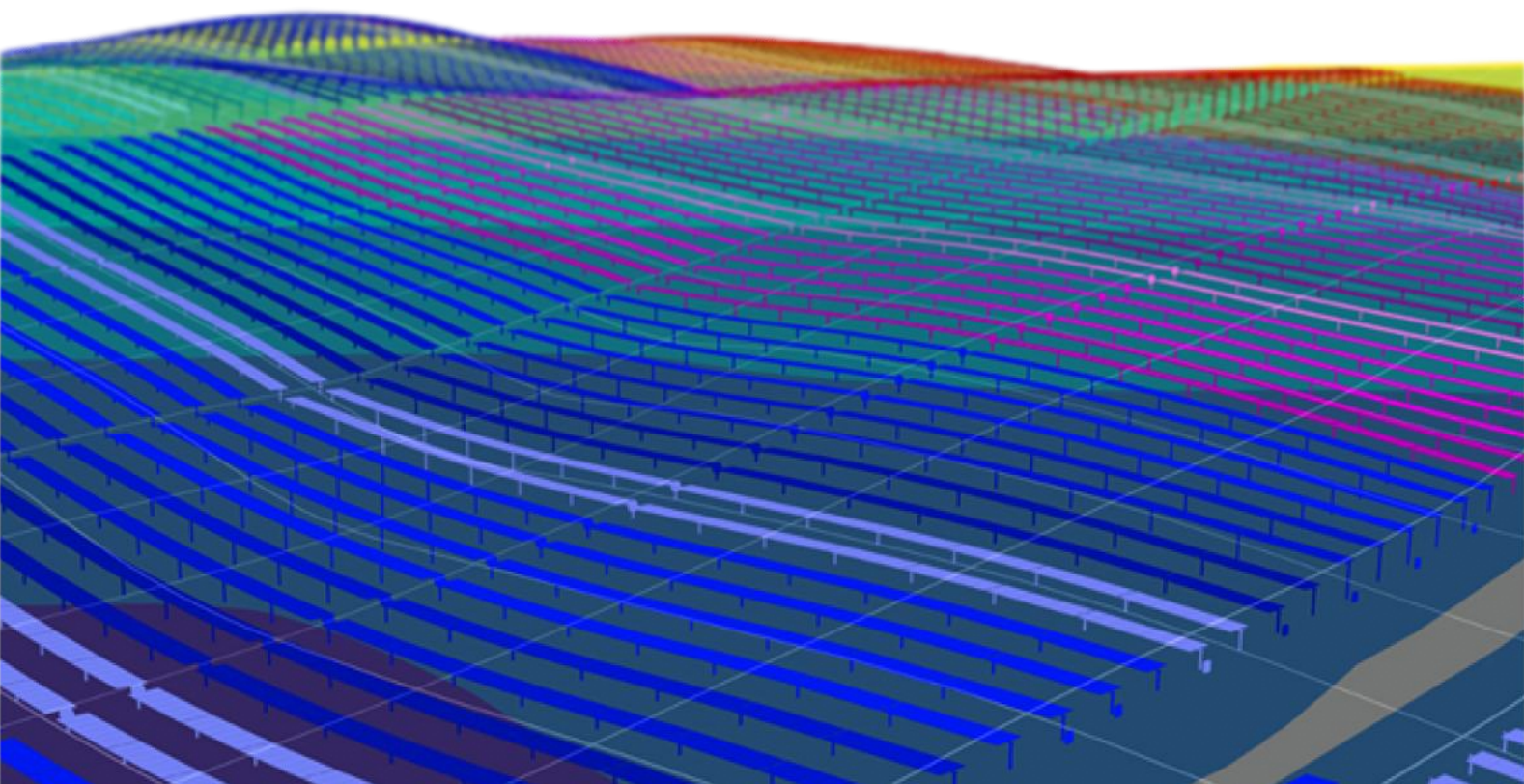


NARENCO PVFARM

Accelerated Estimating
and 5x ROI

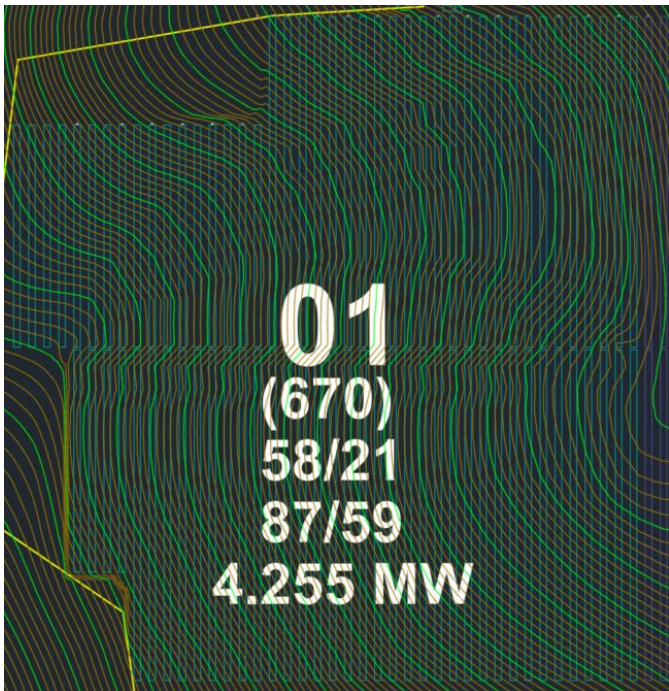


Summary

NARENCO is a vertically integrated solar company specializing in the design, construction, and operation of utility-scale solar projects across the United States. Founded in 2009, this industry leader has successfully completed over 800 MW of solar installations, generating enough clean energy to power more than 100,000 homes. Consistently recognized by Solar Power World as one of the most successful construction firms in the United States, NARENCO has built a reputation for delivering projects on time, on budget, and with an unmatched level of quality.



The Challenge

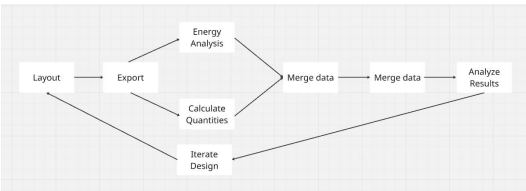


"Now everything can be done in just a day or two and I don't think that can be beat. I think it's a fantastic software."

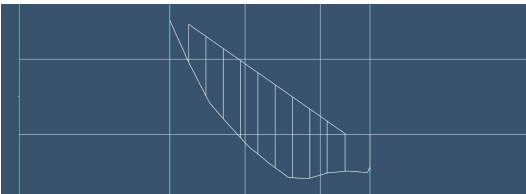
Jesse Johnson
Estimating Manager

NARENCO's success was creating its own headaches. Jesse Johnson, the Estimating Manager, watched his engineering team — experts in civil, electrical, and high-voltage — get buried under the workload that came with rapid growth. Traditional workflows were too slow for modern solar development, taking weeks when clients expected answers in days.

