APPROVED

Sacramento Dharma Center Board Meeting Minutes

3111 Wissemann Drive

Wednesday, February 12, 2020, 6:30-8:30 p.m.

Present: Kenny Bender, Jay Nair, Angela Scarlett, Larry Smith, Diane Wilde. Absent: Barbara Colton, Joe Countryman, Bob Jenne, Sue Taylor.

<u>Minutes</u>

VOTE: The Board approved the minutes of the January 8, 2020 Sacramento Dharma Center (SDC) Board meeting.

Executive Committee

--Per Larry, the Executive Committee meeting was essentially devoted to roofing and solar issues. He reported that Bob intends to eventually get five bids for the roofing project. A roof/solar seminar with Bob and a solar contractor is planned for March 29th at SDC.

--Larry went over Bob's very detailed report on the new roof and solar panels project that each SDC Board member had already received via email. *The report, "Path to a New Roof and Solar," is attached below.*

--The Board discussed the report. One highlight of the discussion: Larry, speaking as a steward of SDC's money, pointed out that the savings gained from lower electric bills were still not completely known, but that the savings generated from paying down the SDC mortgage principal by \$50,000 would generate a known savings of \$2,000 a year. However, he allowed that there was a non-monetary interest served in helping the environment. He would just like the greater sangha to be fully informed when making their decision.

--Meeting Chair Diane asked Larry to follow up with Bob in their financial analysis of the plan.

Building Manager

--No report other than the roof and solar report.

Office Manager

--No report.

Reports from the Sanghas

Valley Streams Zen Sangha (VSZS)

--The inter-sangha Jizo ceremony is March 7th.

Sacramento Insight Meditation (SIM)

--Nothing to report.

Sacramento Buddhist Meditation Group (SBMG)

--No report, however, Angela let it be known that the "big thing" on the horizon is the David Loy "Eco Dharma" inter-sangha event coming up April 17-20.

Treasurer's Report

--Larry presented and reviewed SDC financial reports for January 2020.

--At the end of January, Board-authorized operation reserves stood at \$38,880 and non-earmarked cash on hand was \$ 20,752.16. Earmarked funds held for a Susan Orr memorial were \$8,593; and \$1,679 were being held for reroofing and installing solar panels on the shingled roof.

--The Profit and Loss Report (accrual method) shows total monthly income for January to be \$6,318.38 and total expenses to be \$5,391.37; net income was \$927.01 [Note: cash-basis accounting would show an additional regular expense of \$1,246.72 in January for payment of mortgage principal.]

VOTE: The Board approved the January 2020 financial reports.

New Business

VOTE: On the recommendation of the Art and Design Committee, the Board accepted Terry Wenner's offer to construct and donate to SDC two additional wooden benches (one for the West Lobby and one for placement outdoors) at no cost to SDC.

Roof/Solar Campaign—Tentative Plans

--The Board discussed the draft fundraising email letter that Linda sent to Angela, Jay, and Kenny for editing. The plan is to send the final version out by the end of February.

Upcoming Volunteer Workday (February 23)

--A group of AmeriCorps members will donate several hours of labor to SDC. They will probably be digging out roots and moving river rocks in the yard north of the building.

Building Backups

--Per the January 2020 SDC minutes, a building backup is a volunteer who is "able take care of things if something goes wrong during an event of their respective sangha's—e.g., a blown fuse, a gate that won't open, a leaking roof."

--Bob has offered to do a walk-through of the building to train the backups.

--Diane will bring up the need for a SIM backup with her sangha.

--SBMG needs a backup. Jay would like to get the training but can't commit to being a backup.

Grounds Committee

--Kenny passed along a reminder on behalf of a concerned SBMG sangha member that SBMG needs to name a representative to the committee.

--VSZS hasn't been successful in finding a representative for Grounds.

Art and Design Committee

--A&D minutes did not get distributed; no discussion was held.

Audio-Visual Committee

--Larry reported that all was running smoothly with the sound system. Bob will install speaker shelves when he has time.

Scheduling Committee

-- Diamond Light Tibetan Buddhist Group's (DLTBG) lease at their current space in Sacramento is up for renewal in June. Per several members of the SDC Board, Diamond Light is interested in exploring a move to SDC. The SDC Board held a brief discussion on the matter.

