

Andrew McCalla, Meridian Solar

The Driving Force behind Texas' Largest Integrator

Andrew McCalla is the founder and CEO of Meridian Solar, a PV systems integrator based in Austin, Texas, with offices in Dallas and San Antonio. Meridian is a market leader in the state with more than 400 installations and approximately 3.75 MW of installed capacity. Andrew has been a solar professional since 1995 and is one of two inaugural NABCEP certified installers in Texas. He has served on the board of the Texas Solar Energy Society, currently serves on the board of the Texas Renewable Energy Industries Association and is a regular presenter at industry events and conferences. —Kathryn Houser, managing editor at SolarPro, met with Andrew at his new Austin office and warehouse location.

KH: Can you trace the trajectory of your involvement in solar and your business?

AM: To borrow a phrase from Mickey Hart, I figured out what I wanted my life to smell like in 1992 when I was at the Global Forum in Rio de Janeiro. That's where I was turned on to PV. I was later inspired to do a deep dive, and one of the few options in 1995 was Solar Energy International [SEI]. Along with several others who are still in the industry, including Joe [Schwartz, publisher of *SolarPro*], I went to SEI for its summer courses. Afterward I got a job with a PV distributor outside of Houston—one of the largest in the country, doing great designs with great product. I learned a ton about business, pricing and economics, and design and supply stream. All of this was new to me as a Spanish major from the University of the South.

The company wasn't interested in installation—the market really wasn't ready for it in Texas. But I was looking



Andrew McCalla, CEO and founder, Meridian Solar A commitment to quality has spurred this Texas company into having the state's largest share of the market and the greatest percentage of NABCEP certified employees under its roof.

forward, so I parted ways amicably and hung out my shingle as Meridian Energy Systems. I first officed out of Grandmother's attic in about 200 square feet and warehoused out of her garage. The year was 1999, and the only incentive was altruism or fear. There were a lot of systems sold to people who were fearful about what was going to happen at Y2K.

The myriad ways in which people approached preparing for the apocalypse was fascinating. It became my objective to make sure that the system they had bought was installed properly, and also to temper their fears. I found myself in very personal situations reviewing the hierarchy

of needs: you need air first; and then there's water, so let's talk about water systems; and then let's talk about food and its preservation and preparation. After that, all bets are off. Some people still wanted the Fry Daddy to work.

It made for an interesting way to start the company. It wasn't a huge boom, but it kept us busy through the first five months. Then we just started this slow ramp up, from one full-time and two part-time guys to today, with 42 full-time guys and gals. Office space progressed similarly, from 200 square feet, to a shipping container converted to an office, to a cabin out in the country, to 1,800 square feet, to 15,000 square feet today.

KH: What do you think contributed to that success?

AM: Tenacity and passion—focusing on getting the project and getting it done right. I know that sounds like New Business 101, but it pays off in incredible dividends. We don't do much advertising or marketing; we never have. We are still very much in reactive mode, because word of mouth is doing so much work for us. We maintain an acute focus on quality, and that's not always profitable in the short term. I think profitability needs to be looked at in a long-term way. It's harder to maintain quality control with a bigger organization, when we've got six jobs going at once. But that really is the thing we come back to. We still haven't nailed the formula; we still paint ourselves into a corner on projects. But we always come back to the root: do it right. And I think that's allowed us to grow the way we have.

KH: You started out as the guy on the roof. How has your role changed as the president and CEO?

AM: A lot, and yet not at all. I don't do a lot of wrenching anymore; I do get up on the roof for site analysis and pre-design, to see how project pace is going and to look at quality control issues. While I am still involved in sales and design efforts, more of my attention is on the company structure and making sure that people have what they need and that the company has what it needs. Management is to me, at times, an unfortunate by-product of growth and success. It may take you away from some of your key passions, but I find infinite solace in the overall picture of success. As much as things have changed, I still take out the recycling.

KH: One reason for your recent growth was the round of equity financing that you completed in the summer of 2008. What did that mean for the company?

