Breaking Into Utility & DER Project Management

A Career Transition Playbook

By Orinami Daodu

For project managers in construction, IT, engineering services, and operations who want into the utility and distributed energy (DER) world — without an electrical engineering degree, and without starting over.

Introduction: I Am the Proof This Works

Let me tell you the objection I hear most, because I lived on the other side of it:

"I'd love to get into utility work, but I don't have an electrical engineering degree."

I have an engineering degree. It is not an electrical one. And today I work in transmission interconnections at a major utility, after a run as a senior project manager for distribution interconnections at another one. Before that, I managed substation upgrade projects on contract at a third utility. Before that, I was a project manager at an engineering services firm, and before that, a PM at a building systems integration company in the New York metro area.

Nobody in that chain hired me because of the letters after my degree. They hired me because I could run a project, speak honestly about what I knew, learn the technical process fast, and — this is the part most candidates never figure out — I learned to translate my experience into the language utilities actually hire in.

That translation is what this playbook teaches.

Utilities and the companies that serve them are in the middle of a long, structural build-out: solar and storage projects connecting to the grid, substations and feeders being upgraded, interconnection queues stacked with projects that all need someone to shepherd them from application to permission to operate. Every one of those projects needs a project manager. There are not enough experienced utility PMs to go around,

which means the door is open to PMs from adjacent industries — if you know how to walk through it.

This book is the map I wish someone had handed me:

- Why the hiring wave is real and durable
- Why the "wrong degree" objection is mostly a myth
- How to translate your existing PM experience into utility language
- The interconnection process, explained plainly enough that you can talk about it credibly in an interview
- How to position your resume and your story
- The interview questions that actually come up, and how to frame strong answers
- What to do in your first 90 days so you keep the job you just won
- Where the path leads from there

No hype. No salary promises. No "six figures in six months." Just the real play, from someone who ran it.

Chapter 1: Why Utilities and DER Interconnection Are Hiring

The queue is the headline

Every solar farm, battery storage project, EV charging depot, and rooftop solar array that wants to connect to the electric grid has to go through a process called **interconnection**. The project applies to the utility. The utility studies whether the grid can handle it. Agreements get signed. Upgrades get built. Only then does the project get permission to operate.

Now zoom out. Across the country, developers have proposed enormous numbers of solar, wind, and storage projects, and every single one of them lands in an interconnection queue somewhere. Those queues are long — in many regions, projects wait years to move through studies and construction. State and federal clean-energy incentives keep feeding the pipeline. Utilities are simultaneously upgrading aging substations, reinforcing feeders, and planning for more load from data centers, electrified fleets, and growing communities.

All of that work is **project work**. It has scope, schedules, budgets, vendors, regulators, and deadlines. And it is not shrinking.

Why this matters to you as a PM

Three structural facts make this a good door to walk through:

1. **The work is funded and mandated, not speculative.** Grid upgrades and interconnection processing are core utility obligations. Utilities don't get to skip them when the economy wobbles, which makes these roles more stable than project work in industries that live and die by consumer demand.

2. **The experienced talent pool is thin.** Utility PM roles used to be filled almost entirely from inside the industry. The volume of DER and grid-modernization work has outgrown that pipeline, so utilities, engineering firms, and developers now hire proven PMs from construction, IT, telecom, and operations — and teach them the grid specifics. That is the opening this book is about.

3. **DER is the growth edge.** Distributed energy resources — rooftop and community solar, batteries, microgrids, managed EV charging — are where the new connections, the new programs, and the new teams are. "DER interconnection PM" is a specialty that barely existed as a job title a generation ago. Getting in now means growing with the function instead of chasing a crowded one.

Who is hiring

- **Investor-owned and municipal utilities** — interconnection teams, substation and feeder programs, DER program offices.
- **Engineering and consulting firms** — the L&T-style services firms and owner’s-engineer shops that utilities contract for surge capacity. (This was one of my own stepping stones, and it's an underrated one: contractors see more project variety in two years than many in-house staff see in five.)
- **Developers and EPCs** — the solar/storage companies on the other side of the queue, who need PMs who understand the utility process from the inside.
- **Contract/staffing arrangements** — a large share of utility PM work, including senior work, runs through contract roles. Both of my current-era roles came through the contract door. Don't treat "contract" as "lesser" — treat it as the standard port of entry, with conversion and progression common for people who perform.

