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PowerCommand
Software for Windows®

Operating System User's Guide

Version 6.0

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1. Introduction

SYSTEM OVERVIEW

The PowerCommand® Software for Windows (PCW) program provides local and/or remote monitoring of generator sets, transfer switches and related devices.

This User's Guide covers PCW 6.0. This version supports the protocol for two site types:

- PowerCommand Generator Set (PCC Serial)
- FT-10 Network (LonWorks™)

PCW operates on an IBM–compatible PC, with Windows 2000, Windows XP Pro or Windows NT V6.0 operating systems. Refer to section 2 for complete system requirements.

Figure 1-1 illustrates single site monitoring setups for local and remote configurations that do not require a network.

The PCC 3100, PCC 3200, and PCC3201 controls support PCC serial communications for monitoring without the use of an FT-10 network. PCC 2100, PC-ATS, and generator sets with a 1301 operator panel require a network card to send remote alarms. All other devices (DIM's, CCM-T, CCM-G etc.) must be monitored over an FT-10 network.

Note: Devices that are installed in a network with autobinding (self-installed networks) cannot be monitored with PCW.

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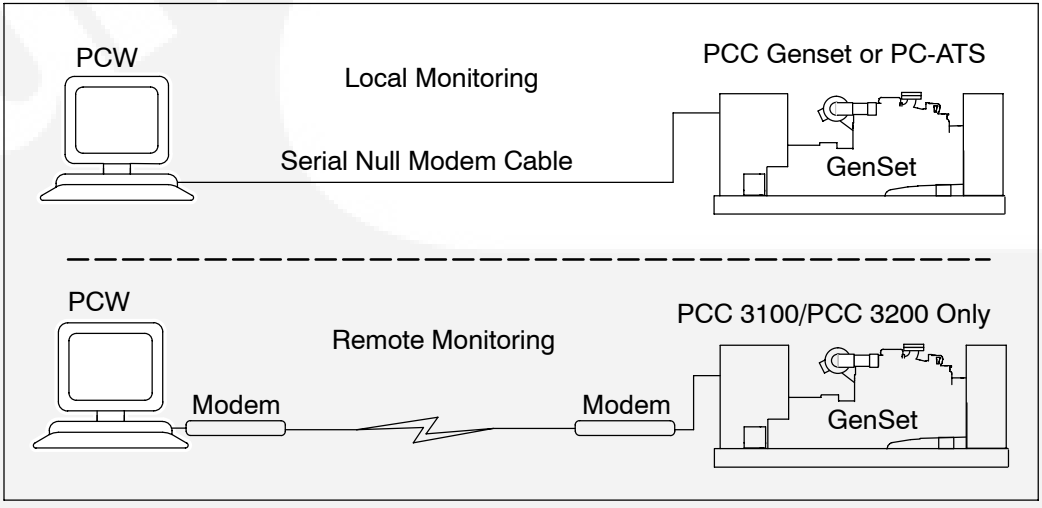

FIGURE 1-1. LOCAL AND REMOTE MONITORING SETUPS THAT DO NOT REQUIRE A NETWORK

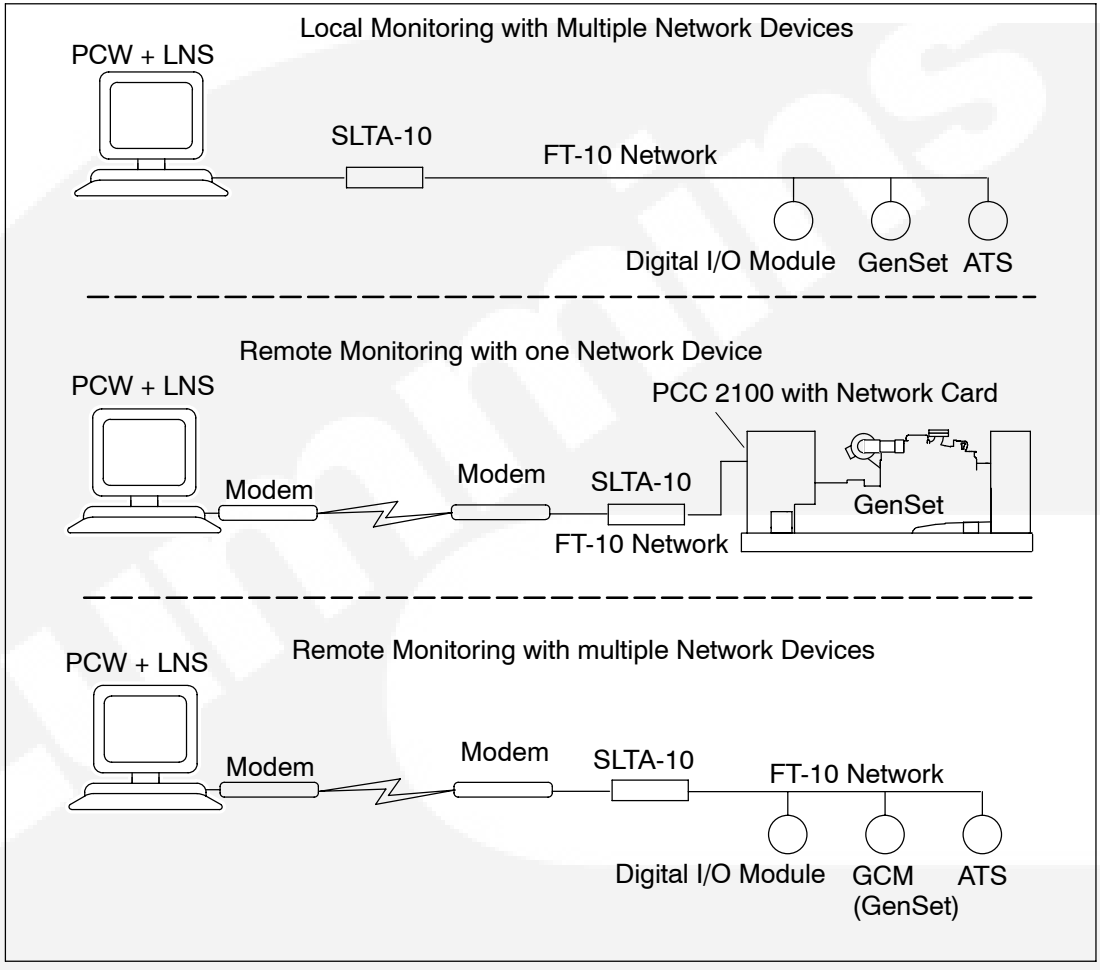

FIGURE 1-2. TYPICAL LOCAL AND REMOTE MONITORING SETUPS THAT REQUIRE NETWORK INSTALLATIONS

Network Applications

PCW can be used to monitor devices on an FT-10 network channel. See Figure 1-2 for typical network installations.

NOTE: PCW does not support monitoring of devices over a TP-78 (transceiver type) network channel.

To monitor devices on a network, the monitoring PC must have the LonWorks LNS server version 3.1, or greater, installed. The PC also needs an FT-10 network interface (gateway) driver and a copy of the network site database.

The LNS server software installation and setup procedures are described in Section 3. This installation, along with instructions on importing a network database must be performed before a network site can be created with PCW.

Note: A backup copy of the database, from the network site to be monitored, is required to complete the PCW setup. Contact the network installer to obtain a copy of this database.

SOFTWARE FEATURES

The features available in PCW are briefly described here, and are covered in more detail in the sections related to these features.

Main Features:

Alarm Monitoring - Monitors for alarms through a local and/or remote dial-in port. Annunciates and displays alarms as they are received. Alarms are logged and custom reports can be created to view alarm information for specific devices and time periods.

Data Log - A group of predefined data points (based on device type) can be monitored, logged or charted on a real-time basis.

Data Points - Displays a predefined group of data points and settings (based on device type) in a preformatted view.

Front Panel View - Simulated view of the front panel for PCC3200, PCC3201, PCC 3100, PCC2100, 1301 operator panels, and PCATS (PowerCommand transfer switches). Allows remote access to query the display menus.

Summary View - Predefined tables of data points for monitoring gensets, transfer switches, Digital I/O Modules (DIM), Controls Communication Modules (CCM-G and CCM-T) and Annunciators (LSA). The Summary View data points are updated approximately every 10 seconds.

LonWorks FT-10 network Support - Connectivity to a commissioned PowerCommand network via an Echelon SLTA network adapter allows local and remote monitoring of one or more devices on the network.

Additional Features:

Strip Chart - Available from the toolbar or Start Program menu, allows the user to display user defined data points in a real-time strip chart.

Compare Utility - Two user selected data points can be monitored within one device or between devices.

System Administration/Security - User setup provided to limit user access. Different user privileges depending on user access level.

Reports – Report feature can be used to produce an Alarm or Data report. User defined devices and time period.

Journal Log – Track user activities, such as when a user connected to a site and started or stopped a device. User activities are logged and a custom report can be generated to display activity for a specified time period.

Module Template Editor – Allows the user to define and apply a template to DIM and CCM modules.

Multiple Open Windows – Allows the user to launch (spawn) multiple windows from within the application.

