

# **General Energy Analysis**

## **Field Data Collection Form**

*Version 3.8 - January 2026*

This form is designed for field workers to collect facility-specific data on-site. Complete all relevant sections and use this form as reference when entering data into the SYNEREX UI.

## 1. PROJECT INFORMATION

<b>Client/Company Name</b>	
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<b>Project Name/ID</b>	
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*Project identifier or name*

<b>Project Description</b>	
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*Brief description of the project*

### Facility Location

<b>Facility Address (Street)</b>	
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<b>City</b>	
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<b>State/Province</b>	
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<b>ZIP/Postal Code</b>	
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<b>Country</b>	
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*Country where facility is located*

### Project Location

<b>Project Address (Street)</b>	
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*Physical location where project work is performed (if different from facility)*

<b>Project City</b>	
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*City where project work is performed*

<b>Project State/Province</b>	
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*State/Province where project work is performed*

<b>Project ZIP/Postal Code</b>	
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*ZIP/Postal code for project location*

<b>Project Country</b>	
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*Country where project work is performed*

### Primary Contact Information

<b>Point of Contact Name</b>	
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*Primary contact person name*

<b>Contact Title/Role</b>	
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*Job title or role of contact person*

<b>Contact Phone</b>	
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<b>Contact Email</b>	
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**Contact Mobile/Cell**

*Mobile phone number (optional)*

**Contact Location****Contact Address (Street)**

*Contact person's business address (if different from facility)*

**Contact City**

*City where contact person is located*

**Contact State/Province**

*State/Province where contact person is located*

**Contact ZIP/Postal Code**

*ZIP/Postal code for contact location*

**Contact Country**

*Country where contact person is located*

**Additional Project Information****Project Manager Name**

*Name of project manager*

**Project Manager Email**

*Email of project manager*

**Project Manager Phone**

*Phone of project manager*

**Project Start Date**

*Date when project work began*

**Project End Date**

*Expected or actual project completion date*

**Project Date (Form Completion Date)**

*Date this form is being completed*

**Secondary Contact (Optional)****Secondary Contact Name**

*Alternative contact person*

**Secondary Contact Title/Role**

*Job title or role*

**Secondary Contact Phone**

*Phone number*

**Secondary Contact Email**

*Email address*

## 2. TEST PARAMETERS

**Test Type**

☐ Power Quality
 ☐ Energy Savings
 ☐ Harmonic Analysis

**Circuit Name**

**Test Period**

Before:

After:

*Start and end dates*

**Test Duration**

*Auto-calculated from CSV data*

**Meter Name**

**Meter Specification**

☐ Class 0.2
 ☐ Class 0.5
 ☐ Class 1.0
 ☐ Class 2.0

**Interval Data**

☐ 1-minute
 ☐ 15-minute
 ☐ Hourly

## 3. WEATHER DATA

**Temperature**

Before: deg F

After: deg F

*Average temperature during test period*

**Humidity**

Before: %

After: %

*Average relative humidity*

**Weather Data Source**

☐ Automatic API
 ☐ Manual Entry

## 4. BILLING INFORMATION

**Utility Company**

**Account Number**

**Energy Rate**

\$/kWh

*Cost per kilowatt-hour*

**Demand Rate**

\$/kW-month

*Cost per kilowatt per month*

## 5. ELECTRICAL CONFIGURATION

<b>Number of Phases</b>	<input type="checkbox"/> 1 (Single Phase) <input type="checkbox"/> 3 (Three Phase)
<b>Nominal Voltage</b>	_____ V
<i>System nominal voltage (e.g., 480V, 240V)</i>	
<b>Voltage Type</b>	<input type="checkbox"/> Line-to-Line (LL) <input type="checkbox"/> Line-to-Neutral (LN)
<b>Transformer kVA Rating</b>	_____ kVA
<i>Rated kVA for loss scaling calculations</i>	
<b>Load Loss at Rated Load</b>	_____ W
<i>Total load loss at rated kVA (copper + stray)</i>	
<b>Core Loss</b>	_____ W
<i>No-load core loss (constant)</i>	
<b>Stray Loss Fraction</b>	_____ %
<i>Percentage of load loss that is stray loss</i>	

## 6. ADDITIONAL BILLING & FINANCIAL INFORMATION

<b>Project Cost</b>	_____ \$
<i>Total project installation cost</i>	
<b>Last Monthly Bill (Total Cost)</b>	_____ \$
<i>Client's last monthly utility bill total</i>	
<b>Target Power Factor</b>	_____ (0-1)
<i>Target power factor for normalization (e.g., 0.95)</i>	
<b>Power Factor in Billing</b>	<input type="checkbox"/> Included <input type="checkbox"/> NOT Included
<i>Check if PF penalties are in billing</i>	
<b>Discount Rate</b>	_____ %
<i>Discount rate for present value calculations (e.g., 3%)</i>	
<b>Escalation Rate</b>	_____ %
<i>Annual escalation rate for savings (e.g., 2%)</i>	
<b>Analysis Period</b>	_____ years
<i>Project analysis period in years (e.g., 15)</i>	

<b>Non-Coincident Peak Demand Rate</b>	_____ \$/kW-month
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*Non-coincident peak demand rate*

<b>CP Demand Rate</b>	_____ \$/kW-month
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*Coincident peak demand rate*

## 7. EQUIPMENT DESCRIPTION

<b>Equipment Description</b>	_____
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*Description of equipment being analyzed*

<b>Circuit Name/ID</b>	_____
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*Circuit identifier or name*

## 8. NOTES

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