

CASE STUDY

Billing Audit Yields Millions in Revenue for DG Investor



Ampion migrated billing of Distributed Generation portfolio from client's in-house team to Ampion's platform



Saved millions of \$ over the lifetime of the portfolio by identifying and correcting hidden billing errors



Drastically improved response time to corporate customer inquiries



Client expects significant reduction in corporate customer churn going forward, reducing future acquisition costs





Challenge

- Fortune 500 owner and developer of a multistate Distributed Generation portfolio sought out Ampion to assume its Community Solar billing function.
- The objective was to take over billing and payment responsibility for their Distributed Generation sites across several states.
- Reason— our client wanted to focus more internal resources on growing the DG portfolio, instead of managing back office DG operations.
- The billing department was proficient at billing customers on static invoicing arrangements, but lacked expertise, processes, and software systems purpose-built for the nuances of dynamic Distributed Generation markets.
- Expectations— The client suspected there were some operational issues to be improved. But they had no idea of how extensive the problems were, or the magnitude of the financial impact.

Solution

1. Systematically understand the history

Each site management migration is different. This client acquired a portfolio of Community Solar sites spread across multiple utility service territories and managed billing in-house for two years.

Because of the unique nature of these DG programs, they decided to piece together their own custom billing process using basic off-the-shelf tools. The DG portfolio requirements didn't fit within the constraints of their existing enterprise billing software and processes, which were built to handle conventional Power Purchase Agreements for large enterprises.

Ampion's Site Migration team conducted a complete audit of each contract, and carefully analyzed all customer invoices to verify whether the amounts billed complied with the terms of each contract.

The goal was to understand existing contracts at a detailed level, such as price escalator changes by year, discounts off the utility's standard rate by year, and more.

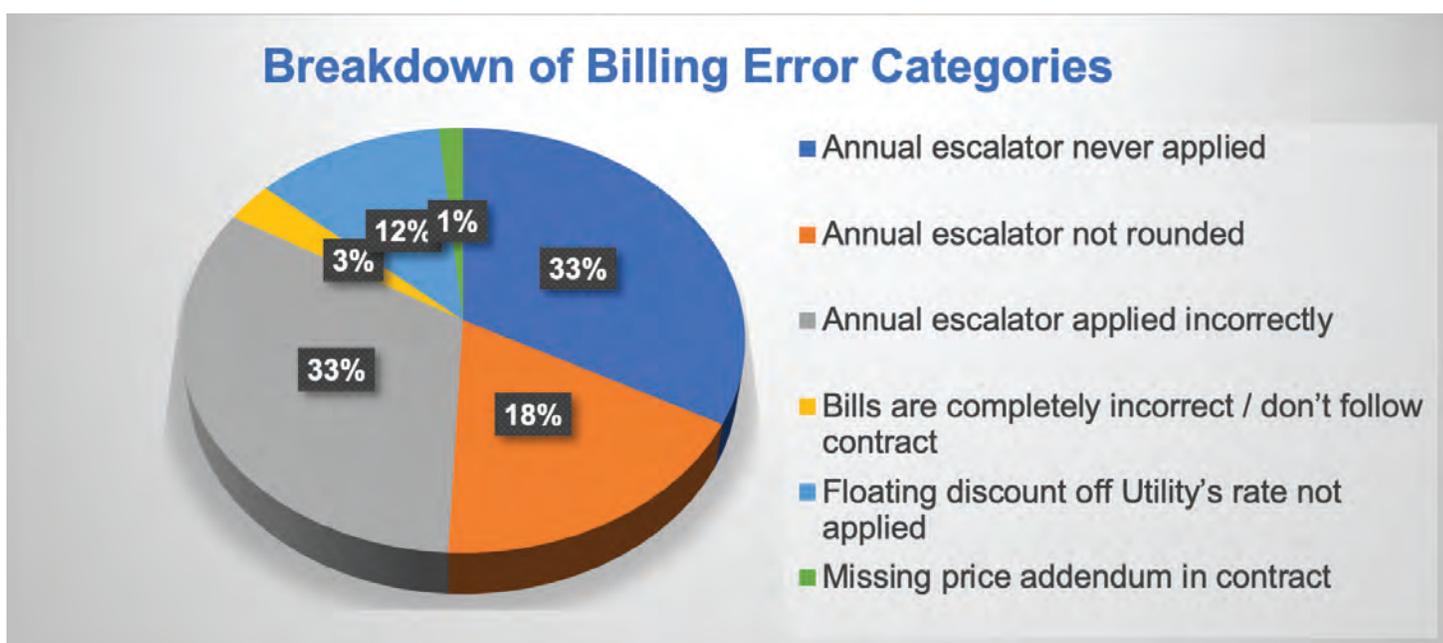
The team then audited the billing history of all corporate customers to find each case where the contract was not followed precisely. These are the standard first steps in Ampion's billing and payments migration process.