The options looked pretty binary: either hire more engineers or accept a slower turnaround that could hurt their edge. Manual terrain analysis, electrical calculations, and layout tweaks were eating up time and leaving room for mistakes. Jesse needed a way to move faster without sacrificing the accuracy that had built NARENCO's reputation.



Slow traditional workflows



Manual terrain analysis

Energy	164	164	164	78	78
> Max CI CB circuit length					
> DC total	43165.98 KW	43165.98 KW	43165.98 KW	24845.40 KW	24845.40 KW
AC total	36050.00 KW	36050.00 KW	36050.00 KW	20160.00 KW	20160.00 KW
DC/AC ratio	1.20	1.20	1.20	1.23	1.23
LV voltage drop	0.00 KW	0.00 KW	0.00 KW	0.00 KW	0.00 KW
LV voltage drop	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %
Year 1 energy yield, total	49338.36 MWh	49338.36 MWh	45463.10 MWh	20250.49 MWh	19597.03 MWh
Year 1 energy yield, daily	135.17 MWh	135.17 MWh	124.24 MWh	55.48 MWh	53.69 MWh
Year 1 energy performance	79.58 %	77.00 %	70.58 %	56.72 %	53.18 %
Specific annual yield	1142.99 Wh/W	1130.10 Wh/W	1053.22 Wh/W	615.06 Wh/W	788.76 Wh/W