USER INTERFACE FEATURES

The system software operates in the Windows graphical environment and is completely compatible with Windows. You can access PCW from the Start menu, just like your other Windows applications. If you are unfamiliar with Windows, or have questions about the Windows operating system, launch the Help program from the Start menu.

All system commands are accessible by mouse and keyboard. Frequently used commands have keyboard shortcuts and toolbar access.

Only commands applicable to the current active window are enabled. All other commands are grayed out.

Enable the system sounds on the PC for audible notification for features like alarms.

ABOUT THIS USER'S GUIDE

This User's Guide covers software installation, setup and operation of the PCW program.

Section 1 provides an overview of this manual, and some of the basic operating concepts and features.

Section 2 describes the required hardware and software and the PCW software installation and setup procedures.

Section 3 covers additional installation and setup steps that are unique to monitoring devices in a LonWorks FT-10 network application. This section covers the LNS server software installation, network interface (gateway) driver installation and steps required to import a network site database.

Section 4 covers PCW main menu and tool bar functions.

Section 5 covers an overview of the procedures for using the PCW monitoring software.

Sections 6 through 15 cover PCW's features and toolbar functions in more detail.

Changes in the PCW operation, or differences between the features described in this User's Guide and the current software release may be found in the PCW ReadMe file.

2. PCW Installation and Setup

This section covers PCW version 6.0 installation procedures and setup instructions. Additional software installations and setups are required for monitoring devices on a network.

If your application involves monitoring one or more devices on an FT–10 network, complete the installation procedures in this section, review the setup procedures, **then follow the procedures in section 3.**

INSTALLATION REQUIREMENTS

Before installing the PCW software, refer to the following system requirements for the PC that will be used to operate PCW.

User Background

To install and use PowerCommand Software for Windows, you need:

- Experience using personal computers.
- Experience using Windows operating systems.

PC Requirements

The following section specifies the recommended PC.

Please note that PCW version 6.0 does not support the Windows 95 operating system.

- An IBM PC or 100% compatible PC.
- 64 MB of RAM, or greater, must be upgradeable. (XP user's should have 128 MB or higher). Hard Drive of 1.5 GB or greater.
- Recommended Operating System: Microsoft Windows 2000, Windows XP Pro, or Windows NT 6.0.
- Microsoft Internet Explorer version 5.5 or higher.
- SVGA (1024x768) color display.
- Windows compatible pointing device and 101 key enhanced keyboard.
- 16X CD-ROM.
- One parallel port. One free serial communications port.
- Windows compatible printer (optional).

PCW INSTALLATION

Failure to log on to the PC with the system security feature enabled will prevent PCW from installing properly. If your PC system security is enabled and you selected **Cancel** during the start up **Logon**, you ***must*** restart your PC and enter the required logon information, prior to installing PCW.

Close all other programs, including the Microsoft Office shortcut bar. Close any programs that have been docked to the taskbar.

During installation, pop-up messages may be displayed behind an open window. If the install program is not responding, check the taskbar, or press the Alt–Tab keys to display hidden windows. Review and close any pop-up messages.

To install PCW software:

1. Insert the PCW CD into the PC.
2. After a short delay the program will begin and launch the *Install Shield Wizard*.

   (If the program does not autostart, select **Run** from the taskbar **Start** menu. At the prompt, type **D:\Setup** [substitute the drive letter of the CD drive being used, in place of D] and then click on the **OK** button.)
3. Click on the **Start Installation** button to begin the installation. Figure 2-1.

   NOTE: The installation windows include an Installation Help [F1] button which allows for access to these instructions.

   NOTE: If you did not install PCW software when you installed another PC tool (InPower Pro or InPower Lite), the message shown in Figure 2-2 is displayed.

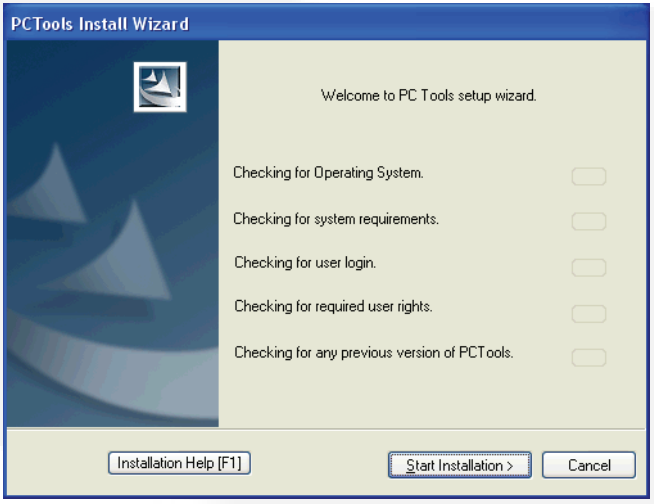

FIGURE 2-1. START INSTALLATION

FIGURE 2-2. NOTICE OF PC TOOL ALREADY INSTALLED

4. The install program will begin and go through a series of checks and preparation for the installation.

   The message shown in Figure 2-3 is displayed if the install program detects an earlier version of PCW. When this message is displayed, the **earlier version must be Uninstalled.**

   If an earlier version is not detected, proceed to step 5.

   If an earlier version is detected, refer to Appendix A for instructions on removing the old PCW version. Begin at step 4, in Appendix A.

   Note: You must use this PCW version 6.0 install program to remove PCW versions 2.0 and 2.5 from powerswept PCs.

5. At the *Select Tools* installation window, click inside the checkbox next to PowerCommand for Windows, then click on the **Next** button to proceed with the installation. Figure 2-4.

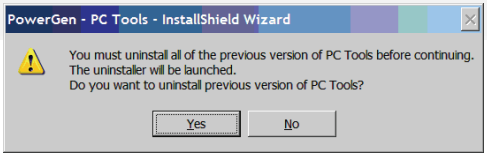

FIGURE 2-3. REMOVE PREVIOUS VERSIONS

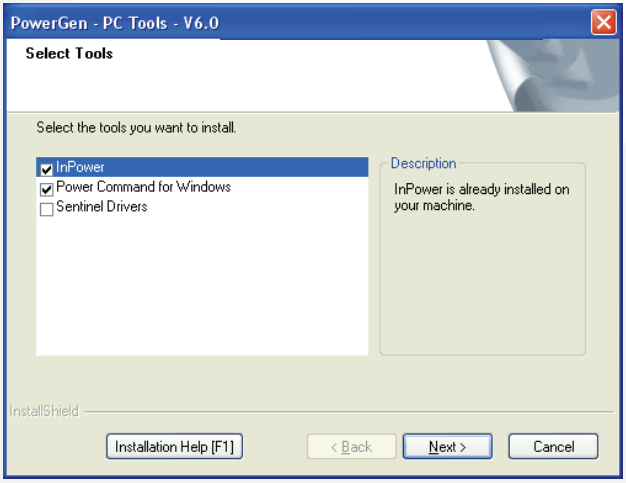

FIGURE 2-4. INSTALL PCW

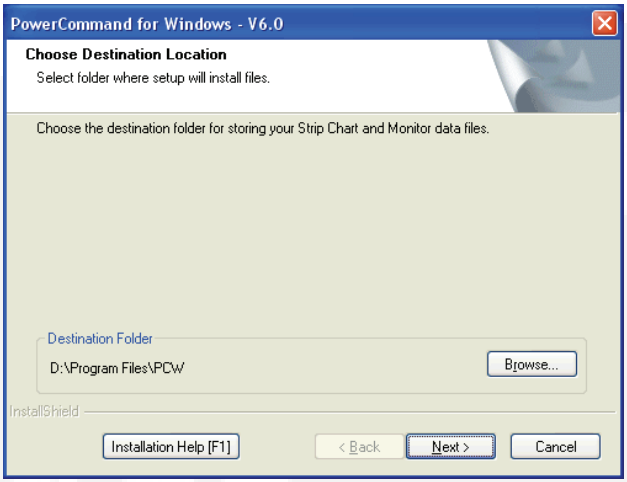

FIGURE 2-5. INSTALL – DESTINATION FOLDER

6. At the *Choose Destination Location* window, accept the destination folder (recommended). Click on the **Next** button to proceed. Figure 2-5.
   Changing the destination location will result in installing the Strip Chart and Monitor folders in the specified location, all other files and folders will be installed on Drive C.
   To edit the location for the Strip Chart and Monitor folders, click on the **Browse** button to locate an existing directory and folder location or edit the path and folder directly in the dialog (browse dialog is not shown).

7. At the *Start Copying Files* window, accept the default directory path (recommended) or click on the **Back** button to edit the desired folder location. Then click on the **Next** button to accept the directory settings and proceed. Figure 2-6.