2. Quantify the Benefit

In this case, our audit team reviewed hundreds of legal contracts and mapped the details of the associated utility accounts over years of monthly bills, tying the amounts on the bill back to the contract terms.

What the team found was a huge benefit for our client: **30% of invoices were billed incorrectly**. Some undercharged the customer, and others overcharged.

Of these incorrect invoices, Ampion sorted the different error reasons into 6 main categories, each with its own proposed remedy.



Examples of Billing Errors

- » Annual escalators not applied— The Community Solar contracts called for commercial subscribers to pay a higher kWh rate each year. Our client often didn't apply these escalators, leaving money on the table.
- » Annual escalators applied incorrectly— The fee schedule is in the contract, with kWh rates listed down to one hundredth of a cent. When escalators were applied, they were often applied incorrectly, with inaccurate rounding, overcharging some subscribers and undercharging others. The net result cost the client significant revenue.
- » Check processing fees not assessed
- » Late fees not assessed

The result was millions of dollars of lost revenue.

Risks and Churn

The Ampion team identified some legal risks, such as state auditors or commercial customers filing lawsuits alleging unfair trade practices.

But the more likely and impactful outcome is the commercial customers' distrust in the billing process. Billing errors or lack of response to a few subscriber emails are almost always followed by an increase in churn. And churn has a direct negative impact on project ROI, requiring expensive re-acquisition, undersubscribed sites, and a meaningful drag on project returns.

This costs clients real money – not only because replacing churned subscribers is expensive, but also because their reputation takes a hit, making it harder to acquire more subscribers.

Other Findings:

Reporting and cost accounting— in many cases, the client struggled to provide accurate bills that subscribers could reconcile with their utility invoices, especially with non-standard use cases.

Allocations— our client lacked the people, processes, and systems to update subscriber kWh allocations as the load changed. This meant they were leaving money on the table, by not signing up more load or reallocating when warranted. It also caused them to increase costs by acquiring more subscribers when they could have simply reallocated load based on usage.

Customer support— Many subscribers knew their billing was incorrect. Some reached out to our client about overcharges, and the customer support response was slow or nonexistent.

Of course our client did not make a conscious decision to provide subpar support. But that's where they found themselves two years in. Because their customer service processes were optimized for a different kind of customer and a different billing paradigm, they weren't prepared for the volume or complexity of inquiries in the DG space. The result? Lots of frustrated subscribers and higher than necessary churn rate.

They also experienced staffing and operational hurdles. Systems didn't exchange data properly. Staff were overburdened with this new type of customer in addition to their other duties with their standard clients. And the DG learning curve was simply much steeper than they expected.

Soft Costs

- ☀ Suboptimal use of resources— The client's team was spending a lot of time on billing, inefficiently. Each DG anomaly that came up required significant effort to understand and resolve
- ☀ Customer support— Slow responses and lack of response to customer questions led to incredibly frustrated subscribers
- ☀ Churn risk was high
- ☀ Limited redundancy— lean team with no backups, no institutional knowledge

These soft costs of their in-house efforts were significant. They took up more resources than expected. Examples of operational tasks unique to DG that took time:

- Researching answers to questions about late utility bills
- Trying to get a response from the utility to coordinate a solution to billing issues
- Building new email templates to respond to the most common customer requests

As a result, emails went unanswered, customers got upset and churned, and revenue was lost.

In distributed generation billing, exceptions are the norm.

3. Fix and Continue to Evolve

Communication is Key

Ampion communicated discrepancies in PPA rates to customers after agreeing with the client on a communication strategy.

Invoice Adjustments

The first customer invoice from Ampion adjusted the billing amounts to the appropriate PPA rate based on contract year.

According to Our Calculations...