The takeaway: you are not trying to sneak into a shrinking club. You are applying to an expanding function that is actively short of people who can run projects. Your job is to make it easy for a hiring manager to see that you're one of them.

Chapter 2: The Myth of the Electrical Degree

What the job posting says vs. what the hiring manager needs

Read a utility PM posting carefully and you'll usually find some version of: "Bachelor's degree in engineering or related field preferred; PMP a plus; experience managing capital projects..." Then read it again and notice what's actually being screened:

- Can this person run a project with multiple stakeholders who don't report to them?
- Can they manage a schedule with hard external dependencies?
- Can they handle vendors, budgets, status reporting, and escalation without drama?
- Can they communicate with engineers, field crews, regulators, and customers in the same week?

The degree line is a proxy — a lazy stand-in for "can think systematically and won't drown in technical detail." It is not the job. In interview after interview, what decides between candidates is demonstrated project delivery plus enough technical fluency to be credible. Fluency is learnable on a deliberate timeline. Delivery track record is not — and you already have it.

My own "wrong degree" story

I hold an engineering degree that is not in electrical engineering. When I moved toward utility work — first managing substation upgrade projects at National Grid on contract — nobody asked me to design a protection scheme. They asked: can you coordinate outages, contractors, materials, and utility stakeholders to get this substation work done safely and on schedule? That I could do, because project management is project management: scope, sequence, risk, communication.

Then the pattern repeated at a higher level. At Exelon, as a senior PM for distribution interconnections, the work was the DER queue itself — applications, studies, agreements, construction coordination. The electrical concepts mattered, but they were a vocabulary and a process to learn, not a four-year degree to redo. At Duke Energy, in

transmission interconnections, the stakes and voltages are bigger; the PM fundamentals are identical.

Here is the honest breakdown of what carried me:

What people assume got me hired	What actually got me hired
An electrical engineering degree	A pattern of delivered projects
Deep grid expertise on day one	Fast, structured learning of one process
Utility insider connections	A resume written in utility language
Luck	Targeting the roles the hiring wave created

What hiring managers actually screen for

1. **Delivery evidence.** Projects finished, budgets handled, problems escalated early and solved. Quantify yours.
2. **Stakeholder range.** Utilities live on cross-functional coordination — engineering, field ops, legal, regulatory, customer-facing teams. If you've ever run a project across departments that didn't report to you, say so loudly.
3. **Process discipline.** Stage gates, change control, risk logs, status cadence. The utility world is process-heavy; PMs who love process thrive here.
4. **Technical humility plus learning speed.** The winning line is not "I already know interconnection." It's "Here's how I got fluent in a new technical domain in my last role — and here's the process as I understand it so far." Chapter 4 gives you that process.

When the degree genuinely matters

Be clear-eyed: if you want to be a protection engineer or a substation designer, yes, you need the EE credential and probably a PE path. That's engineering. **Project management of utility work is a different profession that works alongside those engineers.** Don't let a posting written for a hybrid unicorn talk you out of a PM job you are qualified to do.

> **Reality check exercise:** Take the last three utility PM postings you found. Highlight every requirement in two colors — one for "project delivery" and

> one for "electrical engineering knowledge." In most PM postings, the delivery column dwarfs the engineering column. That ratio is your permission slip.

Chapter 3: Translating Your Experience Into Utility Language

The single highest-leverage move in this book

Hiring managers and recruiters screen for their vocabulary. A construction PM who writes "managed phased build-outs with utility coordination" gets skimmed past. The same PM writing "managed capital projects with external dependency on utility service upgrades, outage windows, and inspection milestones" gets a call. Same experience. Different language.