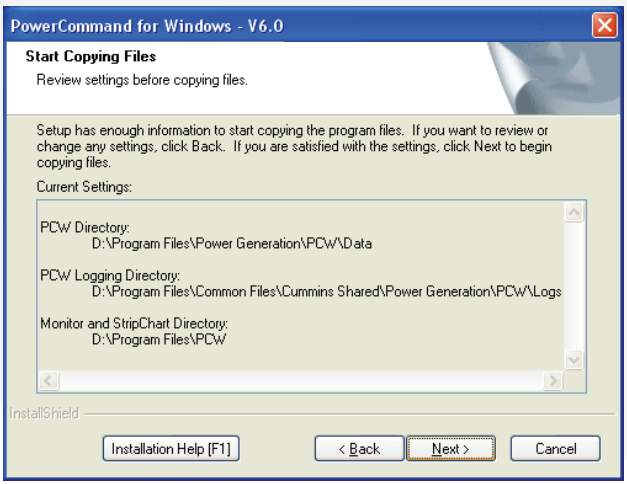

FIGURE 2-6. INSTALL – CURRENT SETTINGS

8. At the *View ReadMe File* window, click inside the **View ReadMe** checkbox (recommended) to select it. Click on the **Next** button to proceed. Figure 2-7.

9. If View Readme was selected, use the scroll bars to access the information that is provided in the Readme file. Click on the **Next** button when finished reviewing this text. Figure 2-8.

10. When the *PC Tools Setup Complete* window is displayed, click on the **Finish** button to complete the installation. Figure 2-9.

Refer to the following Setup section for information on using the Setup dialog.

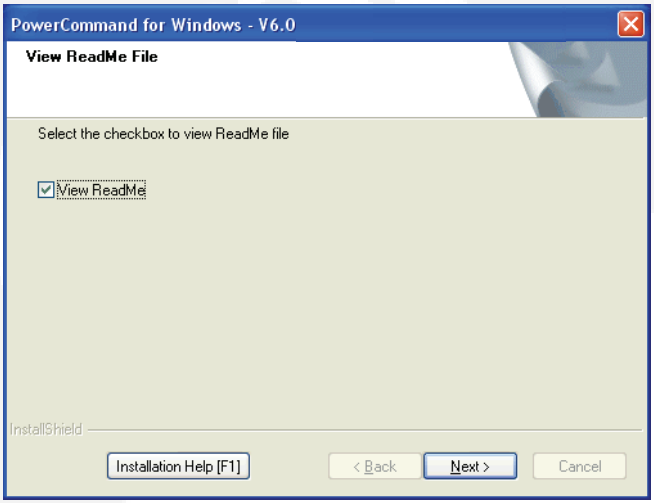

FIGURE 2-7. VIEW README FILE

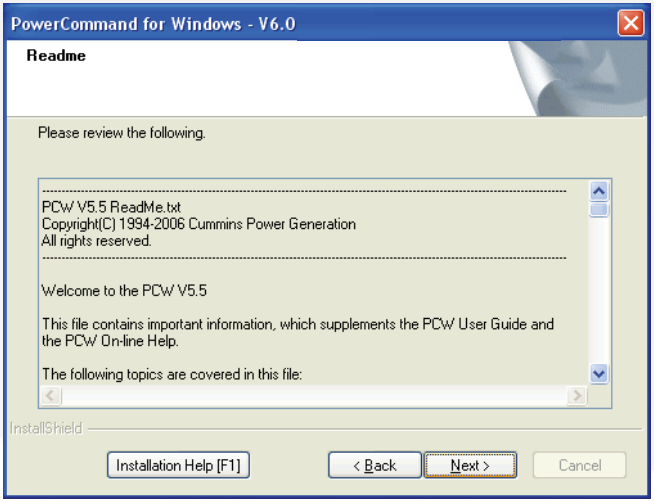

FIGURE 2-8. README FILE

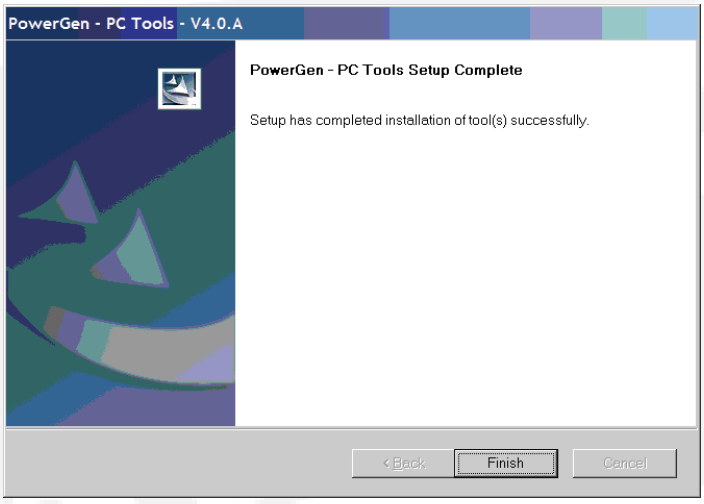

FIGURE 2-9. INSTALLATION COMPLETE

SETUP FEATURES

After successfully completing the installation of PowerCommand for Windows, an initial setup must be completed. If you attempt to use the PCW program before the setup is completed, the message shown in Figure 2-10 is displayed.

The **Setup** dialog allows the installer, or System Administrator, to set user preferences and make changes to both Sites and Devices. Setup is also used to establish remote communications settings and setup datalog preferences.

Review each of the setup procedures in this section to become familiar with the features. During the initial installation, make Unit of Measure selections and click on the **Next** button. Click the **Next** button to bypass any of the remaining setup steps that you are not certain about. You can always return to the setup feature to make changes or additions.

A Site Setup for a network application cannot be completed until after the network installation steps. Instructions for creating a Site Setup for a network application is covered in Section 3.

The **Setup** feature can be accessed from the **Start** menu (Start –> All Programs –> Power Generation –> Setup). Figure 2-12 shows the first Setup dialog.

After the initial setup is completed, the Setup feature can also be accessed from the PCW main window, Tools menu drop-down list. When accessed this way, seven setup tabs are displayed with the Unit of Measurement tab as the default selection (see Figure 2-11). To select another feature, click on the appropriate tab.

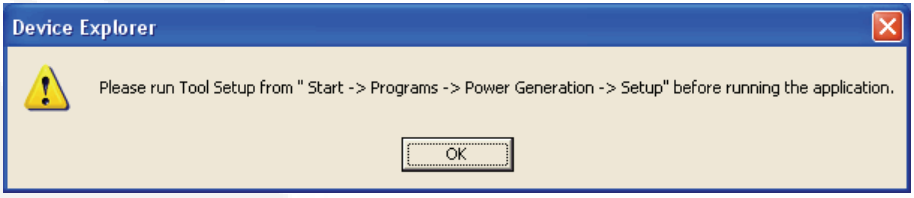

FIGURE 2-10. SETUP REQUIRED MESSAGE

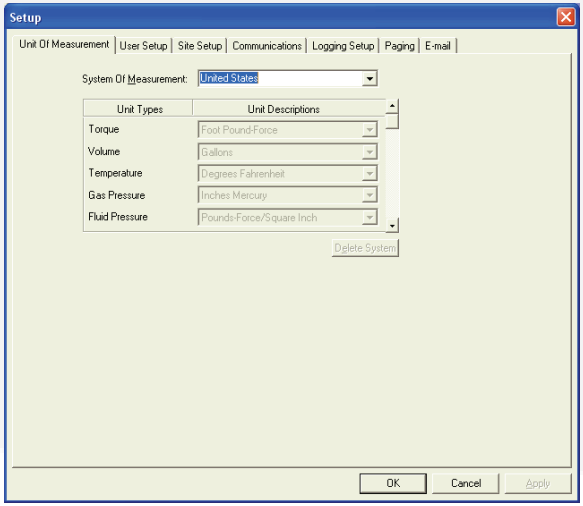

FIGURE 2-11. SETUP TABS

Unit of Measurement

This feature allows selection of a list of pre-defined units of measure, based on customary regional or country measures. PCW will convert and display values according to the units of measure selected from the **System Of Measurement** drop-down list.

User's can create their own list by entering a name in the **System of Measurement** dialog. To customize a setup, select individual **Unit Descriptions**, by **Unit Type**, from drop-down lists.

Click on the **Next** button to view the next setup menu.

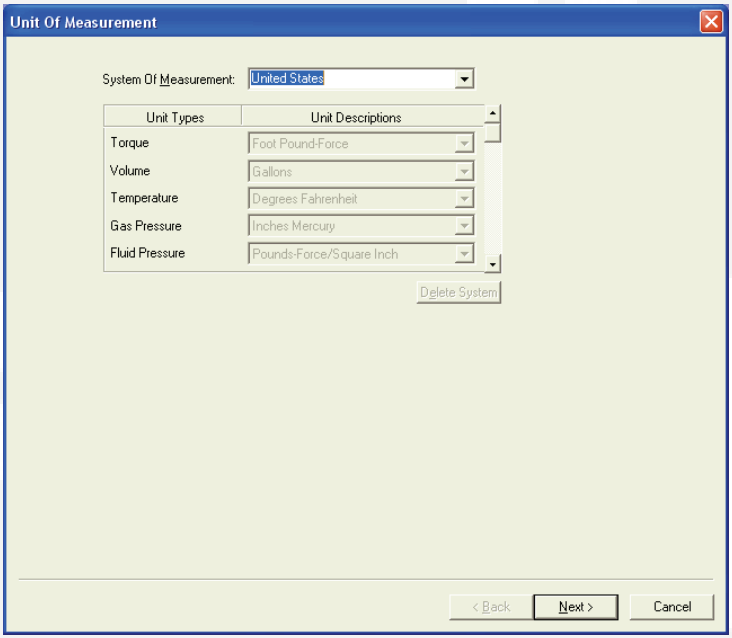

FIGURE 2-12. SETUP DIALOG – UNIT OF MEASURE

User Setup – System Administration

The System Administration feature (**User Setup**) allows a person using the Windows logon (with System Administrator privileges) to establish a user profile for each user on the system. After the initial setup, only the System Administrator will have access to the **User Setup** dialog.