Ampion calculated true-ups/reconciliation credits to be provided to customers who were affected by the billing discrepancies.

Migration

Migrated billing to Ampion's software platform, moving off the paper billing process previously used by the client.

Moving to ACH

Ampion is now in the process of moving customers to ACH autopay to reduce late payments and streamline billing.

Rebalanced Subscriber Allocations

One important component of successful DG management is aligning the allocation of kWh to subscribers based on their usage and the available load for each DG project. Ampion's team was able to identify immediate opportunities to add new subscriber meters the client wasn't aware of, remove meters that were no longer active, and reallocate without needing to incur time and expense to acquire new subscribers.

Example:

One subscriber had been emailing the client for months with no response. The billing contact resigned from the client, and there was no replacement to take over.

This subscriber closed a meter but was still getting charged for credits they weren't receiving. They were frustrated and about to cancel. Ampion's customer care team quickly got up to speed, resolved the situation through the allocation process, and refunded overcharges as part of the true-up, alleviating frustration and removing churn risk.

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Kelleigh Wilmot
Manager, Revenue Management

Mike Hendershott
Sr. Director, Business Operations



Results

The story ends in a happy way. Ampion's experienced, detail-oriented billing team was able to identify mistakes and make the necessary adjustments to save our client money and increase revenue by millions of dollars.

Our client has renewed appreciation for the complexity of this back-office work, as well as for the systems required to accurately bill Distributed Generation projects.

And they are confident that other issues will be caught and resolved in realtime before becoming a problem over the next 20+ years of the project.

**"We have an army of
Community Solar
ninjas working for us!"**

—Commercial Operations Director

Conclusions

These operational challenges are all too common. The in-house impediments to accurate distributed generation billing drive down project IRR, and have a real negative impact on subscriber satisfaction, client reputation, and revenue.

DG billing inefficiencies and inaccuracies lurk beneath the surface and are hard to identify for those who lack expertise in this exact type of work. But they are challenges that Ampion addresses and improves upon each and every day.

The millions of dollars of savings we uncovered for this client are not surprising. We see this situation all the time. If you've ever watched the movie "Office Space," you know how fractions of a penny can add up!

This problem is representative of common practices in the industry. Small errors compounded over a large number of clients and 20+ years can have an enormous impact.

Ampion's experienced team, proven platform, and DG-specific processes helped this client uncover millions of dollars of lost revenue, and has set them up to maximize the return on their portfolio.

Commentary:

Holistic solution, fit-for-purpose for the DG industry



The cost of going it alone for this client was orders of magnitude higher than the cost of a DG-specific solution like Ampion. The multimillion dollar revenue hit, soft costs of human resources deployed in back office work, and opportunity costs far outweighed any short term P&L gains the development team initially modeled.

Distributed Generation assets are **dynamic**. They are far more complicated than other billing paradigms that only rely on price times quantity calculations to generate invoices. Some DG differences requiring ongoing attention:

- ☀ There is always some level of subscriber churn.
- ☀ Subscriber usage changes month to month— meters come and go based on business needs.
- ☀ These monthly changes require new subscriber acquisition to keep sites full, along with ongoing monitoring, forecasting of future usage needs, and allocation adjustments.
- ☀ Someone has to analyze and adjust on a consistent basis to maximize revenue.

The basics of billing are not so basic...

When you're using spreadsheets. Applying line item changes and late fees across a large number of subscribers, solar farms, and service territories requires software that's tailor made for the DG industry.

Utilities can be challenging

In addition to these subscriber changes, the utility companies frequently introduce billing complications. It's no secret that in general, utilities still do most of their DG billing work manually, without fully-vetted, integrated systems, and often in spreadsheets. As with any manual process, errors occur.

These errors require fast identification of the problem, experience to come up with a solution, a customer care team accustomed to communicating these types of issues to subscribers, and access to the right people at the utility to work through the resolution.



Nick Urban
Senior Revenue Specialist

DG billing requires a strong combination of process, human resources, and technical resources. Having just one or two of these is not enough.

If not managed right, these complexities increase churn, driving up reacquisition costs and reducing revenue. Ampion was able to help this client right the ship and maximize its revenue potential. We can do the same for you.



Considering outsourcing your DG billing and subscriber management?

Contact our team today to hear more about how we save clients money and headaches with our industry-leading billing capabilities.