Your experience is more transferable than you think:

- **Construction PMs** — you already live in the utility's world: permits, inspections, subcontractors, long-lead materials, safety culture, schedule float. Substations and feeder work are construction.
- **IT PMs** — interconnection is a workflow business: queues, stage gates, systems of record, SLAs, escalations. You also bring the discipline DER programs need as they digitize application intake and tracking.
- **Operations/manufacturing PMs** — outages, maintenance windows, reliability, and vendor management map directly onto grid operations projects.
- **Building systems / facilities PMs** — my own origin. Power distribution inside a facility is the grid in miniature; you've coordinated with utilities from the customer side, which is exactly the perspective interconnection teams need.

Worksheet 1: The Translation Table

Fill in the right column with your real experience. If a row is empty, that's a gap to close deliberately — or to leave out honestly.

Utility concept	What it means	Your equivalent experience
Capital project delivery		

Utility concept	What it means	Your equivalent experience
	Funded, multi-phase build with stage approvals	
Outage / planned downtime coordination	Work scheduled inside approved shutdown windows	
Long-lead materials	Transformers, switchgear ordered months ahead	
Stakeholder matrix	Engineering, field ops, legal, regulatory, customer	
Stage gates / milestones	Formal go/no-go checkpoints in a process	
Change control	Documented scope/schedule/cost changes	
Vendor & contractor management	EPCs, subs, consultants under contract	
Regulatory / compliance deadlines	Filings, standards, audit trail requirements	
Risk register	Logged risks with owners and mitigations	
Customer-facing delivery	A client waiting on your milestone to proceed	

Rewrite rules for your resume bullets

1. **Lead with scope and scale**, not tasks: "Ran a portfolio of 14 concurrent capital projects" beats "Responsible for project coordination."
2. **Name the dependency management.** Utility work is dependency work — studies waiting on data, construction waiting on outages, agreements waiting on legal. If you've managed external dependencies, that is interconnection experience in embryo.
3. **Quantify outcomes.** On-time percentage, budget variance, cycle-time reduction. Numbers travel across industries; adjectives don't.
4. **Borrow the nouns, keep the truth.** "Feeder," "substation," "interconnection queue" belong in your applications only where your experience genuinely touches

them (customer-side utility coordination counts — say "customer-side"). Never claim utility employment you don't have. Translation is framing, not fabrication — and utility hiring managers can smell fabrication in one question.

Chapter 4: The Interconnection Process, Explained Plainly

You do not need to be an engineer to talk about interconnection credibly. You need the process map and the vocabulary. Here it is, the way I'd explain it to a new PM on my team.

The five stages

1. Application. A developer (or a homeowner, or a business) applies to connect a generating or storage system to the grid. The application states the technology, the size (in kW or MW), and the location — the specific feeder and substation that would serve it. The utility screens it for completeness. Think of this as project intake with a technical data package.

2. Studies. Engineers determine what the connection does to the grid. Depending on project size, this can include a fast-track screen for small systems or a sequence of feasibility, system impact, and facilities studies for larger ones. The questions are practical: Will this overload a feeder? Does voltage stay in limits? What protection is required? What upgrades are needed — and who pays for them? Studies run in queues, roughly in order, and study results drive cost and timeline. This is where most of the waiting, and most of the PM coordination, lives.

3. Agreement. If the project proceeds, both sides sign an **interconnection agreement** — the contract that locks in the technical requirements, the upgrade scope, cost responsibility, and the milestones each side owes. Missed milestones have consequences, which is why PMs track them like court dates.

4. Construction. The customer builds their project; the utility builds any required upgrades on its side — new poles, reconductored lines, substation work, metering. Construction must be coordinated around **outage windows** (planned periods when equipment can be safely taken out of service) and long-lead equipment. This is classic capital-project delivery, with grid-safety rules on top.

5. Permission to Operate (PTO). After inspections, testing, and verification that everything was built as agreed, the utility grants permission to operate. The project is now part of the grid. For the PM, PTO is the milestone everything else serves.

Vocabulary that makes you sound like an insider (because now you are one)

- **DER** — distributed energy resources: generation or storage located near where power is used, rather than at a central plant.
- **Queue** — the ordered pipeline of interconnection applications awaiting study or construction.
- **Feeder** — the distribution circuit that carries power from a substation out to customers.
- **Hosting capacity** — how much DER a given part of the grid can accept before upgrades are needed.
- **Net metering / export** — how a customer's excess generation is credited or controlled.
- **Nameplate capacity** — a system's rated maximum output, in kW/MW.
- **Point of interconnection** — the physical location where the customer's system meets the utility grid.