Note: With PCW, using the System Administration feature requires the user to have admin rights on the PC. Using this feature is not recommended for most users. If you do not have admin rights, conflicts between Windows User Administration and PCW User Setup can occur, preventing user access to PCW. When this occurs, a Windows Administrator may be required to change the PC's user access. The user name must exactly match the Windows user name.

Three access levels are available as follows:

Read Only: User can connect to and monitor a local or remote site.

Read/Write: User has full use of all PCW features, including making adjustments.

Administrator: An Administrator has full use of all PCW features. The administrator can create new sites and maintain user privileges for all users on this PC.

Click on the **Next** button to view the next setup menu.

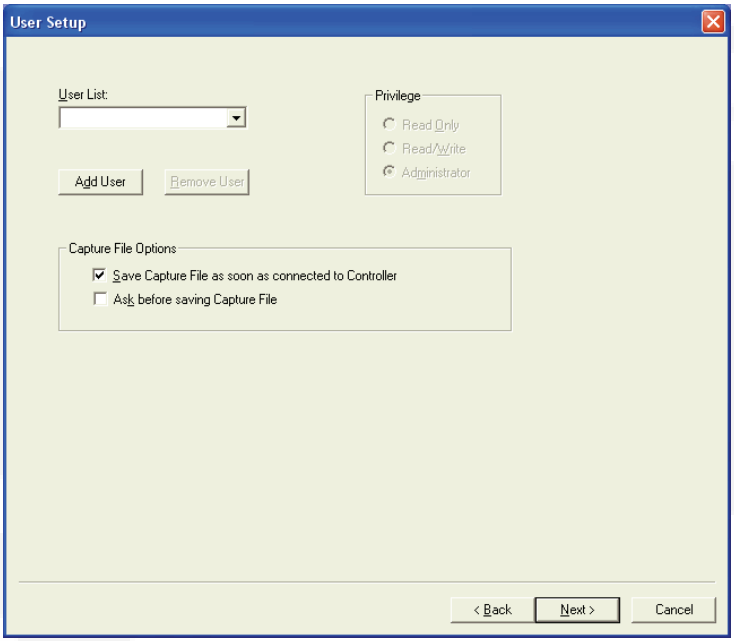

FIGURE 2-13. USER SETUP

Site Setup

The **Site Setup** dialog allows the user to **Add**, **Remove** or edit a Site (Figure 2-14). This feature is used to setup local and remote sites.

Refer to page 2-17 for more information on using this feature. This includes examples of a site setup for remote communications and an example of a local setup with a PCC 3100 device. Refer to Section 3 for information on setting up a network site.

To remove a site from the **Site List**, select the site and click on the **Remove** button. A pop-up will be displayed to prompt you to continue (**Yes**) or cancel this operation (**No**). Click on the **Yes** button to remove the site, or click on the **No** button to cancel the removal.

To add a site, click on the **Add** button. The **Create Site** dialog is displayed. This feature is described in the following section.

Selecting a site from the **Site List** enables the edit feature.

When a site is selected, the sites protocol and COM port can be edited. Also the **Device Setup** button is enabled. This feature allows the user to add or remove devices. This feature is described later in this section.

Click on the **Next** button to view the next setup menu.

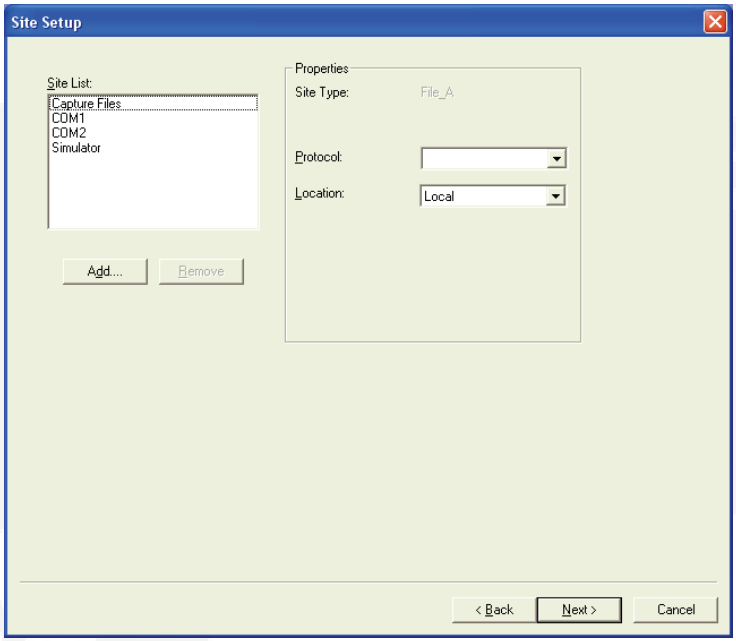

FIGURE 2-14. SITE SETUP DIALOG

Communications

The **Communications** setup feature is used to enable incoming calls (from remote sites) for monitoring remote sites. The **Remote Connections** feature is used to select the modem that will be used for outgoing calls (to remote sites). The **Lon Network Connections** feature is used to set the phone number for local and remote applications (covered in section 3).

Incoming Calls: Enable this feature by clicking on the **Allow incoming calls** checkbox. (Check mark appears in checkbox when the feature is enabled.)

In the **Use modem** combo box, select the desired modem (from remote sites). Only one modem can be selected.

Remote Connections: In the **Remote Connections – Use modem** combo box, select the modem to use for outgoing calls (to remote sites). The names of all modems currently installed on the system will be listed in the drop-down list. The **First Available** selection allows the Windows TAPI program to select an available modem.

Click on the **Next** button to view the next setup menu.

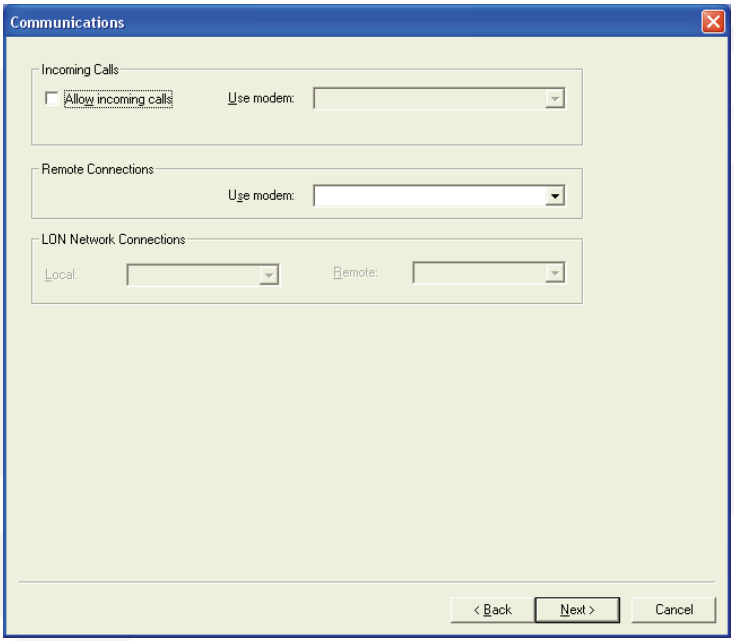

FIGURE 2-15. COMMUNICATIONS SETUP

Logging Setup

The Logging Setup feature is used to set the logging path directories and preferences for the data logging feature.

Directory: The Directory setup allows the user to enter a directory path for logging data The Browse button, next to the path dialog (Figure 2-17), can be used to locate and select the desired directory.

Settings: The Settings group is used to reserve disk space for logging and archiving, selecting the maximum number of active devices for logging.

Reserving disk space (buffer) for logging data will reserve the disk space for logging data with PCW. The default setting is 100 MB for the logging buffer. The minimum setting is 1 MB, and the maximum is limited by the amount of available space on the partition.

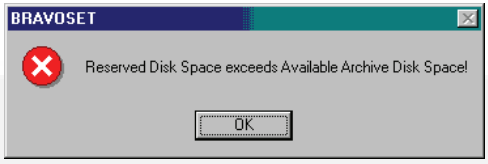

FIGURE 2-16. EXCEEDED DISK SPACE

If the reserve buffer setting exceeds the available disk space, a pop-up message will warn the user that the available disk space has been exceeded (Figure 2-16).

The number of active devices that can be logged can be set between one and 20 devices, the default setting is 4.

The settings can all be restored to the default settings by clicking on the **Defaults** button.

Click on the **Next** button to view the next setup menu.

