

DATA LOGGER SOFTWARE
Version 2.0

QUICK START GUIDE



An **Acuity** Brands Company

Data Logger Version 2.0

Quick Start Guide

SYSTEM REQUIREMENTS:

PC Operating Windows: 2000, XP or 7

Hard-Drive Requirements: 10MB

Data Logger to PC Interface: USB

SOFTWARE INSTALLATION

1. Open Flash Drive that came with your Data Logger Case.
2. Double click DLInstall.exe.
- 3 Click YES if you wish to continue the install of the Data Logger Software.
(Note: the installation is very fast - less than 30 seconds)
4. Click OK.

You have successfully installed the Sensor Switch Data Logger Software.

Proceed to the Data Logger QUICK START GUIDE on the following pages.

FOR PROXY SERVER USERS ONLY:

You will need to change the configuration file. This will allow you to communicate with the data logger software suite server.

1. After installation of the data logger software, go to C:/Program Files/Sensor Switch Data Logger/ to find your DL config file.
2. Open the SSIUniv1.CFG file with the Notepad.
3. Replace the last two lines of code with your proxy server settings:
 - a) Type over "ProxyUser" with your User Name
 - b) Type over "ProxyPwd" with your password (If you don't need a password, do not change "ProxyPwd")

Proceed to the Data Logger QUICK START GUIDE on the following pages.

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CHAPTER 1: GETTING STARTED

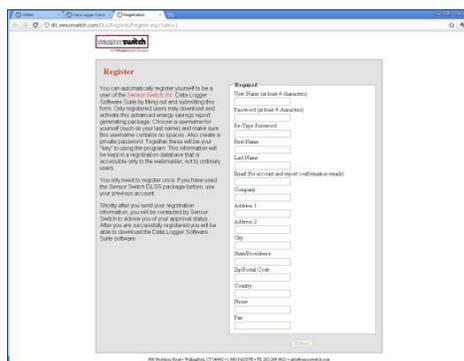
1. Double-click the DL.exe icon on your desktop (or go to the Start menu/All Programs/Sensor Switch Data Logger/).



2. Click **START**.



3. Click **REGISTER**. Fill in your registration information.
(If you have used our software in the past, please use your previous username/password.
You need to register only once to use this software suite.)



(IMPORTANT NOTE: After you register, there will be a 24 to 48 hour period before you can use the software. You will receive an email confirming your registration.)

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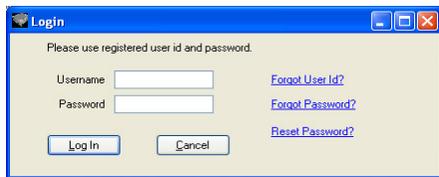
CHAPTER 2: IMPORTING A DATABASE

The Data Logger Software Suite can import a database that was created using the previous version of Data Logger software. Follow the steps below to import your database to the Data Logger Software Suite.

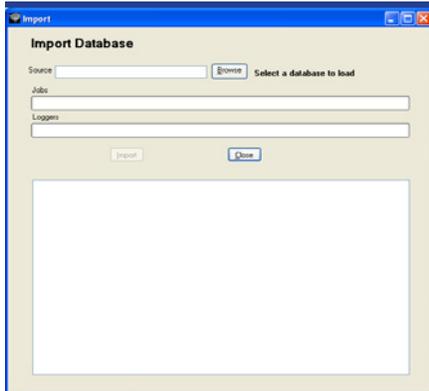
1. Select **IMPORT OLD DATABASE PROJECT**.



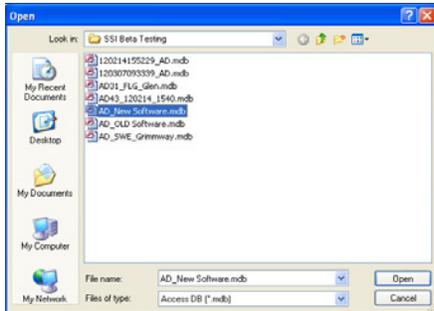
2. Use your Username and Password to log on to the software.



3. Select **BROWSE**.

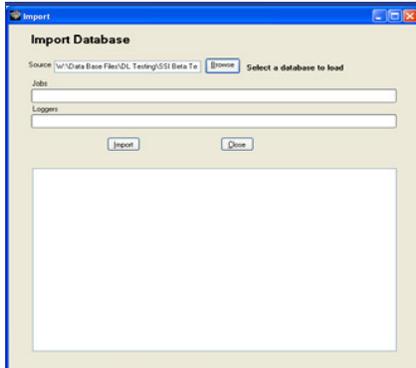


4. Locate the database in your files.

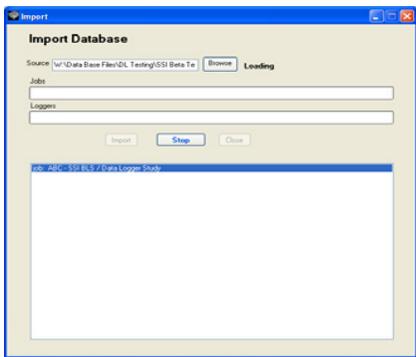


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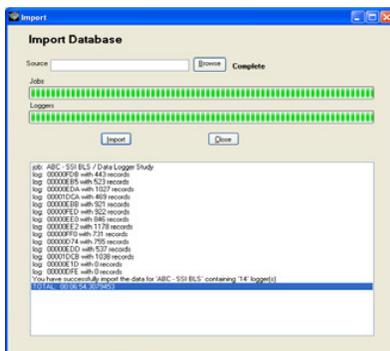
5. Once you have selected your database, click **IMPORT**.



6. In the lower portion of the screen, the database name will appear as pictured in the screen shot.



7. Once the database has been imported, the screen will look similar to the screen shot.
If you wish to enter another database, repeat the process. If you are finished, select **CLOSE** to return to the Main Menu.



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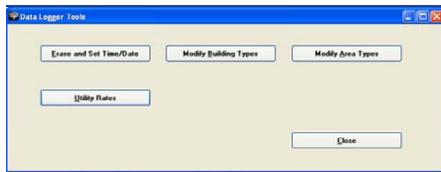
CHAPTER 3: DATA LOGGER TOOLS

Data Logger Tools is a utility that allows you to customize your Data Logger report. The Building Types, Area Types and Custom Electrical Utility Rate Data can be customized. Additionally, this module can be used to erase data and to set the date and time on the dataloggers.