VOTE: The Board authorized Diane to invite Amie Diller of Diamond Light Tibetan Buddhist Group to the March 2020 SDC Board meeting to discuss the possibility of DLTBG's renting or leasing space at SDC.

Paid Staff

Angela would like SDC to start planning for the day that it will need to pay an office manager. She was given tacit approval to do research in the matter, with no commitment from SDC that it would hire staff. She proposed contacting Mountain Stream Meditation Center in Nevada City for information about pay and job descriptions.

Attachment: Path to a New Roof and Solar

TO: SDC Board members

FROM: Bob Jenne

DATE: February 4, 2020

SUBJECT: NEW ROOF AND SOLAR PANELS FOR THE DHARMA CENTER

<u>"Big Picture" Overview</u> I am still in the process of gathering information, but we know enough now to set a fundraising target for a new roof and solar panels. It should cost between \$40,000 and \$45,000 for a new roof. \$45,000 is a worst case scenario if a lot of dry rot is found when the old roof is removed. The new roof will meet California's "cool roof" standards, so it will help reduce our electricity use (and greenhouse gas emissions) because less air conditioning will be needed to cool our building.

Solar panels should cost about \$50,000. So our fundraising target for both a new roof and solar panels is about \$90,000 to \$95,000. However, we can still install solar panels if we raise \$8000 less than that (i.e., \$82,000 to \$87,000), because several attractive financing options are available from companies that specialize in working with nonprofit organizations. These companies can claim the federal solar tax credit that nonprofits cannot claim, and some of the tax credit savings are then shared with the nonprofit.

One particularly attractive solar financing option, which I will discuss later, would require us to pay the cost of the new roof plus a down payment of about \$41,760 for solar panels. An additional payment of \$10,440 would be due after 5 years, so the total cost of solar panels would be \$52,200. However, we would almost certainly save <u>more</u> than \$10,000 over the 5 year period because our SMUD electricity bills would be much lower. Money we would otherwise have paid to SMUD would instead be used to pay for some of the cost of solar panels. At the end of 5 years we would have paid out less money overall than if we <u>not</u> installed solar panels, and after 5 years we would own the system outright and have free solar power.

We already have pledges from several donors for a total of \$25,000, so we are well on the way to raising the money we need.

Below is a summary of what I have learned so far, presented in a question and answer format so that you skip the questions you are not interested in. I will discuss the new roof first, then solar panels, and then financing options for solar panels.

NEW ROOF INFORMATION

What type of new roof should we install?

Our existing roof is a composite shingle roof. A composite shingle roof is also the best choice for our new roof because other types of roofing material (such as tile, metal, and slate) are much more expensive.

The City of Sacramento requires re-roofing projects to meet the "cool roof" standards specified by the California Energy Commission. A "cool roof" is a roof is that has been designed to reflect more sunlight and absorb less heat than a standard roof (see

https://www.energy.gov/energysaver/design/energy-efficient-home-design/cool-roofs and https://www.certainteed.com/residential-roofing-commercial-roofing/what-cool-roof-0/). Cool roofs don't get as hot in the summer, so they reduce electricity use because less air conditioning is needed to cool the building. Composite shingles that meet the cool roof standards are made with specially coated granules that provide better solar reflectance.

It may help in our fundraising to mention that we plan to install a new "cool roof" that will help save energy and reduce our greenhouse gas emissions.

How long will our new roof last before it needs to be replaced?

Composite shingle roofs composed of high-quality shingles typically last 30 years or more, and they can last up to 50 years. The roofing estimates below specify the installation of high quality shingles made by CertainTeed, Owens Corning, or GAF. These three companies are the leading manufacturers of high quality shingles.

What roofing estimates have we received so far?

We have received the following bids for tearing off our existing roof and replacing it with a new composite shingle "cool roof:"

Garner Roofing\$61,705 (oh my!)Level 1 Roofing, Inc.\$36,950Cal-Vintage Roofing\$36,278

I got estimates from these particular roofers because they all received very positive reviews on Angie's List, Home Advisor, and Yelp. It's not that easy to obtain roofing estimates now because most roofers are quite busy due to the booming housing market. I called several other roofers with good reputations. Some said they were too busy to take additional jobs, and others did not bother returning my phone call. We might be able to find a cheaper bid than \$36,278, but I don't think we should pick a cheaper bid unless we are pretty sure that the roofer does quality work.