AM: It's been a great thing, not so much

because of the amount of equity but because of who brought it. We had our business plan, which was a focus on quality and organic bootstrap growth, putting profits back into the company. (I'm a financial conservative, and I don't like a lot of debt.) At a certain point, we hit a wall: we couldn't get to where we knew we could go with our internal capital resources. Sometime in the summer of '07, different organizations started approaching Meridian about investment opportunities. The timing was good; we weren't out begging for money; we were validating suitors.

We didn't find a good fit until the group that we ended up doing the deal with approached us. And it took months of courtship—getting to know each other, getting comfortable, sharing perspectives—before we realized it was a good fit. The amount of capital they were bringing to the table was going to get us where we knew we could go, where we're going now. But that was just part of it. What really moved my needle was realizing I needed to give up a significant piece of this pie to others who could make the entire pie—not just the finances, but also the vision for this company—much bigger. It's really the people behind the deal who made me want to move forward with it. They're people with experience in traditional energy, people who know how to grow companies and how different industries have matured, people who have a seasoned financial and organizational perspective. About six investors are actively involved in the company, and two on a day-to-day basis, much to my perpetual delight. The classic entrepreneurial death knell is some sort of control issue, not wanting to relinquish certain aspects [of the business]. I am more than willing to give a task to someone if they can complete it better than I could.

KH: What advice do you have for other integrators who are considering bringing on investors?

AM: I would say the money's important: know what you want to do with it. But I would say it's more important to know the people behind the money. If it's not institutional money, these are people you're going to be dealing with on a consistent basis. Know them; like them; make sure that they're on board with your vision; and make sure that you understand theirs. It's like you're inviting them to be a part of your family.

I guess some business books might tell you to snow them, but I think that's not a good strategy. As soon as the deal's done, the warts are going to come out. Being completely candid about what they're getting into is vital. Also, you're investigating them as much as they're investigating you. You really need to challenge them to figure out what makes them tick and how they would handle certain situations.

KH: Meridian is a licensed electrical contractor with a master electrician on staff. What competitive edge has this given you?

AM: About four years ago, Texas went to statewide electrical contractor licensing. Before that it was by municipality. We sought to be compliant and also enhance our credentials. Prior to that we were subcontracting out work that clearly should be done by an electrical contractor or an electrician. We were sending money out the door, and we were also training future competitors. We were bringing people who weren't that familiar with the technology up to speed, and then they launched their own solar companies. That was bad practice. Quality control was also an issue. We had to use different electrical contractors based on where we were doing a project.

For those three reasons—financial loss, competition and quality control—we decided to bring a master electrician on staff and become a licensed electrical contractor. Furthermore, it distinguishes us because we are the only one in the state that focuses exclusively on PV.



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We do not have a professional engineer on staff, but we're actively recruiting one. We're sending a lot of money out the door to have designs that we do simply reviewed and stamped. We've educated a few PEs to the point where they now represent the services that we've brought them up to speed on. Finally, we are coming close to providing engineering services but aren't legally allowed to do that. It's a potential revenue stream for us as a fee-based service. Basically, we could charge for something we're already doing. Having a master electrician on staff is a knowledge resource that is invaluable, and I think that we would benefit the same from the right professional engineer.

KH: How have the various rebates driven your business?

AM: The Austin Energy rebate program started in 2004. It was a good shot in the arm for us: it probably doubled revenue after it got going. The reason it didn't do more is because of its structure. Everybody's heard of Austin's program as being the best in the country—its press department has done a good job—and at \$5 a watt, it was the best as far as dollar per watt goes.

Moving forward As Meridian starts doing multiple 250 and 500 kW projects, and particularly the multimewatt ones on the boards, careful changes to its installation and project execution division will be required. Its two large installation crews can evolve into three or consolidate into one for large commercial projects. The established practice of leveraging a close-knit subcontractor base will likely continue and evolve, especially for services not carried in-house such as steel fabrication or underground utilities.