1. To begin, select **LOGGER TOOLS**.



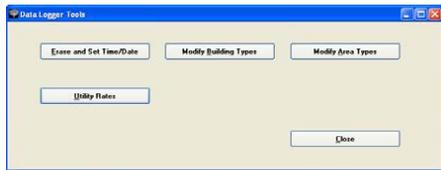
2. Five menu options will display on the screen. Follow the directions below for each menu option.



ERASE LOGGER MEMORY and SET THE TIME & DATE of the Logger Processor

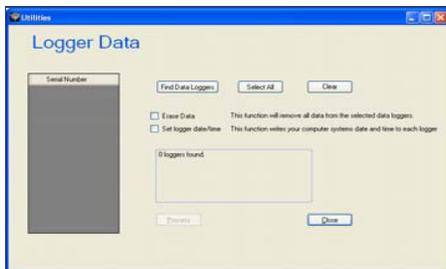
The Data Logger memory is fixed to 8,000 records. Each analysis project generates many records. It is our recommendation to erase the Data Logger memory after each successful Data Logger report has been generated to avoid running out of memory during the next analysis project.

1. Select **ERASE AND SET TIME/DATE**.



2. Connect your logger devices to the computer using a commercial grade USB hub.

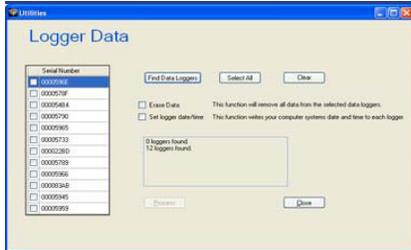
Note: maximum number of loggers that can be connected to a PC is 18.



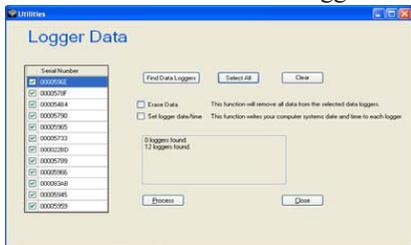
When they have finished, click **FIND DATA LOGGER**.

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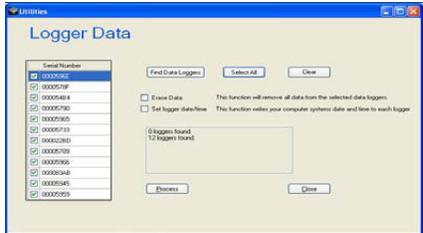
3. A list of all the data loggers connected to the computer will appear in the serial number field.



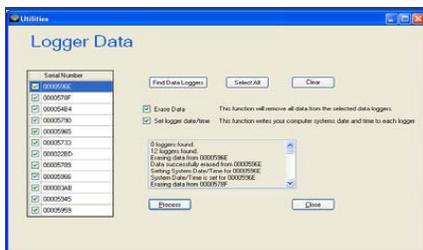
4. Select an individual data logger or select all data loggers by using the **SELECT ALL** button.



5. Select the task(s) to perform by selecting the check box next to **ERASE DATA** and/or **SET DATE/TIME**. After the selection is made, select **PROCESS**.



6. If any errors occurred when setting the logger, the screen will display: “Logger Could Not Be Erased or Date/Time Could Not Be Set.” To correct the error, select the logger on the screen. After correcting the error, select **CLOSE**.



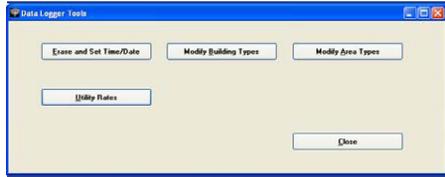
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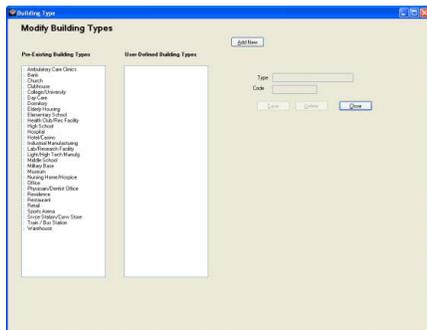
MODIFY BUILDING TYPES

Data Logger Software Suite comes with pre-set building types built into the program (eg. high school, office, warehouse, etc.). If you would like to add more building types, follow the steps in this MODIFY BUILDING TYPES section.

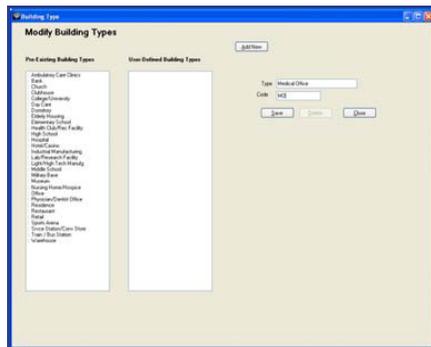
1. Select **MODIFY BUILDING TYPES**



2. This window will appear.

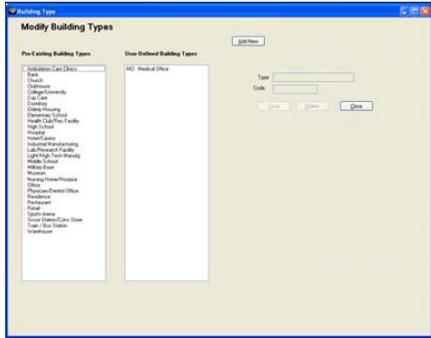


3. To enter a new building type, select **NEW** and type in the building types in the **TYPE** field. Assign the new building type with a code. Be sure the code is unique to avoid duplications. The screen display should look similar to the screen image below. Repeat as needed. When finished, select **SAVE**.