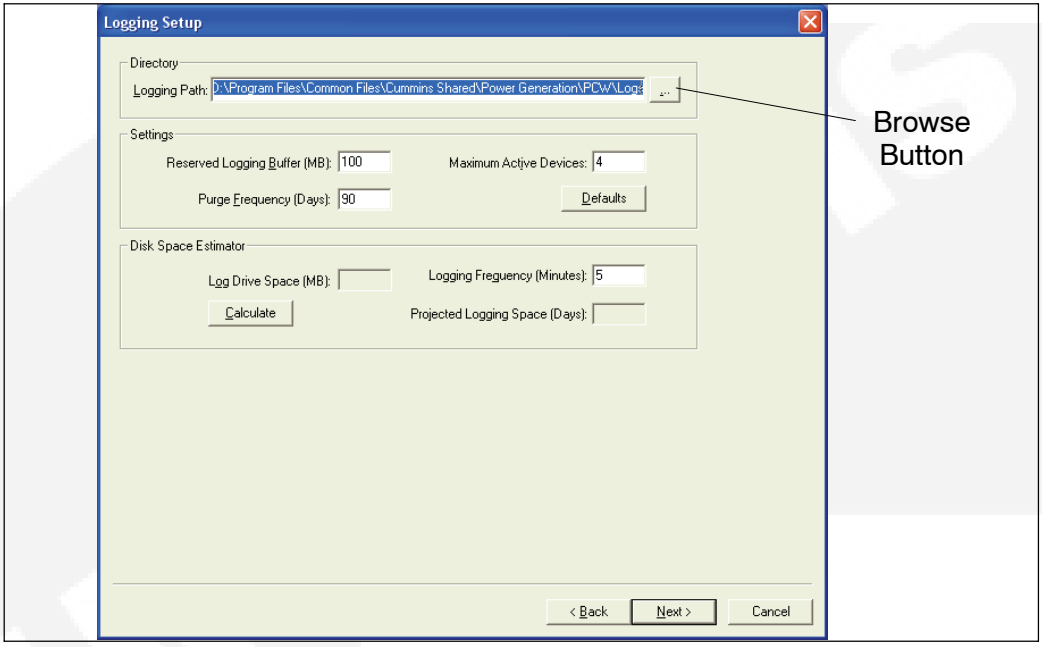

FIGURE 2-17. LOGGING SETUP

Disk Space Estimator: The Disk Space Estimator allows the user to enter the desired logging frequency, in minutes, and then calculate a projection of the logging space in days.

The Logging Frequency range is from 1 to 240 minutes, and the default value is 5 minutes.

After entering the Logging Frequency, click on the **Calculate** button to view the Projected Logging Space. The amount of estimated Log Drive Space for the directory paths, specified earlier, is also displayed. Make adjustments as needed to assure an adequate amount of logging space, then click on the **Apply** button to save the changes.

Paging

The Paging setup feature is used to select authorized personnel to be paged, and to set preferences for the paging feature.

Paging List Setup: Subscriber names must be added to the Subscriber Name List on the right side of the dialog box. After each entry, click on the **Add** button on the right side of the Subscriber Name List.

After this list is complete, names can be added to the Paging List. Select a name in the Subscriber Name List and click on the **Add** button to the right of the Paging List.

Individual names can be removed form the Paging List or the Subscriber Name List be selecting the name and clicking on the **Delete** button. The entire list can be removed by clicking on the **Clear** button.

Polling Directory: Either accept the default polling directory or else click on the **Browse** button to select a new location.

Max Message Length: Enter the number of characters that will be allowed in a message.

Max Subscribers: Enter the maximum number of subscribers per site that will be allowed to be paged.

Click on the **Next** button to view the next setup menu.

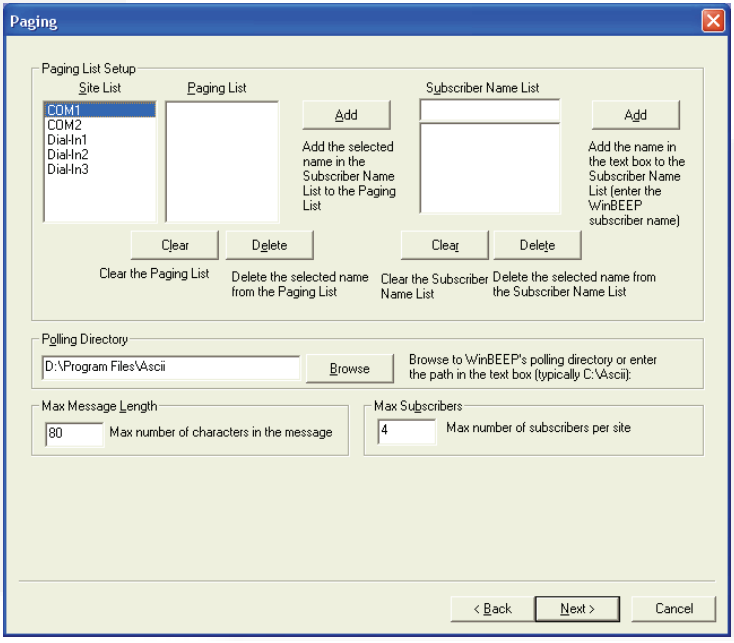

FIGURE 2-18. PAGING SETUP

E-mail

The E-mail setup feature is used to enter e-mail addresses for authorized personnel and to set preferences for the e-mail feature. A LAN or dial-up connection is required in order to use this feature.

The default e-mail setup screen is shown in Figure 2-19.

1. Under **Site List:**, select the control that you will be receiving e-mails from when you are connect with PCW.
2. Under **E-mail Address List:**, enter the e-mail in which you want to receive e-mails of faults from the control (in the example shown in Figure 2-20, it is the PCC1301). Once the address is entered, click on the **Add** button to the right of "E-mail Address List."
3. Click on the e-mail address (in this case, EmailMe@Cummins.com) so it is highlighted. Then click on the **Add** button to the right of "E-mail Address List." The address is now displayed in the **Site E-mail Address List** (see Figure 2-21).

