project finance proceeds, which are naturally lumpy, we would generate approximately \$30 million in ultimate contribution margin per 100 leased MW given the reported cost stack of \$3.41 per watt in the quarter. Our priority is still, however, to maximize NPV while maintaining a healthy balance sheet as we grow.

In addition, we share 50/50 in refinance upside with National Grid in this partnership. In a few minutes, I will explain further the value of this term.

Historically, our strategy has been to retain this equity value for Sunrun rather than to place it with a third party. However, in this case we partnered, especially given the strategic value of National Grid to Sunrun. We have also received unsolicited offers from financial buyers on substantially similar terms, and we continuously evaluate using such project equity, in whole or in part, as a tool in our business. This project equity adds about 45 to 55 cents per watt in upfront proceeds over our historical capital structure.

### **Capital Structure Optimization**

This brings me to my third topic, which is our debt finance strategy. Our general objective is to minimize risk from potential interest rate changes while maximizing opportunity for future upside. We have also staggered maturity dates and avoided using recourse debt for long-term asset finance.

Our customer contracts have an initial contracted term of approximately 20 years. Because we expect to refinance assets several times over the time period of these contracts, we use interest rate swaps to fix the underlying rate, LIBOR, for the approximate initial term of the customer contracts. Over 20 years, we may refinance a single set of systems several times, but the swaps we enter into today effectively fix LIBOR for all of those future potential credit facilities.

Given the quirks of tax equity, there is substantial opportunity for refinance proceeds after our tax equity funds flip. Here's how that works: our credit facilities are expected to amortize down to less than 60% loan to value by the time our tax equity funds flip-down, which takes about 6 years. We've also already demonstrated that, without tax equity, we can achieve a 76% loan to value at even a BBB, or investment grade, credit rating. The upside from refinancing to 76% from 60% is substantial: on a 1 GW portfolio, we could generate refinance proceeds post-flip of approximately \$215 million.

In addition, by using bank loans that we can call without prepayment penalty, we have the ability to enjoy lower spreads as the asset class matures and when the repayment of our tax equity investors allows us to offer a first lien to our lenders, which protection back-leverage lenders do not enjoy today.

You can see why, in our National Grid transaction, we believe there is real value in the fact we share refinance proceeds with them 50%/50%.





## **Capital Availability**

I'll now turn to my final topic, capital availability.

Our tax equity pipeline remains robust, with closed transactions and executed term sheets that provide us runway well into Q4 of 2017. The potential changes to tax rates have not impacted the availability of tax equity for Sunrun; in fact, because the depreciation benefit of solar is not as large as it is for wind, we are seeing more interest than usual, especially from tax equity investors who traditionally focus on wind finance.

Our current committed back-leverage and project equity provides us runway into Q3 of 2017.

I'll now turn the call over to Lynn for closing remarks.

## **LYNN JURICH**

Thanks Ed.

We're excited about the tremendous market opportunity in front of us and how Sunrun is positioned. With a continued focus on cost efficiencies, disciplined growth, and an unwavering commitment to our customers, we are confident we can continue to generate significant shareholder value while helping to modernize our electric grid.

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## **Forward Looking Statements**

*This script contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995, including statements regarding our future financial and operating guidance, operational and financial results such as growth, value creation, MW bookings and deployments, estimates of gross and net earning assets, project value, estimated creation costs and NPV, and the assumptions related to the calculation of the foregoing metrics, as well as our expectations regarding our growth and financing capacity and our strategic partnership with National Grid. The risks and uncertainties that could cause our results to differ materially from those expressed or implied by such forward-looking statements include, but are not limited to: the availability of additional financing on acceptable terms; changes in the retail prices of traditional utility generated electricity; changes in policies and regulations including net metering and interconnection limits or caps; the availability of rebates, tax credits and other incentives; the availability of solar panels and other raw materials; our limited operating history, particularly as a new public company; our ability to attract and retain our relationships with third parties, including our solar partners; our ability to meet the covenants in our investment funds and debt facilities; and such other risks identified in the reports that we file with the U.S. Securities and Exchange Commission, or SEC, from time to time. All forward-looking statements in this script are based on information available to us as of the date hereof, and we assume no obligation to update these forward-looking statements.*