How to use this in an interview

You are not pretending to have run this process (unless you have). You are demonstrating the two things hiring managers actually doubt about cross-industry candidates: that you understand what the work is, and that you've bothered to learn it before being paid to. Saying "As I understand it, the PM risk concentrates in the study phase and around outage windows — here's how I've handled analogous dependency risk" is a stronger answer than most insider candidates give.

> **Credibility drill:** Pick one stage above and write three sentences on where a PM adds value in it — dependencies tracked, stakeholders coordinated, milestones protected. Do this for all five and you can hold your own in any first-round conversation.

Chapter 5: The Application Play

Target the right doors, in the right order

Not all entry points are equal. Based on how this industry actually hires — and how my own path went — rank your targets like this:

Tier 1: Engineering services firms and utility contractors. This is where I built my utility credibility: a services-firm PM role, then a contract role managing substation upgrades at a major utility. These firms hire for delivery skill, train you on utility process, and put real utility projects on your resume fast. Contract roles at utilities themselves belong in this tier too — they are the standard entry door, including for senior-scope work.

Tier 2: Utility in-house PM roles. Harder to land cold from outside the industry, very reachable after a Tier 1 run. Interconnection teams, capital program offices, and DER program teams post these. Your Tier 1 experience, rewritten in utility language, is exactly the profile they describe.

Tier 3: Developers and EPCs. Solar/storage developers need PMs who understand the utility's queue from the inside. Best as a second move, or a first move if your background is already energy-adjacent.

Notice what this ordering does: it stops you from spending six months applying only to the hardest door while ignoring the two that are open.

The resume: position, don't just list

A utility hiring manager should be able to answer three questions from your resume in 30 seconds:

1. What size and type of projects has this person delivered? (portfolio, budgets, concurrency)
2. Have they managed external dependencies and regulated or safety-critical work? (the utility world's core anxieties)
3. Do they know what interconnection is? (one or two precise mentions — your cover summary and a skills line — not a fantasy employment history)

Lead the resume with a three-line positioning summary. Mine, in spirit, read: Project manager with a record of delivering multi-stakeholder capital projects; experienced

coordinating with utilities from the customer side; now focused on interconnection and grid projects. Yours will differ — but it must tell the reader which shelf to put you on.

Worksheet 2: Your Pitch Narrative

Every interview and networking conversation will ask some version of "So, why utilities?" Build your answer from these five beats, in your own words:

1. **The foundation:** "I've spent my career delivering _____ projects — [type, scale, one quantified result]."
2. **The bridge:** "A consistent thread was _____ [utility-adjacent thread: coordinating with utilities, managing regulated work, running queue-based workflows]."
3. **The move:** "I deliberately moved toward utility/DER work because _____ [the structural reasons from Chapter 1 — say them like an investor, not a fan]."
4. **The homework:** "To make the move real, I learned the interconnection process end to end — application, studies, agreement, construction, PTO — and [any concrete step: coursework, shadowing, studying a utility's published process]."
5. **The fit:** "What I bring on day one is delivery discipline and stakeholder range; what I'm building is grid depth. That's the trade your team gets."

Write it. Say it out loud until it sounds like a person, not a script.

A note on credentials

A **PMP** helps and is worth getting if you don't have it — utilities respect it, and some postings require it. It is not a substitute for the translation and process fluency in Chapters 3 and 4. Domain-specific training in interconnection and DER exists as well; Chapter 8 covers how to sequence it. Sequence matters: **position first, credential second** — the reverse order is how capable PMs spend a year studying and still get screened out by a resume written in the wrong language.

Chapter 6: Interview Prep — The Questions That Actually Come Up

These are the recurring questions in utility and DER PM interviews, with the frame a strong answer uses. No scripts to memorize — frames to think with.

"Tell me about a project that went sideways. What did you do?" Frame: Situation in two sentences → the specific risk you surfaced and when → the escalation or recovery you led → the outcome and the system you changed afterward. Utilities are risk cultures; they are listening for early escalation and documentation, not heroics.