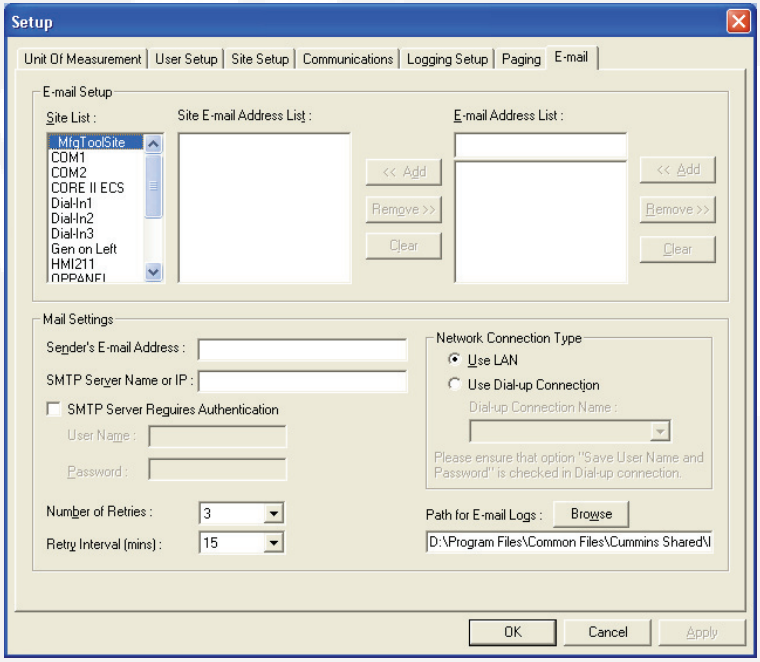

FIGURE 2-19. DEFAULT E-MAIL SETUP SCREEN

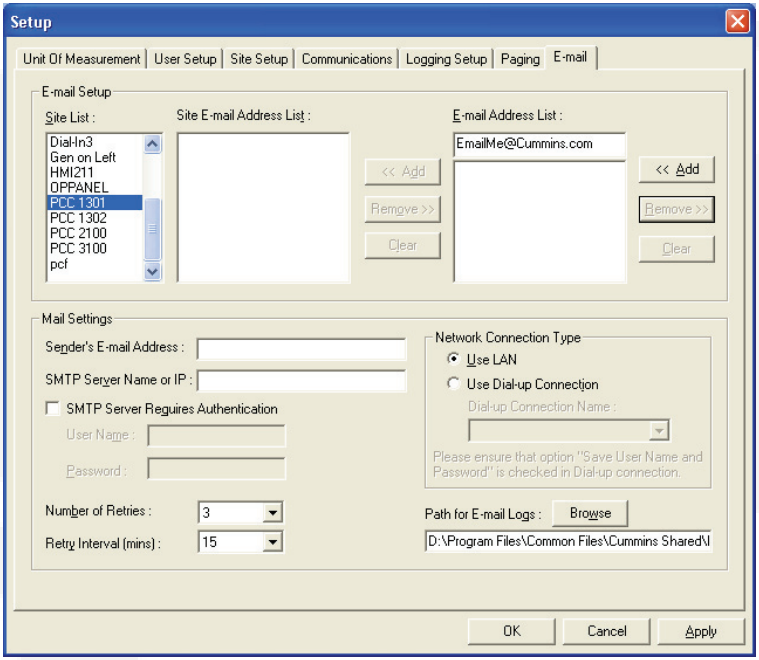

FIGURE 2-20. E-MAIL ADDRESS LIST SETUP

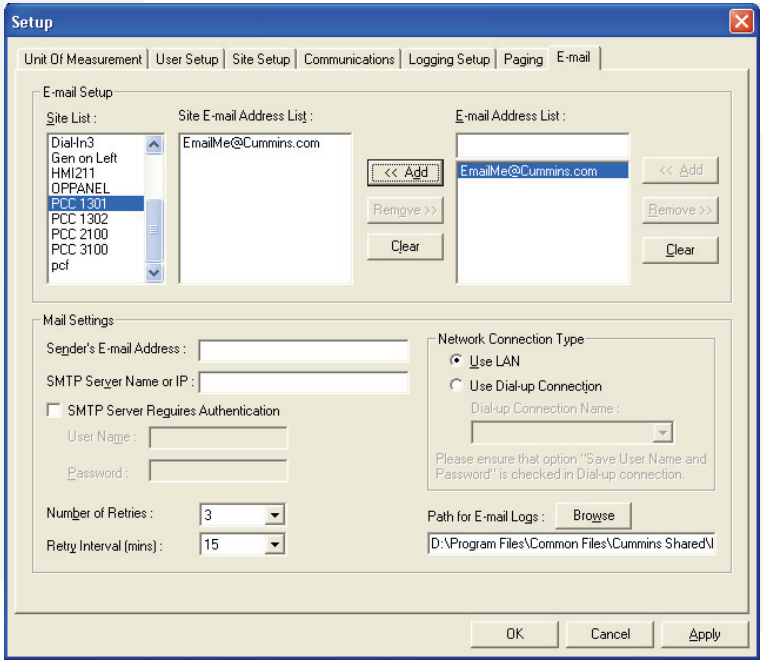

FIGURE 2-21. SITE E-MAIL ADDRESS LIST SETUP

4. Under **Mail Settings**,

   a. For the **Senders E-mail Address**, enter an e-mail address which will send the fault codes to the addresses that will receive the e-mails.

   b. For the **SMTP Server Name or IP**, enter the IP address or Server name that the "Sender's E-mail Address" originates from.

   c. For the **Network Connection Type**, select Use LAN or Use Dial-Up Connection.

5. When all settings have been completed, click on **Apply** and **OK**.

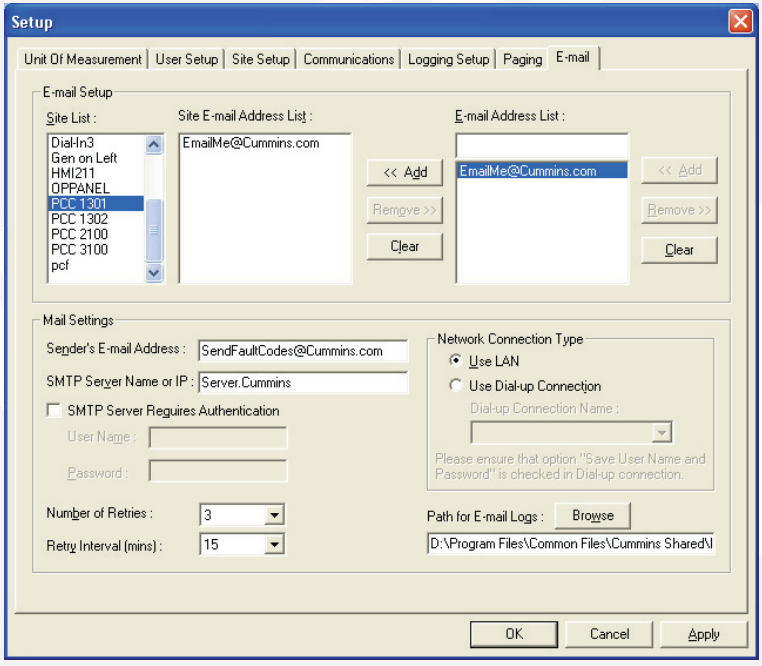

FIGURE 2-22. COMPLETED E-MAIL ADDRESS LIST SETUP

SITE SETUP FEATURES

This section describes the Site Setup features available from the Site Setup dialog shown on page 2-10.

Use the **Cancel** button to close any of the following dialogs without saving any changes made during this session. Use the **OK** button to accept the existing settings.

Create Site

When the user selects the **Add** button, the **Create Site** dialog appears (Figure 2-23). This dialog allows the user to select a **Site Type**, **Site ID**, **Protocol**, **Location** and **COM Port**.

Use each of the dialog fields as follows:
Site Type – Use **Physical** for local monitoring when using direct serial communication. Use **Network** when monitoring one or more devices on an FT-10 network. (Note: PCC2100 controls and PC-ATS controls require an optional network module for remote communication.) Refer to Section 3 for network setup instructions.

Site ID – Enter a name that will be useful for identifying the site, BLDG2 or LOCAL.

Protocol – Select **goal** for device applications that are not on a network. If Network was selected for the Site Type, the Protocol box is not displayed.

Location – Use **Local** for local monitoring applications. Use **Remote** for applications that use a modem. Note that the last dialog changes from COM Port to Telephone Number when **Remote** is selected for the **Location**.

COM Port: Enter the COM port on the PC that is used to connect to the site.

Telephone Number: Enter the telephone number of the phone line connected to the modem at the site location.

Click on the **OK** button to save the new site. This establishes the port, next, setup a device for this port.

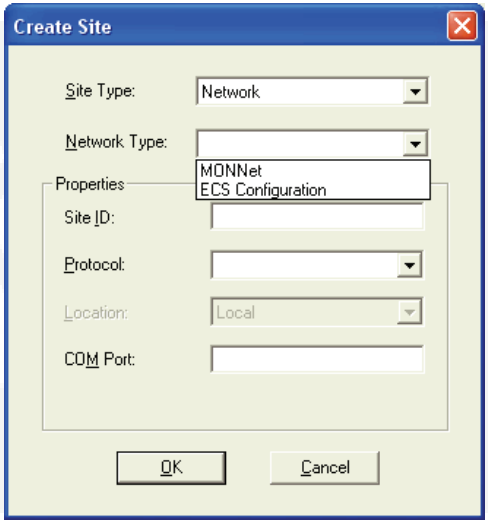

FIGURE 2-23. CREATE SITE DIALOG

Device Setup

The **Device Setup** dialog allows the user to Add, Remove or edit a device (Figure 2-24). Device setup is not required in network applications, refer to Section 3.

Selecting a device from the **Device List** allows the user to edit the **Device Name** and **Type**. The dialog also displays the **Site Name,** that the Device is associated with.

Selecting the **Add** button displays the **Create Device** dialog (Figure 2-25). This dialog allows the user to enter a new **Device ID.**, **Device Name** and allows the user to select a **Device Type** from a drop-down list.

Use each of the dialog fields as follows:
Device ID – Enter a name to identify the device.
Device Name – Use a generic term to describe the device (such as PCC 3100).
Device Type – Select the type from the drop-down list that matches the device being monitored. For remote applications, select **PCF Device,** or select the device name from the list.

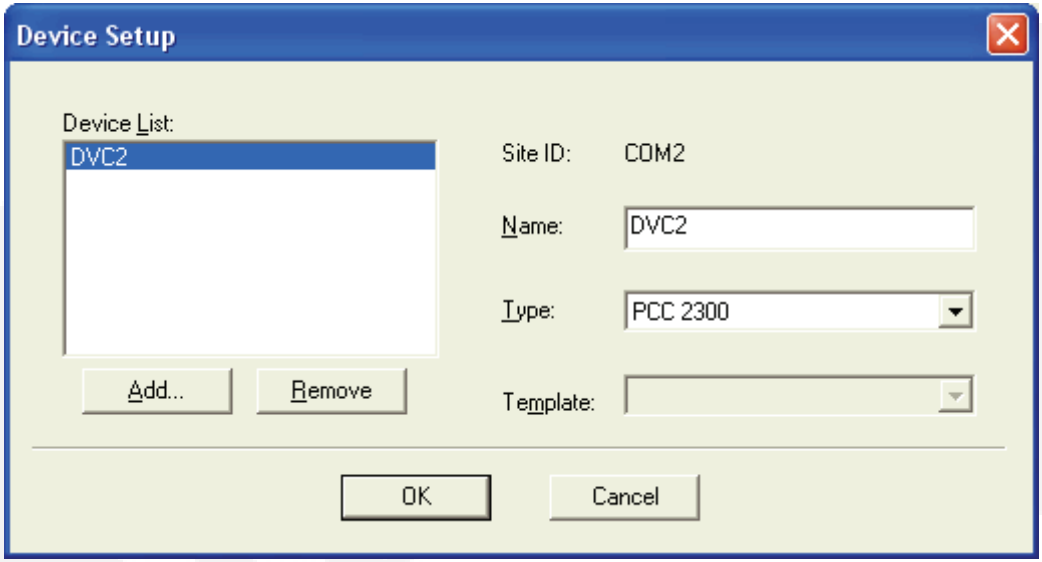

FIGURE 2-24. DEVICE SETUP DIALOG

Currently the following device types are supported:

ATS
Consumer Device
CORE II ECS
DKHA
GCP PCS
HDCA
HDKAJ
HDKC
HMI220
HMI320
HMI211
HMI211 (MCM3320)
HQD Display
HQD (Engine Control Module)
HQD (Transfer Switch)
HQD Inverter
Marine
Marquis Premium
MCM3320
NonGCP PCS
OPPANEL
PCC1100
PCC1100 User Interface
PCC1300
PCC1300 User Interface
PCC1301
PCC1302
PCC2100
PCC2300
PCC3100
PCC3200
PCC3300
PCF Device
Raven Commercial
TS1312
TS2312

Click on the **OK** buttons for the Create Device and Device Setup dialogs, then click on **Apply** to save the settings. Click on **OK** to complete the setup and close the **Site Setup** dialog.