Which roofing company should we use?

I think Cal-Vintage Roofing would be a good choice. They have an excellent reputation as well as the cheapest bid. I also have a friend who used them and was quite happy with both the quality of their work and their customer service.

Why did I say that a new roof would cost between \$40,000 and \$45,000 when we have a roofing bid for \$36,278?

We have dry rot that needs to be repaired, and we won't know exactly how much dry rot exists until the old roof is removed (see the next question below for a more detailed discussion of dry rot).

I think it will probably cost us several thousand dollars to: (1) repair the dry rot we know about, and (2) replace some low-quality sheet metal installed by the previous roofer—the sheet metal has bent over time and created some small depressions in the surface of the roof. That's why I picked \$40,000 as the estimated cost of the new roof. \$45,000 is the likely worst case scenario if a lot of dry rot is discovered.

The standard practice in the roofing industry is to charge an hourly rate for labor (plus the materials needed) to fix dry rot and other problems that they discover when an old roof is removed. Roofers will <u>not</u> give customers a fixed up-front cost estimate because they don't know what they will find when the roof is removed. The roofing contract specifies the hourly rate that the roofer charges for labor to fix dry rot, but the rate isn't very useful for comparison because a roofer who charges a lower hourly rate may employ carpenters who are less skilled and take

longer to do the job. I believe the best approach is to just pick a roofer with a good reputation and not try to comparison-shop based on the hourly rate that the roofer charges.

Could we save money by just installing a new roof on top of our existing roof, instead of incurring the expense of tearing off the old roof?

No, we have to tear off the old roof. It is OK to install a new roof over one layer of old roofing material. But our roof has two layers of old roofing material, because a new roof was installed on top of the old roof during a previous roofing job. Building codes don't allow a new roof to be installed on top of two layers of old roofing material.

How bad is our dry rot?

You might have noticed that several boards are missing from underneath the roof overhang on the south side of our building. I removed these boards to investigate the dry rot that has been there since we first occupied our building. There's good news; the dry rot isn't too bad. Almost all of it appears to be confined to the boards (called "soffit" boards) that you can see when you look up at the overhang.

The soffit boards are not structural components of the roof. Their basic purpose is to visually hide the rafters and plywood underneath the soffit boards. Fortunately, our rafters and plywood look quite good. I saw no dry rot in the plywood and only a little dry rot in a few places on one rafter at the end of the roof, next to the gutter. The rafters and plywood are structural components of the roof and they are much more difficult and expensive to replace than the soffit boards.

We won't know for sure if there is more dry rot until we tear off the roof. But the results of my preliminary investigation are encouraging, particularly since the soffit boards I removed were the ones that showed the worst dry rot.

What is our time schedule for installing a new roof and solar panels?

It would be best to wait until June or July (after the winter rains are over) to tear off our existing roof, because some dry rot needs to be repaired and the roof will need to stay uncovered for some period of time while repairs are being made. The actual schedule will depend on when the roofing company can do the job. The solar installation can proceed as soon as the roof is finished; timing will depend on when the solar contractor can do the job. If we decide to install solar power it would be best to have everything done before the end of 2020. That's because the 26% tax credit for solar installations drops to 22 percent if we wait until 2021. The tax credit is discussed below under "FINANCING FOR SOLAR PANELS."

SOLAR PANEL INFORMATION

What solar estimates have we gotten so far?

The shingled portion of our roof is ideal for solar panels; it faces south toward the sun and there are no nearby trees that significantly block the sun. So far I have estimates for two reputable companies that install solar panels.

Solar Revolution \$51,744

Magic Sun Solar \$57,285

During the next few weeks we should also be receiving bids from 3 more companies: Aztec Solar, Energy Savings Pros, and Sunstone Home Services. These companies have all the information they need to give us a bid and they are in the process of preparing one. All five of these companies have received very positive reviews on Angie's List, Home Advisor, and Yelp.