"How do you manage stakeholders who don't report to you?" Frame: This is the utility PM's entire job. Name your method: stakeholder map, communication cadence, decision log, escalation path — with one real example spanning at least three groups (engineering, field, customer, legal…).

"What do you know about our interconnection process?" Frame: Walk the five stages from Chapter 4 in their order, note where PM risk concentrates (study queues, outage windows, long-lead equipment), then ask a question back: "Where does your team's bottleneck sit right now?" You have just separated yourself from 90% of external candidates.

"This role involves a lot of process and documentation. How do you feel about that?" Frame: Enthusiasm with evidence. Utilities run on audit trails and regulatory deadlines; show a change-control or compliance example from your past and say plainly that you like stage-gated work.

"Why are you moving industries?" Frame: Your Worksheet 2 narrative. Structural reasons (durable, funded work; a growing specialty), never "I'm bored" or "the money" — even though senior PM roles in this sector are well paid, leading with that reads as flight risk.

"How do you handle a developer/customer who is furious about their queue position or study cost?" Frame: Acknowledge the stakes for them, explain the process transparently, give the next milestone and date, escalate internally what you can't solve. Interconnection PMs are part diplomat; show it.

"What's your experience with outage coordination / capital budgets / [specific tool]?" Frame: Answer the analog honestly: "I haven't coordinated grid outages; I have run phased shutdown windows in live facilities with zero unplanned downtime — here's how." Then name your plan to close the specific gap. Honest analogs beat bluffing every time; these interviewers bluff-check for a living.

Worksheet 3: Answer-Frame Builder

For each question above, draft your answer in this grid before any real interview:

Question	My example (project + result)	The method I used	What I'd do in the utility version
Project went sideways			
Stakeholders not reporting to me			
Process/documentation			
Angry customer			
Domain gap question			

Questions you should ask them

- "How is the interconnection team structured, and where does the PM sit relative to engineering?"
- "What's the current queue volume and the team's biggest bottleneck?"
- "What does success look like at 90 days in this role?"
- "How much of the portfolio is distribution vs. transmission work?"

Asking about queue and bottlenecks signals that you understand the business you are joining, not just the job you want.

Chapter 7: The First 90 Days

Winning the role is the midpoint, not the finish. Cross-industry hires fail in utility roles for predictable reasons — almost never intelligence, usually rhythm. Here is the 90-day pattern that worked for me, level by level.

Days 1–30: Learn the system you're now inside

- **Map the process before touching it.** Get the team's actual workflow — intake to PTO — and compare it to the five-stage model in Chapter 4. Note where this utility's reality differs. Every utility's queue has local rules, legacy projects, and exceptions; your job is to learn them, not to redesign them in week two.
- **Learn the systems of record.** Interconnection tracking tools, project systems, document control. Fluency in the team's tools is fluency in the team's work.

- **Meet your stakeholder matrix in person (or on camera).** Engineering, field operations, legal/regulatory, customer programs. Introduce yourself as the new PM and ask each one: "What do you need from this role that you haven't been getting?" Write down the answers. They are your real job description.
- **Read closed projects.** Two or three completed interconnection files, end to end, teach you more than any training deck: where delays happened, what the correspondence looked like, what "good" documentation is here.

Days 31–60: Take ownership visibly

- **Own a portfolio slice end to end.** However small. Run the status cadence, chase the dependencies, publish the milestone view. Reliability in small things is how new PMs earn bigger queues.
- **Build your risk habit early.** Start your risk register for your projects in week five, not after the first surprise. Escalate one thing early and cleanly — it teaches the organization that your escalations are signal, not noise.
- **Learn the field reality.** If there's any chance to see a substation, a feeder ride-along, or a construction site, take it. PMs who have stood next to the equipment communicate differently with the people who build it.

Days 61–90: Become a reference point

- **Know your numbers cold.** Your projects' stages, milestone dates, blockers, and next actions — from memory, in any meeting. This is the visible marker that separates "the new PM" from "our PM."
- **Close one improvement.** A tracker cleaned up, a template fixed, a recurring status pain removed. Small, finished, and credited to the team.
- **Have the growth conversation.** With your manager: what's the path from here — larger projects, transmission vs. distribution depth, program work? You don't need promises; you need the map while you have momentum.