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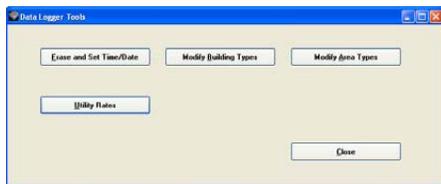
- The new building type will appear in the **USER DEFINED BUILDING TYPE** list.
For additional new building types, repeat the process in step #3. When complete, select **CLOSE**



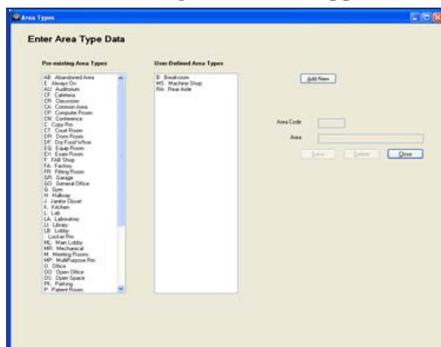
MODIFY AREA TYPES

Data Logger Software Suite comes with pre-set area types built into the program (eg. restroom, office, classroom, etc.). If you would like to add more building types, follow the steps in this MODIFY AREA TYPES section.

- Click on **MODIFY AREA TYPES**.



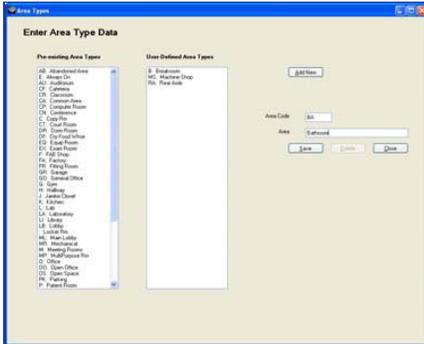
- This following screen will appear.



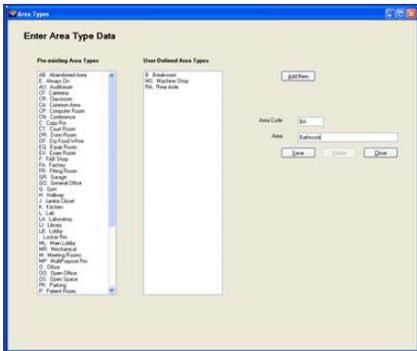
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3. To enter a new Area Type, select **NEW**. Type in the new area type and assign it a unique code. Repeat as needed. When finished, select **SAVE**.



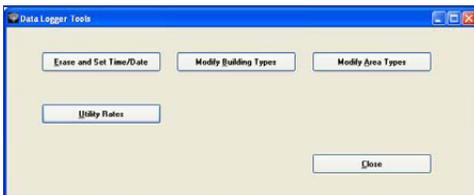
4. The new area type will appear in the **USER DEFINED AREA TYPE** list. For additional new user defined area types, repeat the process in step #3. When complete, select **CLOSE**.



CHANGING/ENTERING ELECTRIC UTILITY RATE DATA

Data Logger Software Suite comes with one pre-set utility rate built into the program. If you would like to see the savings based on a specific time of day, follow the steps in this **UTILITY RATE** section.

1. Click on **UTILITY RATES**.

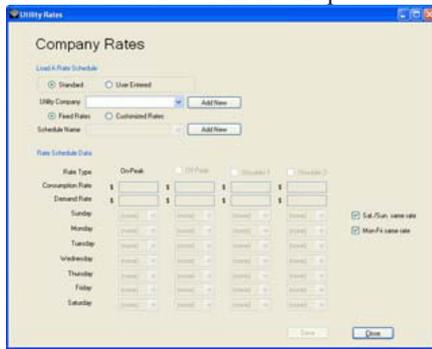


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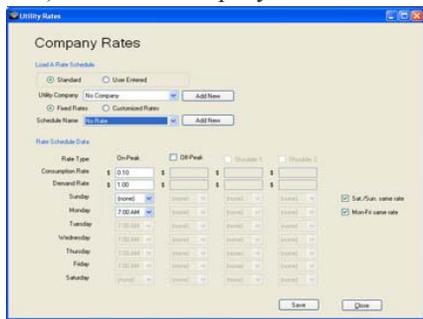
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2. To use a built-in utility company and rate:

- a) Be sure the **STANDARD** box is checked. A list of utility companies, as well as their rates, can be viewed in the drop down list.

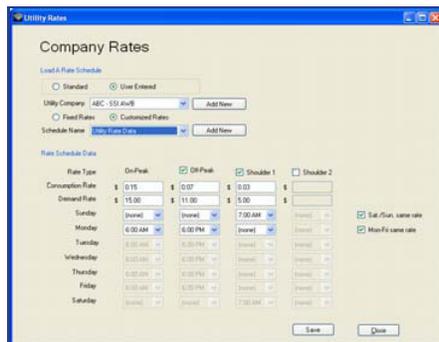


- b) Select the company/rate and click **SAVE**. That utility rate will be saved for your project.



4. To create a custom utility rate:

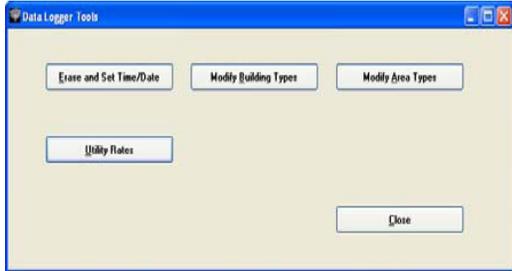
- a) Select **USER ENTERED**
- b) Select **ADD NEW**
- c) Type in a Company Name in **UTILITY COMPANY** field
- d) Enter a new rate name in **SCHEDULE NAME** field
- e) Enter in **CONSUMPTION RATE** and **DEMAND RATE** information with the associated time of date that the rate occurs
- f) Be sure to enter **PEAK** or **OFF PEAK**
- g) After all information has been entered, select **SAVE**.



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5. Select **CLOSE** to exit.



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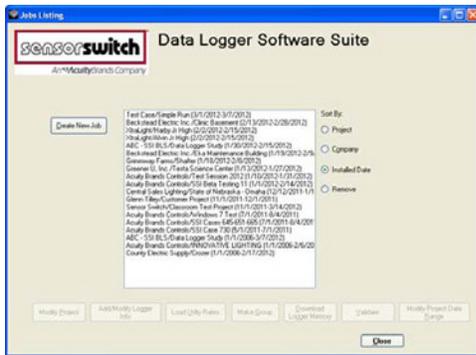
CHAPTER 4: WORKING WITH A DATABASE

This section is used to start a new project, or modify an existing project.