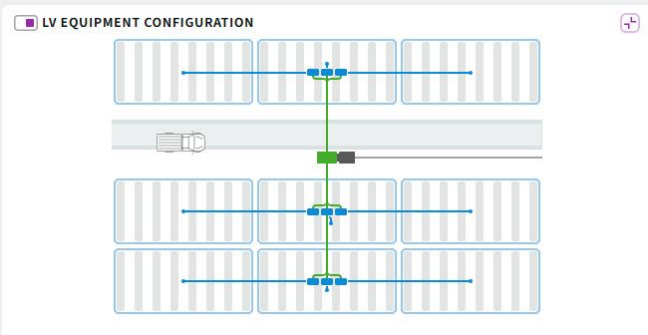
Bandwidth overload

The Solution

Jesse first spotted PVFARM in PV Newswire and knew right away it could be a game changer. The platform's rapid terrain analysis and electrical balance of systems tools replaced hours of manual work with a few clicks. Getting buy-in was about showing it wouldn't replace the engineering team's expertise—it would amplify it. Leadership saw the upside too: faster pre-construction workflows, fewer bottlenecks, and all at a fraction of the cost of adding more full-time staff.



Rapid terrain analysis



Superior electrical balance of systems tools

Overview	PV Modules	PCS	Electrical	Civil	Structural	Design and Engineering	All Rates					
Description	Cost Source	Cost date	Cost Unit	Quantity	Labor hours per Unit	Loaded wage Rate	Labor cost per Unit	Material cost per Unit	Equipment cost per Unit	Labor Total	Material Total	Equipment Total
Invoicing	Group sum: ▼											
undeposited										\$ 537,795	\$ 547,298	\$ 70,503
Generic:										\$ 537,795	\$ 547,298	\$ 70,503
S&E										\$ 537,795	\$ 547,298	\$ 70,503
87 MOD PV Module										\$ 771,655	\$ 584,426	\$ 20,000
inverter	Default	Swach		22,000	15,000	\$ 51,000	\$ 765,000	\$ 4,493,200	\$ 100,000	\$ 18,000	\$ 148,070	\$ 2,000
edge_3rd	Default	Swach		34,000	15,000	\$ 51,000	\$ 765,000	\$ 3,336,000	\$ 100,000	\$ 28,010	\$ 181,424	\$ 1,400
edge_3rd	Default	Swach		21,000	15,000	\$ 51,000	\$ 765,000	\$ 3,080,000	\$ 100,000	\$ 6,000	\$ 121,262	\$ 2,000
edge_top	Default	Swach		24,000	15,000	\$ 51,000	\$ 765,000	\$ 5,880,000	\$ 100,000	\$ 18,360	\$ 148,070	\$ 1,400
87 MOD PV Module										\$ 489,530	\$ 598,542	\$ 8,000
inverter	Default	Swach		26,000	15,000	\$ 51,000	\$ 765,000	\$ 3,604,000	\$ 100,000	\$ 24,420	\$ 209,004	\$ 2,000
edge	Default	Swach		65,000	15,000	\$ 51,000	\$ 765,000	\$ 8,004,000	\$ 100,000	\$ 71,145	\$ 744,772	\$ 9,000
edge_3rd	Default	Swach		141,000	15,000	\$ 51,000	\$ 765,000	\$ 8,004,000	\$ 100,000	\$ 107,865	\$ 1,241,420	\$ 14,100
inverter	Default	Swach		262,000	15,000	\$ 51,000	\$ 765,000	\$ 8,004,000	\$ 100,000	\$ 184,420	\$ 1,610,008	\$ 20,200
edge_top	Default	Swach		136,000	15,000	\$ 51,000	\$ 765,000	\$ 8,004,000	\$ 100,000	\$ 185,570	\$ 1,215,007	\$ 18,000