These solar bids will not be "apples to apples" comparisons, because each company's bid is based on installing different solar panels and different "inverters" (another component needed to make the solar system work). I haven't yet engaged in the time-consuming research that will be needed to decide between different solar installers and solar equipment manufacturers. Since both of the bids we have received so far are similar in price, I just picked the number \$58,000 as a conservative estimate of how much money we need to raise. We might ultimately decide pick a bid that is less than \$58,000.

If my assumption is that we would pay \$58,000 to a solar installer, why did I say that solar panels would only cost us about \$50,000?

This is explained below under "FINANCING FOR SOLAR PANELS." The short answer is that we can significantly reduce our total cost by working with a company that will share with us a portion of the 26% solar tax credit that they can claim but SDC and other nonprofit organizations cannot.

How many solar panels would be placed on our roof?

Depending on which solar panel manufacturer we pick, between 48 and 60 solar panels would be placed on our roof. Each solar panel measures about 5 ft. x 3ft.. We have a big roof and the solar panels would cover less than half of it.

How much do we pay now for electricity?

Electricity is our building's sole power source and we get all of our electricity from SMUD. We do not use any natural gas because our building has no natural gas pipes.. Our building is very energy efficient because we have replaced every light on our property—both inside the building and outside---with energy efficient LEDs. These changes have cut our electricity bill in half compared to what it was before we installed LEDs.

Our current average SMUD bill is about \$376 per month. This amount include a "fixed infrastructure charge" which all SMUD customers pay whether or not they have solar power. The current fixed infrastructure charge is about \$20 per month. If we don't count the fixed infrastructure charge, we currently pay an average of about \$356 per month for electricity.

Is our SMUD bill likely to increase in the future?

Yes. Our SMUD bills will definitely increase over time, but we don't know how much they will increase. What we do know is that SMUD electricity rates increased an average of about 3% per year from 2008 to 2017, and that SMUD has approved rate increases of 6.75% for 2020 and

4.5% in 2021. 3% per year might be a good guess for the average yearly SMUD rate increase after 2021. That is the percentage rate increase that solar calculation programs typically use to calculate the payback period for solar installations.

Free solar power obviously becomes more and more attractive as electricity rates go up. SMUD rate increases should also be taken into account if we decide to borrow money to finance our solar installation. We may wish to consider taking on a monthly loan payment that is initially higher than the average amount we now pay to SMUD each month. That's because in a few years a fixed monthly loan payment could be much lower than what we would otherwise be paying to SMUD due to SMUD rate increases.

I will try to find out more information to help us better estimate future SMUD rate increases. We will be getting some help from a man named Rick Codina that some of our sangha members know. He is a an engineer with a great deal of knowledge about SMUD rate structures and solar power.

How much would installing solar panels save us on our average monthly SMUD bill? Would our SMUD bill go to \$0.00?

Our average SMUD bill should be dramatically reduced but it won't go to \$0.00. My best guess at this time is that our SMUD bill would probably be reduced by at least 2/3. In addition to the \$20 "fixed infrastructure charge" that we pay every month, our average SMUD bill won't go to zero due to the complexities of the "net metering" rate system that SMUD uses to compensate customers for excess solar power that they generate.

How does net metering work?

The basic concept is that customers sell excess power to SMUD at times when their solar system is generating more electricity than they are using, and buy electricity from SMUD at times when their system is generating less electricity than they are using (such as at night or in winter when there is less sun). Ideally, the quantity of electricity that a customer draws from the grid each year will be balanced by the excess electricity that the customer's solar system sends to the grid each year. Solar companies try to design each customer's solar system so that it is just the right size to achieve this balance.