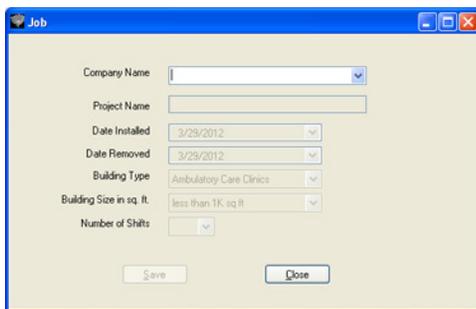
1. Click on **USER JOB/PROJECT/DATABASES**.



2. For a new project, click **CREATE NEW JOB**.



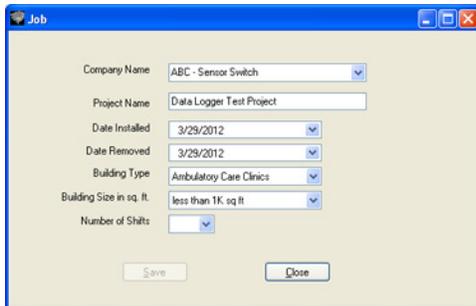
3. Type in new **COMPANY NAME** or use the pull down menu to find an existing company.



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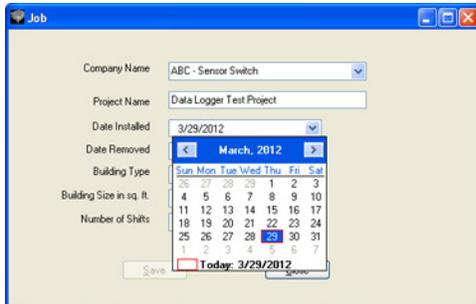
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4. Type in **PROJECT NAME**.



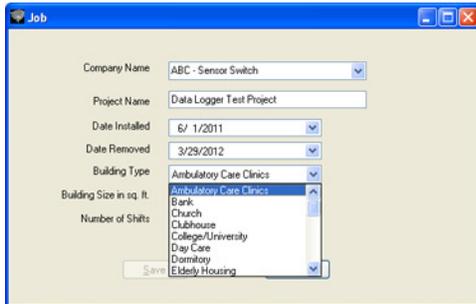
The screenshot shows the 'Job' window with the following fields filled: Company Name: ABC - Sensor Switch; Project Name: Data Logger Test Project; Date Installed: 3/29/2012; Date Removed: 3/29/2012; Building Type: Ambulatory Care Clinics; Building Size in sq. ft.: less than 1K sq ft.; Number of Shifts: 1. The 'Save' and 'Close' buttons are visible at the bottom.

5. Select the **INSTALL DATE** and **REMOVAL DATE**.



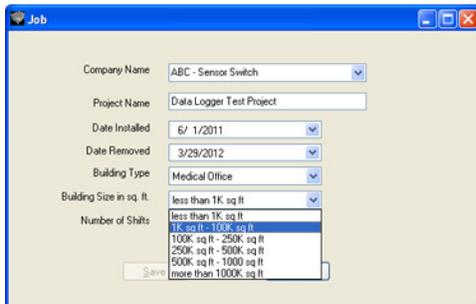
The screenshot shows the 'Job' window with a calendar pop-up for March 2012. The date 3/29/2012 is selected. The calendar shows the following dates: Sun 26, Mon 27, Tue 28, Wed 29, Thu 1, Fri 2, Sat 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31. The 'Today: 3/29/2012' is indicated at the bottom of the calendar.

6. Select **BUILDING TYPE**. (If you don't find the building type you want, click on **CLOSE** and follow the steps in Chapter 3: MODIFY BUILDING TYPE.)



The screenshot shows the 'Job' window with the 'Building Type' dropdown menu open. The selected option is 'Ambulatory Care Clinics'. Other options visible in the list include Bank, Church, Clubhouse, College/University, Day Care, Dormitory, and Elderly Housing.

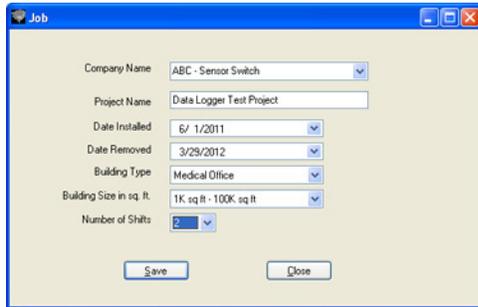
7. Select **BUILDING SIZE**.



The screenshot shows the 'Job' window with the 'Building Size in sq. ft.' dropdown menu open. The selected option is 'less than 1K sq ft.'. Other options visible in the list include 1K sq ft - 100K sq ft, 100K sq ft - 250K sq ft, 250K sq ft - 500K sq ft, 500K sq ft - 1000 sq ft, and more than 1000K sq ft.

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8. Select the number of **SHIFTS** that occur in this building.

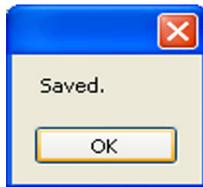


The 'Job' dialog box contains the following fields:

- Company Name: ABC - Sensor Switch
- Project Name: Data Logger Test Project
- Date Installed: 6/ 1/2011
- Date Removed: 3/29/2012
- Building Type: Medical Office
- Building Size in sq. ft.: 1K sq ft - 100K sq ft
- Number of Shifts: 2

Buttons: Save, Close

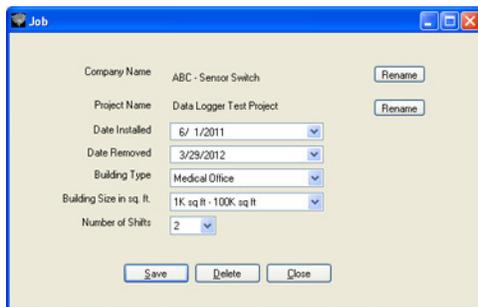
9. When you are done, click **SAVE** and then click **OK**. When you have finished with this task, click **CLOSE**.



10. If needed, click on **MODIFY PROJECT** to change any basic information pertaining to the job.



11. You can modify the dates of removal and install if needed. When you have finished with this task, click **CLOSE**.



The 'Job' dialog box now includes 'Rename' buttons next to the Company Name and Project Name fields.