Faster pre-construction workflows, fewer bottlenecks

Results

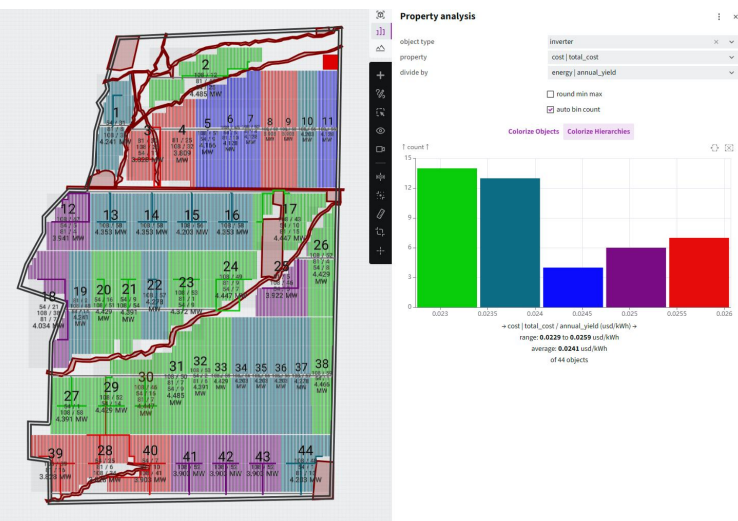
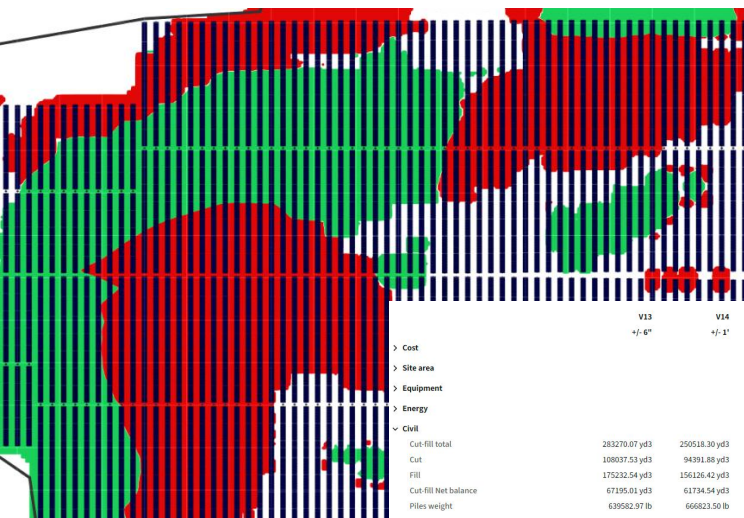
The impact was immediate. Jesse cut project timelines by about 50%, shrinking tasks that used to take a week down to a day or two. Early-stage pricing went from a five-week slog to a quick turnaround in days. **In six months, the ROI hit roughly 5x.** Beyond the speed, PVFARM added a layer of verification that caught discrepancies and lowered error risk. Best of all, NARENCO sidestepped hiring extra estimating staff, saving their budget while gaining sharper analysis and more flexibility.

PVFARM helped NARENCO level up to more data-driven decision making. With richer datasets and faster scenario comparisons, the team could evaluate designs and equipment options in record time, giving clients sharper analysis and quicker answers.

It wasn't just an operational win — it positioned NARENCO as a tech-forward company that solves challenges with smart tools, not just more headcount. That shift set the stage for ongoing growth and a clear edge over competitors still stuck in manual workflows.

Final Thoughts

NARENCO's experience with PVFARM shows how the right technology can transform operations without compromising quality. In just a few months, they cut timelines by **50%**, **hit a 5x ROI**, and sharpened their competitive edge. PVFARM turned into more than a tool — it became a catalyst for growth, freeing engineers to focus on high-value work while delivering the speed and accuracy modern solar development demands.



About PVFARM

With PVFARM, you can design and deliver large-scale solar projects more easily and make more money doing it. The software automates a lot of the complicated stuff, gives you clear data to work with, and helps your team collaborate effectively. It's all about getting better results, quicker.

- **Effortless mix & match equipment & electrical designs in the same project.**
- **Multiple grading strategies with just a few clicks, fast & easy.**
- **Seamless integration with your favorite tools to fit into your existing workflows.**
- **User-friendly, web-based interface built on industry-leading technology.**