> **The 90-day trap to avoid:** importing your old industry's habits as criticism — "at my last company we did it faster." Utilities carry safety and regulatory obligations your old world didn't. Learn why a process exists before proposing to change it. The PMs who thrive are the ones the organization experiences as relief, not as commentary.

Worksheet 4: 90-Day Scorecard

Milestone	By day	Done?
Process map of my team's workflow, in my own words	21	
Stakeholder 1:1s complete, needs documented	30	
Systems of record: can pull any project's status unaided	30	
First portfolio slice owned, cadence running	45	
Risk register live for all my projects	40	
One field/site visit completed	60	
One small improvement shipped and credited to the team	75	
Growth conversation held with my manager	90	

Chapter 8: Where It Leads

The shape of the ladder

Interconnection and DER PM work is not a terminal specialty — it's a platform. From the PM seat, the paths that open up:

- **Senior and lead PM roles** — bigger projects, transmission-level work, portfolios instead of projects. (My own path ran exactly this way: distribution interconnections at senior level, then transmission interconnections — same discipline, higher stakes, wider scope.)
- **DER program management** — running the programs themselves: community solar, storage incentives, EV programs, virtual power plants. As DER shifts from "projects connecting" to "fleets being orchestrated," program roles multiply.
- **Interconnection management** — leading the queue function: policy, process redesign, regulatory interface. For PMs who discover they love the system more than any single project, this is the top of the craft.
- **The other side of the table** — developers, EPCs, and technology vendors pay a premium for PMs and leaders who have run the utility side of the queue. Experience inside a utility's interconnection process is portable in both directions.

- **Adjacent grid-modernization work** — substation programs, grid analytics rollouts, ADMS and DERMS implementations, where your interconnection fluency plus delivery record is a rare combination.

Keep building the moat

Your long-term advantage is the combination, not any single item: delivered projects + interconnection fluency + stakeholder range + a reputation for clean escalation and documentation. Keep feeding it:

- **Technical depth, in slices.** Feeder operations, protection basics, storage dispatch, rate and policy developments — one topic a quarter, learned properly, beats a frantic survey of everything.
- **Regulatory awareness.** State commission proceedings and federal queue-reform efforts shape this work years ahead. PMs who can read a docket summary and say what it means for their portfolio get invited into rooms others don't.
- **Structured prep when you want to go deeper.** If you decide to formalize the transition or accelerate it, structured programs exist for exactly this pivot — PowerPath PM is one, built around utility and DER project management careers. Whether you use a program or self-study this playbook's chapters, the principle is the same: learn the process deliberately, in order, instead of absorbing it by accident over three years.

The closing truth

I did not back into this career. I aimed at it — from building systems, to engineering services, to substation work, to distribution interconnections, to transmission — translating my experience at each step and learning the next process before I needed it. Every step of that path is repeatable, and none of it required the "right" degree.

The queues are long. The grid is being rebuilt. The teams doing it are hiring project managers who can deliver — and now you know how they screen, what they need, and how to talk to them.

Go take the seat.

Appendix: The Transition Checklist

Position - [ ] Resume rewritten in utility language (Chapter 3 translation table complete) - [ ] Three-line positioning summary drafted - [ ] Pitch narrative built and practiced aloud (Worksheet 2)

Knowledge - [ ] Five interconnection stages explainable without notes - [ ] Chapter 4 vocabulary fluent - [ ] Credibility drill done for all five stages

Applications - [ ] Tier 1 targets (services firms, utility contractors) identified and applied - [ ] Tier 2 utility in-house postings tracked - [ ] Application materials tailored per posting — no mass blast

Interviews - [ ] Worksheet 3 answer frames drafted with real examples - [ ] Questions for them prepared (queue, structure, 90-day success)

After the offer - [ ] 90-day scorecard (Worksheet 4) printed and started on day one - [ ] Growth map conversation scheduled inside 90 days

— End of playbook —