However, there are three other things that really make a program good. One is the amount of money put toward the program on an annual basis: here it's only \$4 million, which includes administrative costs. A second is the cap: how large can a system be? The cap was \$100,000 per commercial project, and \$15,000 for residential. The third is transparency: knowing how a program is structured; knowing when the rebate's going to taper, as good programs should, and communicating to installers when that money is not going to be available. Austin Energy has not done a very good job there. Its most recent rebate program changes effectively removed \$7 to \$8 million worth of solar activity from the market, retroactively. There are four or five smaller companies that are now done. We're working on it with Austin Energy, the city council and the citizens of Austin, because we have a municipally owned utility. I want the program to continue; I want it to taper, but I want it to do that in a forecasted, measured way.

At the same time, I'm grateful for Austin Energy because it provided a consistent baseline for us to grow the company. Before, projects were spotty,

and it was hard to build up a team to address the big ones. Austin Energy provided the back beat that allowed us to reach out to Dallas, where we've done projects for eight years. We decided to make the move there when we finally had a strong enough background going in Austin, and we saw the promise in Dallas and were encouraged by its incentive program, the Oncor rebate.

Likewise with San Antonio: we've done projects there for years, including the second and third largest in our portfolio, at the Pearl Brewery and Fort Sam Houston. CPS Energy, the municipally owned utility, had some fits and starts with its rebate program, which left us unwilling to commit. CPS Energy's recommitment to its rebate program, its attractive new feed-in tariff and its aggressive pursuit of large scale PPAs with regional solar farms really got us off the dime and justified our having an office there.

KH: Your project type and geographical diversity have certainly contributed to your continued success.

AM: We've always been a statewide company because we've had to be. If somebody asked in 1999, "What kind of jobs do you want?" I'd say, "Any of them. All of them." There just wasn't that much going on. I would drive to Conway, Arkansas, to put in a 3 kW system.

Now, 80% of our jobs are residential; 20% are commercial, nonprofit or large industrial. But almost the inverse is true for revenue and, consequently, installed capacity. We have all the skills and operations that commercial or industrial or federal projects require. However, those aren't back-to-back. Residential projects fill in the gaps; they serve as the baseline. That doesn't mean these projects are not profitable or glamorous; we've done some residential projects that are really cool, whether it's 38 kW on a big ranch or it's for Willie Nelson. The other reason we

still do them is because residential is really our roots.

We're starting to approach utility scale, behind-the-fence projects. While we want to be a part of them because they speak to our fundamental goal of getting more PV in the world, the bigger they get, the less likely they are to embrace one of PV's key attributes: distributed generation. Residential installations typify that attribute because they're small systems; there are a whole lot of them; and they go where the load is.

KH: What kind of marketing advice could you offer startup solar companies?


AM: Turn back! Save yourselves! [Laughter] Keep in mind that my experience didn't hold a lot of marketing as far as direct expense. I didn't find it necessary, or possible, frankly, at certain

points. Now, we do some advertising in strategic regional publications. We go to trade shows; go to events; sponsor when appropriate. It's been very key and also often as a show of support for the publication or for the event. It hasn't been thinking, "If I put in \$150 or \$1,500 bucks, I want to see this much return." Some people approach their marketing effort that way.

What Meridian did early on was just simply be present, help out and volunteer—not always as Meridian but sometimes as Andrew McCalla, solar advocate. While this was not what it was about at the time, I think it has paid impressive dividends through relationships and contacts. And I guess it doesn't matter why you do it—you're just fired up about your company, about the industry and about the technology. You just want

to be plugged in, and you're crazy and young: "You want me to carry 18 tons of gravel up onto the roof of this church for free? Hell, yeah." If you need financial justification for the sacrifices you make early on, then take it from me, you will be rewarded. I wouldn't say beyond your wildest dreams, but you will be rewarded.


This industry has come a long way in 10 years since Meridian was founded. But it's still a nascent technology. We have not made the paradigm shift that we need to in this country—not just about solar, but about energy and what it is, how it's used, how it's distributed and how it's abused. Sometimes I'm asked on forms: "What's your profession?" I feel like putting down "teacher." We still are all very much educators. That role will remain fundamental for some time. ⊕



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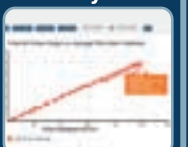
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