- Company Name: ABC - Sensor Switch (Rename)
- Project Name: Data Logger Test Project (Rename)
- Date Installed: 6/ 1/2011
- Date Removed: 3/29/2012
- Building Type: Medical Office
- Building Size in sq. ft.: 1K sq ft - 100K sq ft
- Number of Shifts: 2

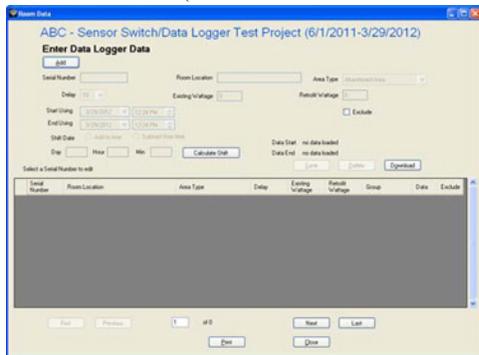
Buttons: Save, Delete, Close

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12. If this is your first project, then only one project will be listed. If you have more than one project, **select/highlight** the project you want to work with by clicking on it. Then click **ADD/MODIFY LOGGER INFO**.

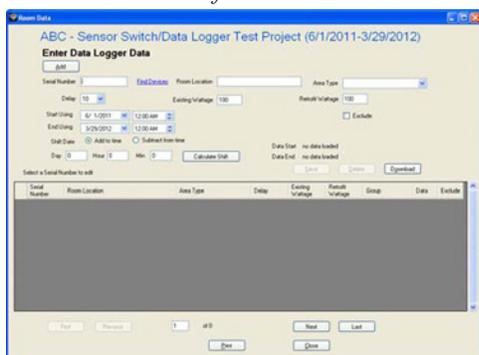


13. Click **ADD**. (This will allow the user to add a logger to the project.)



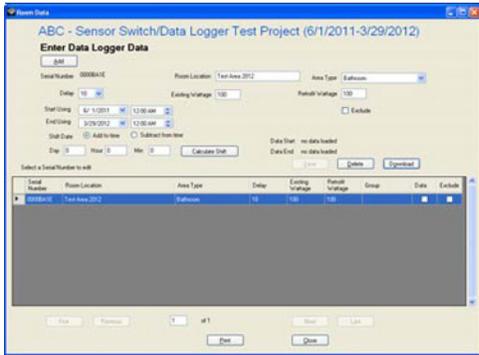
14. a) In **SERIAL NUMBER** type in the 8 digit numerical code found on the data logger unit.
- b) Fill in **ROOM LOCATION** and then select **AREA TYPE** from the pull down menu.
(If the area type you want is not present, follow the steps in Chapter 3 - MODIFY AREA TYPES.)
- c) Fill in **EXISTING WATTAGE** and **RETROFIT WATTAGE**. (Must be a number greater than 0.)
- d) Click **SAVE**.

*Note: An alternative way to make sure the logger's serial number is correct is to click on **FIND DEVICES**. The program will find all loggers attached to the computer via the USB interface. Highlight the logger you want and click **READ-ADD**. Then fill in **ROOM LOCATOR**, **AREA TYPE**, etc. Then click **SAVE**.*

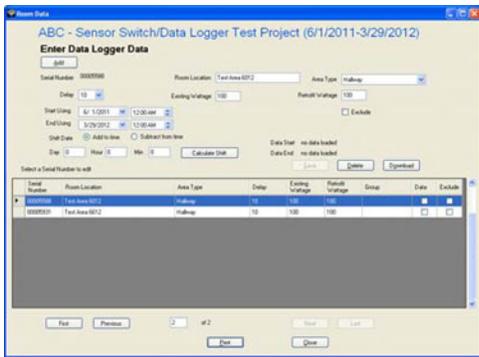


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15. Logger information should show in viewing window. Repeat steps 12 - 14 for every logger in the project.



16. Click CLOSE when you have finished adding all loggers for your project.



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LOAD UTILITY RATE DATA

1. a) Select **UTILITY COMPANY** and **RATE** for this project.
- b) Click **SAVE RATE**.
- c) Click **OK**.
- d) When you have finished with this task, click **CLOSE**.

Rate Type	OnPeak	OffPeak	Shoulder 1	Shoulder 2
Consumption Rate	\$ 0.15	\$ 0.07	\$ 0.03	\$
Demand Rate	\$ 15.00	\$ 11.00	\$ 5.00	\$
Sunday	(Inval)	(Inval)	7:00 AM	(Inval)
Monday	6:00 AM	6:00 PM	(Inval)	(Inval)
Tuesday	6:00 AM	6:00 PM	(Inval)	(Inval)
Wednesday	6:00 AM	6:00 PM	(Inval)	(Inval)
Thursday	6:00 AM	6:00 PM	(Inval)	(Inval)
Friday	6:00 AM	6:00 PM	(Inval)	(Inval)
Saturday	(Inval)	(Inval)	7:00 AM	(Inval)

Note: To create a custom utility rate:

- a) Select **USER ENTERED**
- b) Select **ADD NEW**
- c) Type in a Company Name in **UTILITY COMPANY** field
- d) Enter a new rate name in **SCHEDULE NAME** field
- e) Enter in **CONSUMPTION RATE** and **DEMAND RATE** information with the associated time of date that the rate occurs
- f) Be sure to enter **PEAK** or **OFF PEAK**
- g) After all information has been entered, select **SAVE**.

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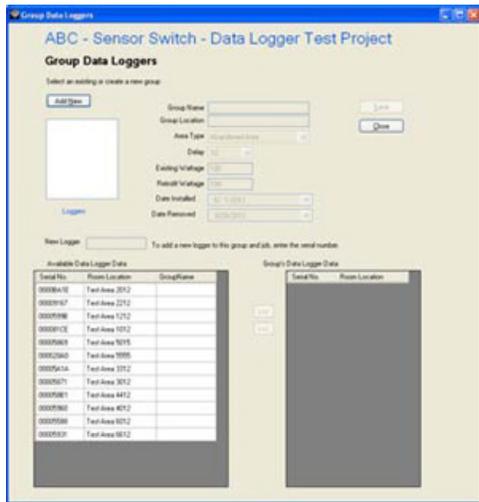
MAKING GROUPS

At times analyzing the energy usage in a space requires multiple data loggers. These data loggers can be merged together to provide data for an entire room not just a specific area in a room. Select MAKING FROUPS in the menu and follow the instructions below for merging the data loggers.