The concept of net metering is fairly simple but the details aren't. The size of a customer's SMUD bill depends on their individual electricity use patterns—at what specific times during the day does a particular customer generate the most solar power, at what times during the day do they use the most electricity, and how much does SMUD pay for excess electricity generated at different times of the day. SMUD's compensation rates vary by the time of day, and are also different in winter and summer. Here are links to a few article that explain how net metering works: https://science.howstuffworks.com/environmental/green-science/net-metering.htm and https://www.sunrun.com/utility/ca/smud/how-to-read-your-smud-nem-bill an https://www.sunrun.com/utility/ca/smud/how-to-read-your-smud-nem-bill an https://www.sunrun.com/utility/ca/smud/how-to-read-your-smud-nem-bill an https://www.sunrun.com/utility/ca/smud/how-to-read-your-smud-nem-bill an

I am in the process of finding out more information so that we can make a more exact estimate of how much our SMUD bills would be reduced. It's really complicated, but fortunately Rick

Codina has generously offered to analyze the Dharma Center's electricity use patterns to help figure this out. Detailed electricity use data for the Dharma Center is available on SMUD's website. I downloaded this data and sent it to Rick for analysis.

FINANCING FOR SOLAR PANELS

How can we save money by financing our solar panel installation costs?

A number of companies specialize in making loans to churches and other nonprofits that want to install solar panels. A 26 percent federal tax credit (decreasing to 22% in 2021) is available to individuals and companies that install solar panels. However, nonprofit corporations like SDC can't take advantage of this tax credit because they don't pay federal income tax. But for-profit companies that make loans to nonprofits <u>can</u> claim the tax credit, because these companies structure the loan transaction so that the company owns the solar system for a few years until the loan is payed off. This means that they can offer loans to nonprofits on very favorable terms, and the total cost of the solar system to the nonprofit is also less because some of the tax credit savings are passed on to the nonprofit.

In the previous paragraph I said that these companies make "loans" to nonprofits. As I will explain later, these are not the kind of "loan" that you or I could get. They are a more complicated type of financing agreement with much better terms than a conventional loan. A "solar power purchase agreement" is the term typically used to describe these agreements.

Have other nonprofit organizations used this financing mechanism to finance their solar panel installations?

Yes. It is quite common for nonprofit organizations to work with private companies that can claim the tax credit, because an organization can save a lot of money by doing this. Both the San Francisco Zen Center and Spirt Rock financed their solar panel installations in this way. The two companies that I discuss below were recommended by "Interfaith Power and Light." You may have heard of this organization; it is a nonprofit organization that works with churches and other nonprofit entities to help them install solar panels and take other actions to reduce their carbon footprint. (see: <u>https://www.interfaithpower.org/resources/solar-resource-guide/</u>).

At Interfaith Power and Light I spoke with Jerry Bernstein, who is their staff expert on solar financing. He is a member at the San Francisco Zen Center sangha and is currently working with the Zen Center to help finance the installation of solar panels on several of their buildings. Jerry gave me the contact information for company that the Zen Center is using to finance their project (California Clean Energy) and for another reputable company that he also works with (SDC Energy). Jerry is happy to help us and is available as a resource to answer our questions.

What solar financing options do we have?

We have two good financing offers so far, one from California Clean Energy (<u>https://calcleanenergy.com/</u>) and one from SDC Energy (<u>https://sdc-energy.com/solar-financing/</u>):

(1) California Clean Energy's offer

The company essentially offers to split the 26% federal tax credit 50/50 with nonprofit organizations. To accomplish this, the transaction is structured so that the nonprofit makes one single payment of 87% of the total cost of installing the solar system. This transaction is described as a "Solar Power Purchase Agreement," and the one-time payment is characterized as a "prepayment" by the nonprofit for 5 years worth of power that will be generated by the solar system. The company owns the system for 5 years and claims the federal tax credit during this time, and then title passes to the nonprofit at the end of five years. The nonprofit makes no other payments except for this single one-time payment. And because the nonprofit pays only 87% of the system's total cost, the nonprofit and the company basically split the 26% federal tax credit 50/50, since the nonprofit ends up paying 13% less than the full price it would have paid if the nonprofit had simply bought the system outfight without any "financing" from the company.

As "financing" agreements go, this is quite a good one. If I finance the purchase of a new car by taking out a loan, my loan payments over time will amount to more than I would have paid if I'd simply paid cash for the car, because the finance company makes money by charging interest. But if SDC "finances" the purchase of solar panels under this arrangement, SDC's total cost would be13% less than if SDC had simply bought the system with no "financing," because the financing company makes money by claiming the federal tax credit instead of charging interest. This may sound too good to be true (or legal), but this type of financing arrangement is allowed by federal tax laws and is currently being used by many nonprofit organizations.

