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PetersenDean, a roofing and solar company headquartered in California with operations in CA, AZ, NV, TX, and FL, has been actively providing roofing and solar systems to the production homebuilders in California for many years. We are offering our comments to the upcoming CEC proceeding regarding the staff recommendation to establish a waiting list for the New Solar Home Partnership (NSHP) program.

Background

The adoption of solar on new homes has not been robust since the NSHP program began in 2007. CEC's data indicate that the NSHP program has seen the creation of 13.3MW of solar capacity in the new home segment since 2007, toward a goal of 400MW, which suggests only 3.3% attainment thus far.

Solar has been offered by homebuilders primarily as an option over the past 5 years, with relatively few communities offering solar as a standard inclusion with every home. In communities where solar has been offered as an option, the acceptance rate is generally in the 10% to 20% range, in our experience, with some notable exceptions where it is much higher (in excess of 80%).

The market for new homes is depressed, and the numbers of new homes that have been built over the past several years in CA are at historic low points. Prospective homebuyers' ability to borrow has also been constrained. In this environment, the sensitivity of homebuilders to increases in the cost of construction, and to the price of their product offered to homebuyers, is very high.

The intention among production homebuilders, in general, to build an energy-efficient product is also high, spurred mainly by the evolution of the Title 24 standards in CA. Currently, the 2008 standard must be exceeded by a minimum of 15% for the builder to qualify a planned community for participation in the NSHP program. This requirement typically adds to the cost of a home through energy efficiency upgrades and HERS inspection fees. With the decline in average selling prices (ASPs) for solar facilities over the past 18-24 months, due primarily to reductions in the price paid by installers for solar panels, we have seen increased interest among builders in offering solar to their homebuyers. Total Cost of Ownership (TCO) is becoming a relevant metric to builders, as it is to homebuyers, in addition to the cost of construction.

With the acceptance by the NSHP of 3rd-party ownership early in 2010, coupled with the decline of installed system prices, the amount of interest among builders in offering a "solar service" (PPA or lease) as a standard inclusion on new homes has increased. This solution tends to minimize first cost to the builder, while providing the lower TCO to the homebuyer of a very energy-efficient home equipped with solar PV.

In response to the SB1 provisions that took effect at the beginning of 2011, the interest among homebuilders in offering a solar facility to their homebuyers as 1) a purchased option, or 2) as a standard inclusion with the home, either purchased and included with the home price or leased, has increased as one might expect since this is now required of production homebuilders on communities of 50 or more homes, unless a builder chooses to exercise the option to build equivalent solar capacity elsewhere. Although the activity level among builders in planning and developing new communities in this context is high, the low current build rate means that much of the uptake of solar in these communities will occur in future years. In short, the current combination of pricing, incentives and SB1 provisions has created a

climate of interest and momentum among production homebuilders toward the inclusion of solar offerings in their products.

The reservation of incentives, however, is occurring as the communities are beginning construction of the first models and relatively few homes. We feel it is highly unlikely that a builder, installer, or a 3rd-party system owner would agree to the construction of a solar facility on a new home absent the certainty of knowing what the cost will be net of available incentives. Therefore, solar facilities on wait-listed projects will not be built in most cases until the rebate is finally approved. The implication of this is an impairment of the ability of a builder of a wait-listed community of 50 or more units to comply with the provision of SB1 requiring the offer of solar as an option.

Current NSHP guidelines allow for up to 49% of the planned units in a community to reserve rebates, if solar is to be offered as an option. For solar-standard communities, the maximum percentage of units that can be reserved is 100%, provided the builder commits to solar facility installations on more than 50% of the homes. These rebates have a 3-year expiration window. Given the historic adoption rates of solar offered as an option (10% to 20%) it is apparent that over-reservation of incentives is occurring. Moreover, it appears that the recent rebate drop occurred as installed capacity, rather than the Reserved Volume, approached the trigger point (15MW) referred to in the NSHP Guidebook table, Section A.1.

Recommendations

Based on current ASPs observed by PetersenDean in our competitive sphere, the percentage of total system installed price that is represented by the NSHP rebate is now most often in the range of 30% to 50%, depending on the products used in the installation. We believe that the schedule of rebate steps in accordance with Reserved Volume (or installed capacity) should be revised and possibly accelerated in accordance with the decline in average ASP of solar facilities. The recent reduction in NSHP rebates was 10%. During the past two years, the ASP of installed solar facilities has declined by about 25%.

PetersenDean is also supportive of efforts to reduce the complexity of compliance in the NSHP and CAHP programs. Although we recognize the need to conform to the loading order of energy efficiency first, renewable energy generation second, the compliance costs are significant to the installer and the builder, in manpower, dollars and time.

Finally, our recommendation to CEC regarding the over-reservation of NSHP rebates that has prompted the wait-list suggestion, is to institute an ongoing proactive review process by CEC among builders and installers regarding the installation rates in solar-option and solar-standard communities that are on the books. If, for example, one year into a planned 100 unit solar-option project the builder has built 20 homes where 49% of the units have rebate reservations, and only 2 units have had solar installed, CEC can work with the builder or installer to release a percentage of the rebate reservations that will likely go unused. This will result in the freeing up of a large amount of funding allocated to the unused rebates. At a minimum, installers that are active in the NSHP program with production homebuilders should undertake this review internally, which PetersenDean commits to doing in the next 30 days.

Sincerely,

Bill Scott SVP Solar Solutions

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