1. Click on **MAKE GROUPS**.



2. Click **ADD/NEW**.



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- Fill in **GROUP NAME** (eg. Group A), then fill in all fields on the page (eg. **GROUP LOCATION**, **SELECT AREA TYPE**, **EXISTING WATTAGE**, **RETROFIT WATTAGE**, etc.)

Serial No.	Room Location	Group Name
0000814E	Test Area 2012	
00009147	Test Area 2212	
00009098	Test Area 1212	
000081CE	Test Area 1012	
00007600	Test Area 5015	
00003940	Test Area 9995	
00005A1A	Test Area 3012	
00005071	Test Area 3012	
00005081	Test Area 4412	
00005060	Test Area 4012	

Serial No.	Room Location
00005060	Test Area 4012
00005038	Test Area 6012

- Select the logger from the **AVAILABLE** list and click right arrows to move the logger to **GROUP'S DATA LOGGERS**. Continue selecting loggers for this group. When all information is entered, click **SAVE**.

Serial No.	Room Location	Group Name
0000814E	Test Area 2012	
00009147	Test Area 2212	
00009098	Test Area 1212	
000081CE	Test Area 1012	
00007600	Test Area 5015	
00003940	Test Area 9995	
00005A1A	Test Area 3012	
00005071	Test Area 3012	
00005081	Test Area 4412	
00005060	Test Area 4012	

Serial No.	Room Location
00005060	Test Area 4012
00005098	Test Area 6012

- When finished making groups, click **CLOSE**.

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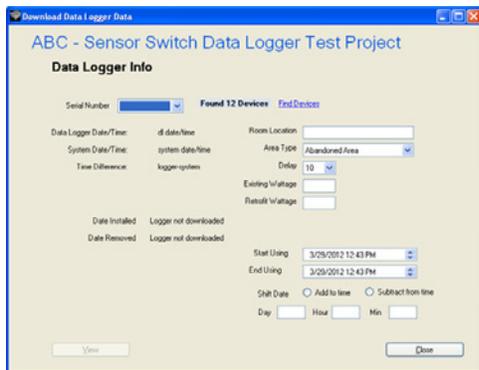
DOWNLOAD LOGGER MEMORY

Once the energy analysis has been completed the data from the data logger has to be transferred to the software program for analysis and report generation.

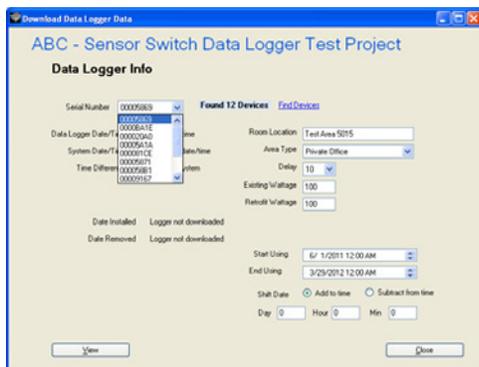
1. Select project from the list by highlighting it. Then select **DOWNLOAD LOGGER MEMORY**.



2. The number of loggers connected to the computer will show automatically under **FOUND XX DEVICES**. (If the number is “XX”, connect a logger via the USB port, wait for the computer to find the device, then click **FIND DEVICES**. The number should change to the number of loggers connected to the computer.)

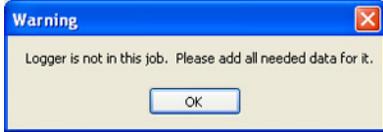


3. In the SERIAL NUMBER pull down menu, select one of the loggers. The logger details will automatically populate (eg. room locations, area type, etc.)

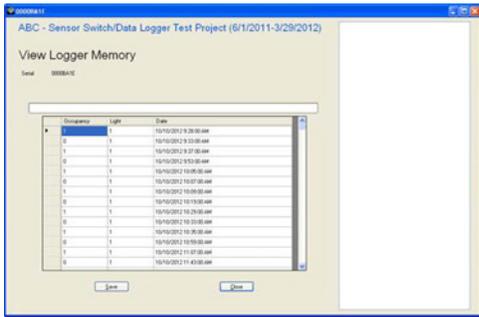


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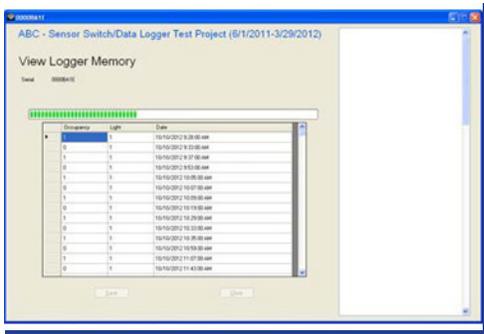
4. If the logger details were not previously entered, the following error message will be displayed. Select OK. The information must be manually entered. When all the data logger details have been entered click **VIEW**.



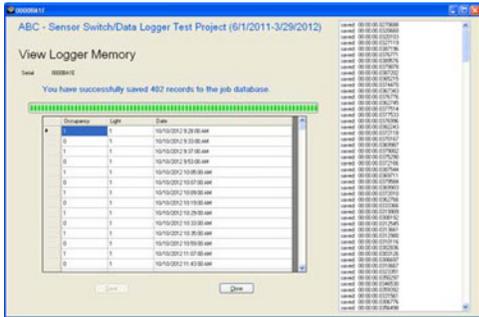
5. If the selected logger had memory, the viewing window will populate with the data logger memory.



6. Click **SAVE**. Progress bar should start and increase from left to right.

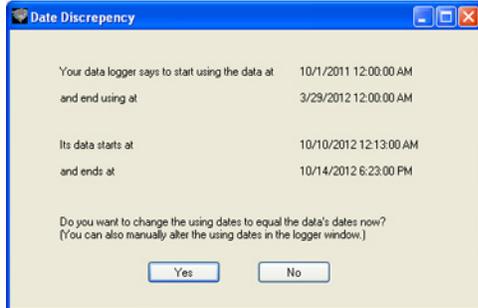


7. When all memory has been written to the database, the following message will display: "YOU HAVE SUCCESSFULLY SAVED XXXX RECORDS TO THE JOB DATABASE".



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8. If the following message appears, it indicates that the logger date range is different than the project date range. Select **YES** if you want to use the logger date ranges or **NO** if you want to use the project's date range.