So if a solar installer charges \$58,000 to install a solar system, SDC would pay 87% of this amount, which is about \$50,000. That's why I said earlier that solar panels would cost SDC about \$50,000 instead of \$58,000; I am assuming that we would finance our solar installation project through California Clean Energy and would save about 13% of the project's total cost

Additional savings are also possible .

Our savings will be actually be greater than \$8000 <u>if</u> we can raise enough money to "finance" both the roof <u>and</u> the solar panels through California Clean Energy. If we can raise this much we would save about \$1560 on the cost of our new roof. That's because the new roof and solar panels can be treated as a single integrated project for tax purposes, which allows the company to claim a solar tax credit on 30% of the reroofing costs. This "30% rule" has been used by California Clean Energy on other solar projects where new roofs are installed along with solar panels.

Here are the calculations explaining why we would save \$1560. If a new roof costs \$40,000, the tax credit could be claimed on 30% of this amount, or \$12,000. The company will pass on 13% of the federal tax credit they can claim on this amount, which is \$1560. Our total roofing costs would therefore be \$38,440 instead of \$40,000.

I was initially skeptical about whether SDC Energy could really claim the solar tax credit on 30% of reroofing costs. I did some research and learned that the tax rules on this issue are ambiguous, but they have a decent argument that this is OK. It also isn't our problem if at some point in the future they are audited and the IRS determines that they can't claim the credit for reroofing costs. Our contract with them would be unaffected by such a determination.

(2) SDC Energy's Offer

SDC Energy offers a Power Purchase Agreement with somewhat different terms. Instead of making a single one-time payment of 87% of the system's total cost, we would instead make two payments to SDC Energy that amount to 90% of the system's total cost. So SDC Energy is only offering a 10% discount instead of the 13% discount offered by California Clean Energy. 10% of \$58,000 is \$52,200, so we would pay a total of about \$52,200 if we use SDC Energy to finance our project.

However, the upside of making two payments is that we don't need to raise as much up-front money. The first payment would be for 80% of the reduced price of \$52,200 (i.e., \$41,760), and this \$41,760 payment is due when the system is first installed. This first payment represents the "prepayment" for 5 years of electricity that will be generated by the system.

The second payment would be for 20% of the reduced price, or \$10,440. The second payment is due at the end of the 5 year period, and represents the "buyout" of the system (i.e., We would own the system outright after the second payment is made.) It is important to note that we would almost certainly save more than \$10,440 over the 5 year period because our SMUD electricity bills would be lower. Money we would otherwise have paid to SMUD would instead be used to pay for some of the cost of our solar panels. At the end of 5 years we would have paid out less money overall than if we <u>not</u> installed solar panels, and after 5 years we would own the system outright and have free solar power. So if we can raise about \$42,000 to make the first payment, that's all we really need to go ahead with our solar project, because the second payment would be taken care of from the money we save.

What if we can't raise the entire amount needed to make an upfront payment of either \$42,000 to SDC Energy or \$50,000 to California Clean Energy? Do we have other financing options?

Yes, other financing options exist. I'm still in the process of exploring them. It is quite possible that we could raise only \$20,000 to \$30,000 and it would still make financial sense to install solar panels. Let's say that we want to finance the project through SDC Energy but can only raise \$30,000 of the \$42,000 we need. We may be able to get a loan for the extra \$12,000 we would need, and still keep our monthly payments below the average payment of \$356 per month that we currently make to SMUD. (Our "monthly payment" would include our monthly loan payment <u>plus</u> the amount we would need to save each month to make the \$10,440 payment at the end of 5 years.) Is it possible to do this? We don't know yet. We will know more after we finish investigating the available financing options.

Where do we go from here?

We can start a fundraising campaign and see how much money we are able to raise. In the meantime we can continue to research different financing options. We can also research and decide which solar company we would like to use and what solar equipment we want to install, which should tell us exactly how much our solar installation would cost.

At some point we will know: (1) Exactly how much our solar installation would cost; (2) How much money we have been able to raise; and (3) What financing options are available. Then we will be able to decide whether or not it makes financial sense to go ahead and install solar power.