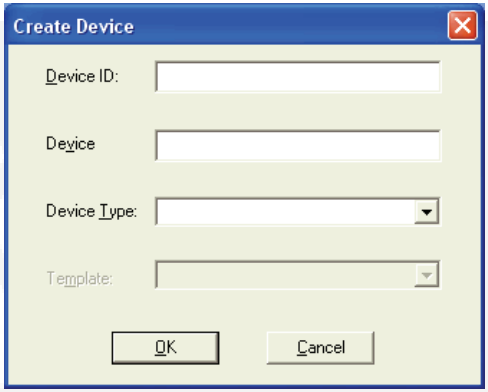

FIGURE 2-25. CREATE DEVICE DIALOG

Remote Site Setup Example

The following procedures describe how to setup PCW for remote communication.

The **Setup** feature is accessed from the **Start** menu by clicking on the **All Programs –> Power Generation –> PCW** program group. Click on **Setup**, to launch the Setup dialog.

If a TAPI Error message appears, you may be using Windows 95 or Windows 98 operating software. PCW does not support remote communications with Windows 95 or Windows 98.

In this example the user will define a new site, then add a device for that site and apply the changes.

1. Navigate to the **Site Setup** dialog in the Setup menus (Figure 2-14). Click on the **Add** button, to display the **Create Site** dialog.

2. Enter the following information in the dialog to create a new remote site:

   Site Type – Select **Physical** from the drop down list.

   Site ID – Enter a site name; use **REMOTEA** in this example.

Protocol – Select **goal** as the protocol from the drop-down list.

Location – Select **Remote** from the drop-down list.

Telephone Number: Enter the telephone number of the phone line connected to the modem at the site location.

3. Click on the **OK** button to save the new site. This establishes the port, next, setup a device for this port.

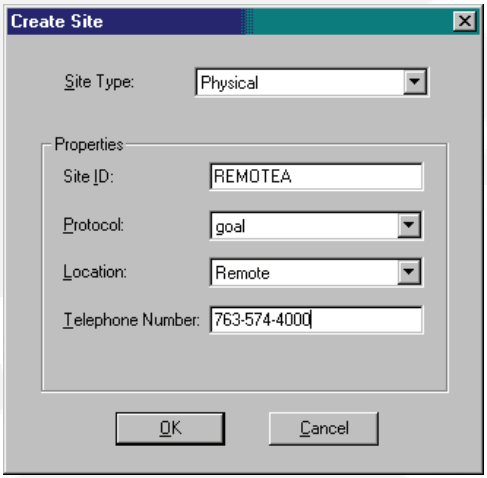

FIGURE 2-26. CREATE SITE DIALOG

4. Click on **Remote**, in the Site List, then click on the **Device Setup** button to access the Device Setup dialog. Click on the **Add** button to access the Create Device dialog (Figure 2-27). For remote communication, enter the following information in the **Create Device** dialog:

   Device ID – Enter **PCCA**.

   Device Name – Enter **PCCA**.

   Device Type: Click on the drop–down arrow, then scroll to and select **pcf_dvc** or select the device name from the list.

5. Click on the **OK** buttons for the Create Device and Device Setup dialogs; then click on **Apply** to save the settings. Click on **OK** to complete the setup and close the **Site Setup** dialog.

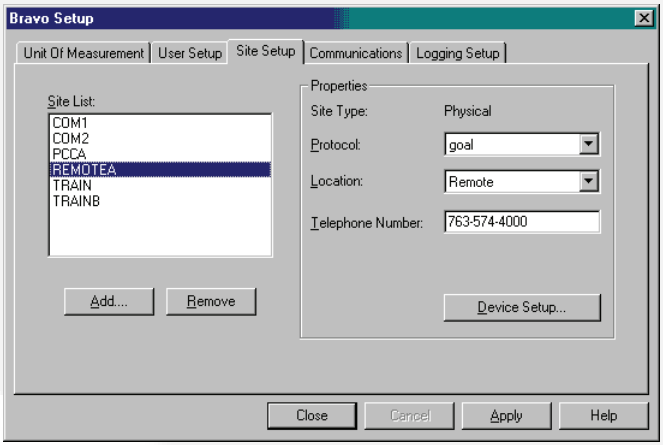

FIGURE 2-27. DEVICE SETUP

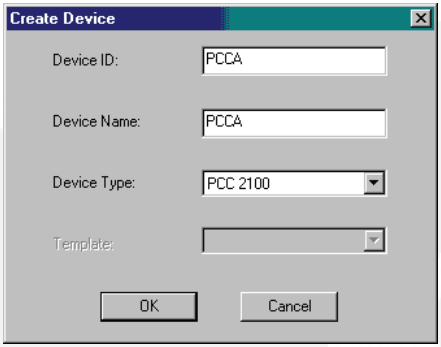

FIGURE 2-28. CREATE DEVICE DIALOG

PCC3100 Setup Example

In this example, a local site will be setup to monitor a PCC 3100 control.

1. Launch the Setup program from the **Start** menu **All Programs –> Power Generation** program group.

   In this example a new site will be created specifically for connecting to a PCC 3100 control that is not on a network.

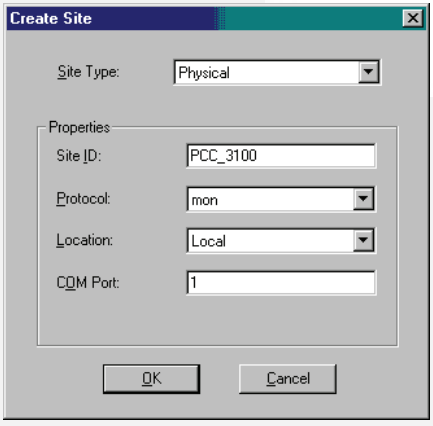

FIGURE 2-29. PCC 3100 SITE SETUP

2. Navigate to the **Site Setup** dialog in the Setup menus and then click on the **Add** button, located below the **Site List**. Create a new site for connecting to the PCC 3100 control. Select the **Site Type Physical**, from the drop down list. Enter a **Site ID**. Selecting **mon** from the **Protocol** drop-down list. Select **Local** for the **Location** and enter **1** (or the desired com port)for the **COM Port.** Click on the **OK** button to create the new site.

3. With **PCC_3100** selected in the **Site List**, click on the **Device Setup** button, then click on the **Add** button, to create a new device (Refer to Figure 2-28).

4. Enter a Device ID and Device Name (Figure 2-30). Select **PCC 3100**, from the **Device Type** drop-down list. Click on the **OK** button to create the device. Click on the Device Setup **OK** button to exit the Device Setup. Click on the **Apply** button to save the device setup.

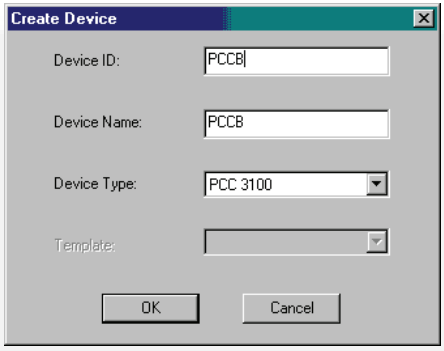

FIGURE 2-30. PCC 3100 DEVICE SETUP

ADDING A SITE

A site can be added using the menu bar. This method accomplishes the same thing as Create Site does from the Setup menus.

1. Go to **Tools –> Add Site** (see Figure 2-31).

2. In the Add Site dialog (see Figure 2-32), select a **Location** if using a Local or Remote connection.

3. Enter the **COM / Telephone** number that you are using on your computer.

4. From the **Products** list, select the control that you will connect to with PCW.

5. Click on the **OK** button.

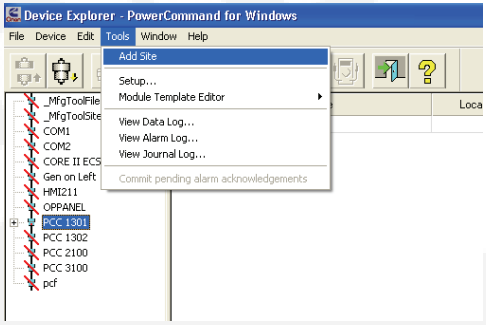

FIGURE 2-31. ADD SITE

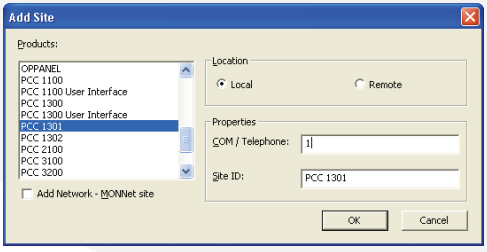

FIGURE 2-32. ADD SITE DIALOG

NETWORK SETUP

Before setting up PowerCommand for Windows to be used in network applications, the network must be set up using LonMaker for Windows. For more information on networks and naming limitations, refer to the FT-10 Network Installation and Operation Manual (900–0529). Then go through the following setup procedures.