9. Continue **DOWNLOAD LOGGER MEMORY** steps 1 - 8 for every logger in your project.

WORKING WITH A DATABASE/PROJECT/JOB

This module allows you to add or remove a logger from your project, change room location information, etc.

1. Click on **USER JOB/PROJECTS/DATABASES**.

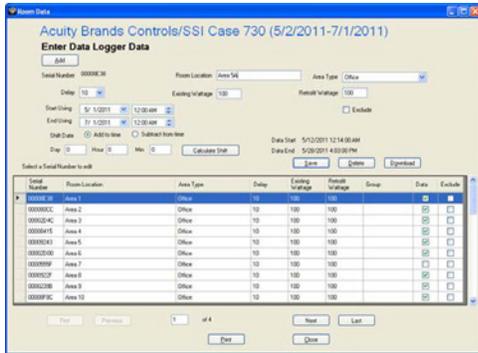


2. Select a project by highlighting it, then click **ADD/MODIFY LOGGER INFO**.



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3. If you need to change any data logger details (eg. **ROOM LOCATION**, **AREA TYPE**, etc., retype over that information then click **SAVE**.



VALIDATING PROJECT INFORMATION FOR REPORT GENERATION

Prior to running a report to view the results of the energy analysis, all data must be reviewed to ensure all fields contain data. This will avoid gaps in the reporting data.

1. Select a project by highlighting it, then click **VALIDATE**.



2. Any errors will display in this dialogue box. To fix an error, simply click on it and the program will go to the module that needs to be modified.



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3. Change the information that needs modifying (for example below, the project doesn't have a Utility rate entered for the weekends).

Rate Schedule Data
Acuity Brands Controls - SSI Case 730

Load A Rate Schedule
 Standard Use Entered

Utility Company: No Company

Fixed Rates Customized Rates

Schedule Name: No Rate

Rate Schedule Data

Rate Type: On-Peak Off-Peak Shoulder 1 Shoulder 2

Consumption Rate: \$ 0.10 \$ \$ \$ \$ \$

Demand Rate: \$ 1.00 \$ \$ \$ \$ \$

Day	On-Peak	Off-Peak	Shoulder 1	Shoulder 2	Self/Man/Fri same rate
Sunday	7:00 AM				<input checked="" type="checkbox"/>
Monday	7:00 AM				<input checked="" type="checkbox"/>
Tuesday	7:00 AM				<input type="checkbox"/>
Wednesday	7:00 AM				<input type="checkbox"/>
Thursday	7:00 AM				<input type="checkbox"/>
Friday	7:00 AM				<input type="checkbox"/>
Saturday	7:00 AM				<input type="checkbox"/>

To create a new customized rates schedule when you save for this job, enter a new schedule name here

Save Rates Exit Close

4. After all changes are made, click **SAVE** and then **CLOSE**.

Rate Schedule Data
Acuity Brands Controls - SSI Case 730

Load A Rate Schedule
 Standard Use Entered

Utility Company: No Company

Fixed Rates Customized Rates

Schedule Name: No Rate

Rate Schedule Data

Rate Type: On-Peak Off-Peak Shoulder 1 Shoulder 2

Consumption Rate: \$ 0.10 \$ \$ \$ \$ \$

Demand Rate: \$ 1.00 \$ \$ \$ \$ \$

Day	On-Peak	Off-Peak	Shoulder 1	Shoulder 2	Self/Man/Fri same rate
Sunday	7:00 AM				<input checked="" type="checkbox"/>
Monday	7:00 AM				<input checked="" type="checkbox"/>
Tuesday	7:00 AM				<input type="checkbox"/>
Wednesday	7:00 AM				<input type="checkbox"/>
Thursday	7:00 AM				<input type="checkbox"/>
Friday	7:00 AM				<input type="checkbox"/>
Saturday	7:00 AM				<input type="checkbox"/>

To create a new customized rates schedule when you save for this job, enter a new schedule name here

Save Rates Exit Close

5. Click **REFRESH** and the error will no longer be listed.

Validation Issues
Acuity Brands Controls - SSI Case 730

Logger 00008E38 is set to use data outside the job's installation period.
Job starts 5/2/2011, using data from 5/1/2011.

Logger 000080CC is set to use data outside the job's installation period.
Job starts 5/2/2011, using data from 5/1/2011.

Logger 0000294c is set to use data outside the job's installation period.
Job starts 5/2/2011, using data from 5/1/2011.

Logger 00008415 is set to use data outside the job's installation period.
Job ends 7/1/2011, using data from 2/10/2012.

Logger 00005243 is set to use data outside the job's installation period.
Job starts 5/2/2011, using data from 5/1/2011.

Logger 00002000 is set to use data outside the job's installation period.
Job starts 5/2/2011, using data from 2/1/2011.

Logger 0000825F is set to use data outside the job's installation period.
Job starts 5/2/2011, using data from 5/1/2011.

Refresh Close

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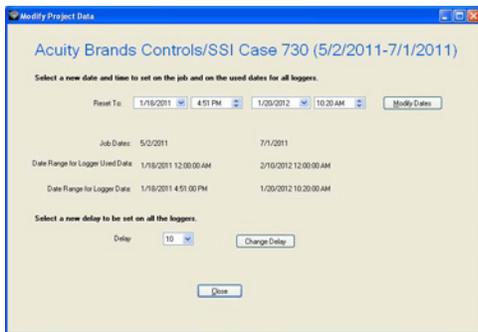
- Continuing selecting errors until all errors are resolved. If all errors are related to the start and stop times of the loggers, click on **MODIFY PROJECT DATE RANGE**.



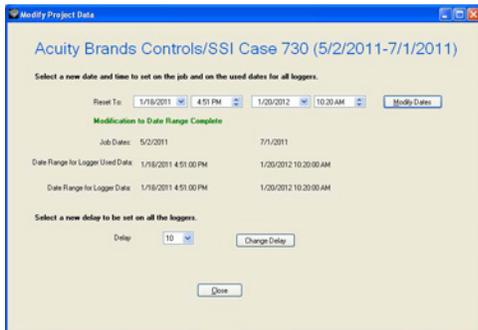
(Other buttons on this screen are not covered in this Quick Start Guide. Please refer to the User Manual.)

MODIFY PROJECT DATE RANGE

- The program will automatically select the new start and stop date/time for the report; however you may modify this information. Enter the information you want to modify and click **MODIFY DATES**. All the logger start and stop times will be modified.



- Wait for confirmation in green: “MODIFICATION TO DATE RANGE COMPLETE.” Click **CLOSE**.



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RE-VALIDATE PROJECT INFORMATION

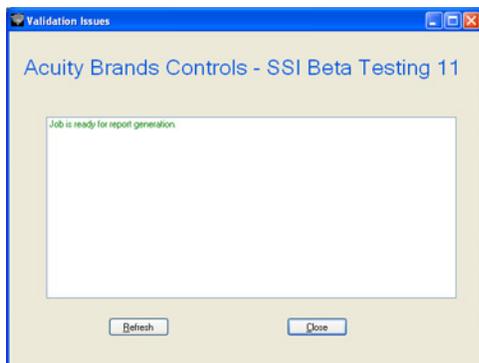
1. Click on **VALIDATE**.



2. Continue to correct errors.



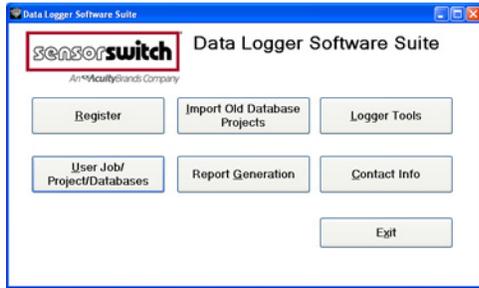
3. When all errors have been resolved, on the final refresh for validation you should receive this message. Click **CLOSE**, then **CLOSE** the **MODIFY PROJECT** module.



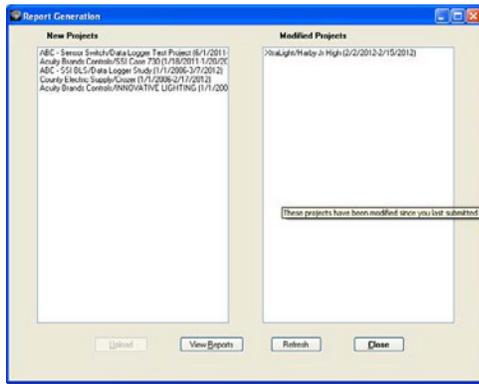
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CHAPTER 5: REPORT GENERATION

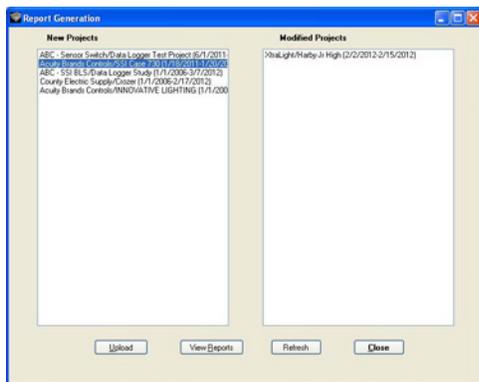
1. Click **REPORT GENERATION**.



2. Select a project by highlighting it.



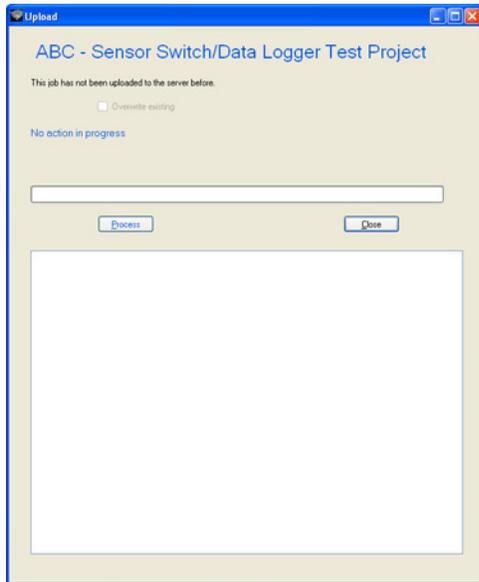
3. Click **UPLOAD**.



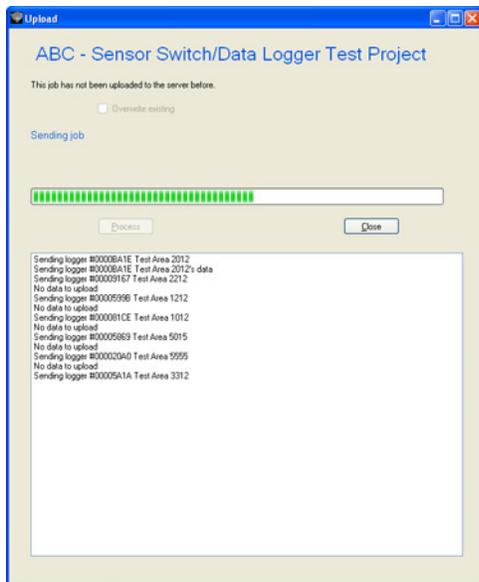
NOTE: If any errors are still present, fix them by following the steps in Chapter 4's VALIDATING PROJECT INFORMATION FOR REPORT GENERATION section above.

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4. Click **PROCESS**.



5. Process bar will indicate when process is complete.



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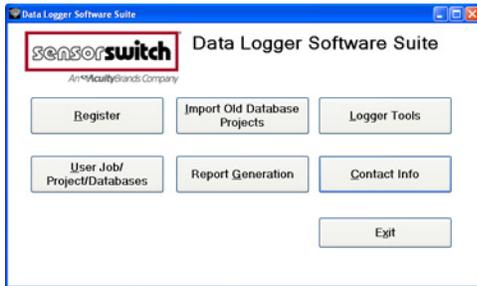
6. When the program has finished processing the date, the following message will display: “YOUR REPORT WILL BE GENERATED WITHIN THE HOUR.” Click **CLOSE**.



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CHAPTER 6: CONTACT INFO

1. Click **CONTACT INFO**.



2. When you have completed your energy analysis, return the loggers to the address on this screen.
(Data logger devices are on loan for 6 weeks.)



3. If you need help on installing the data loggers, click on **INSTALLATION GUIDELINES**.

4. If you need additional field monitoring forms, click on **FIELD MONITORING FORMS**.

5. If you have lost your copy of the user manual, click on **SOFTWARE MANUAL**.

6. When finished, click **CLOSE**.

7. Click **EXIT** to leave the program.



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