1. If the initial setup has not been completed, go to **Start –> All Programs –> Power Generation –> Setup** and navigate to the Setup dialog. If the initial setup has been completed, start the PCW program on go to **Tools –> Setup** from the menu bar and then click on the Site Setup tab (see Figure 2-33).

2. Click on **Add** to open the Create Site dialog.

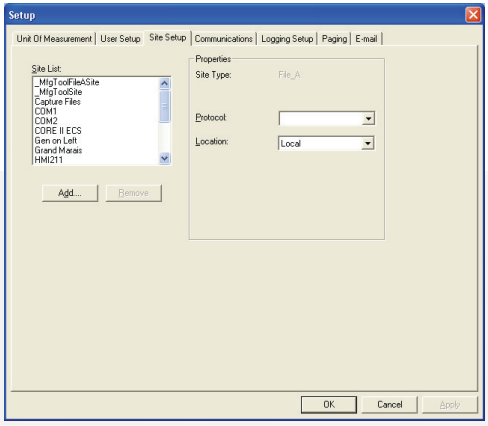

FIGURE 2-33. SITE SETUP

3. Fill in the following information (see Figure 2-34).
    - Site Type: Select Network from the drop-down list.
    - Network Type: Enter “LonWorks”
    - Network: Select your network name
    - Site Name: Re-enter your network name
    - Location: Select Local or Remote
4. Click on the **OK** button.
5. From the Site Setup dialog, select the network name from the Site List and click on **Device Setup** (see Figure 2-35).

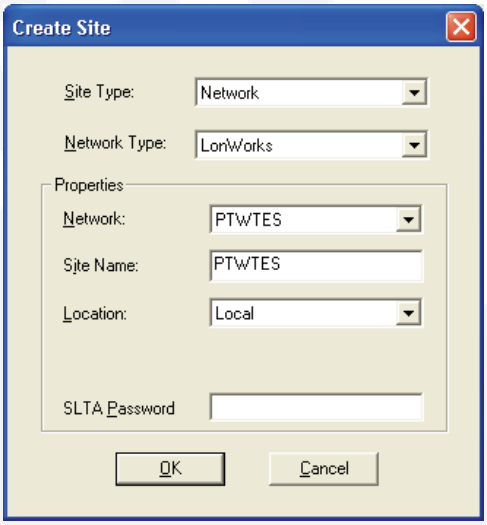

FIGURE 2-34. CREATE NETWORK SITE

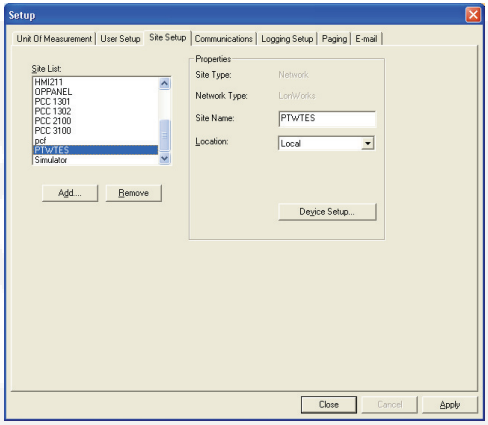

FIGURE 2-35. SELECTING THE NETWORK

6. Click on “DIM” in the Device List and select the created template (see Figure 2-36).
7. Click on the **OK** button.
8. Open the Communications dialog and select the Local or Remote connection name (see Figure 2-37).

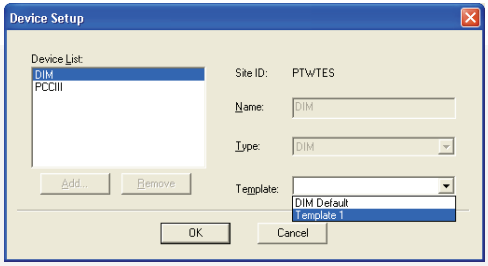

FIGURE 2-36. DIM SETUP

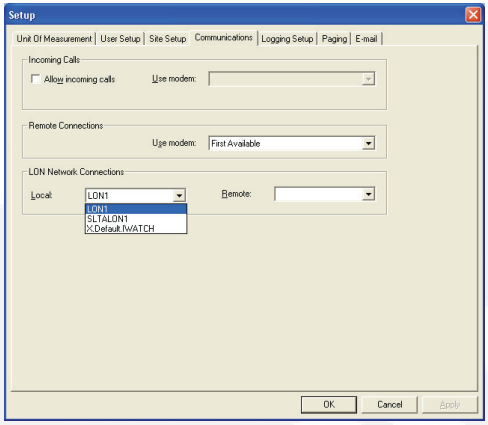

FIGURE 2-37. SELECTING THE NETWORK CONNECTION NAME

9. From the Device Explorer view, double click on the network name (see Figure 2-38).

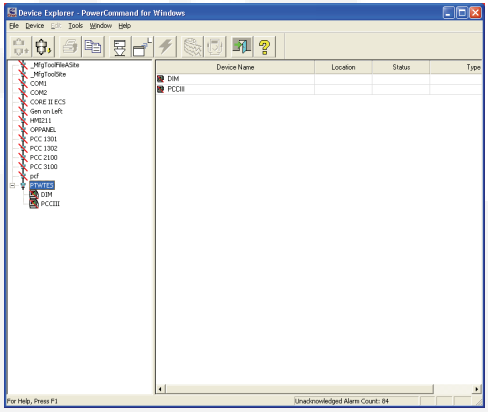

FIGURE 2-38. NETWORK ADDED TO DEVICE LIST

10. Double click on DIM to view the contents of the DIM folder. Data Log, Data Points (see Figure 2-39), and Summary View (see Figure 2-40) screens can be viewed.

    DIM relays can be activated or deactivated using the PCW Summary View screen.

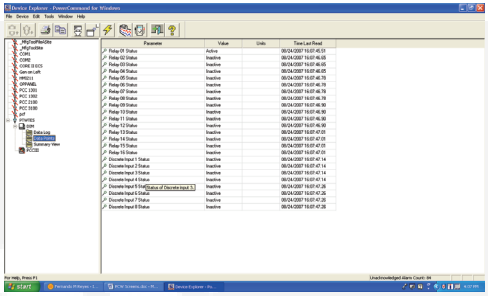

FIGURE 2-39. DATA POINTS SCREEN

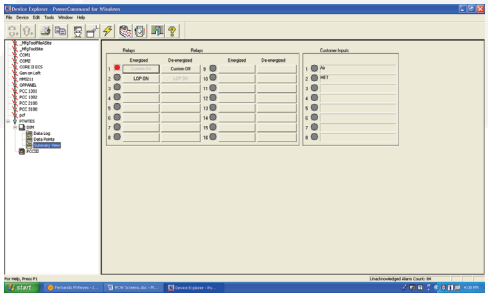

FIGURE 2-40. SUMMARY VIEW SCREEN

CCM-G and CCM-T Setup

1. Start the PCW program on go to **Tools –> Module Template Editor** from the menu bar and select either **CCMG Editor** or **CCMT Editor** (see Figure 2-41). A blank template is displayed (see Figure 2-42).

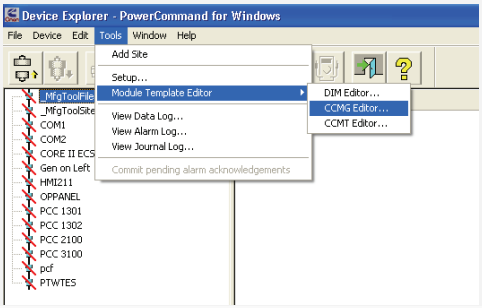

FIGURE 2-41. SELECTING THE CCM-G EDITOR

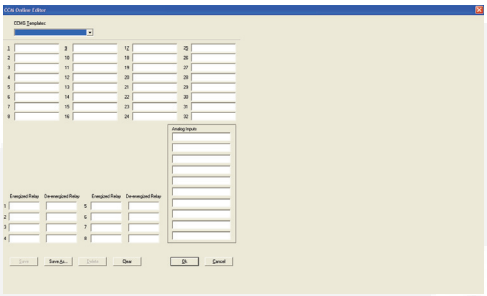

FIGURE 2-42. BLANK CCM-G EDITOR

2. Either accept the default template or create your own.

   - To accept the default template (see Figure 2-44), select **CCM Default** from the drop-down list under "CCMG (or CCMT) Template:"

   - To create your own template, fill in the appropriate information in the required fields (such as shown in Figure 2-45) and click on **Save As**. The Template Name dialog is displayed (see Figure 2-43). Enter the name and click on the **OK** button.

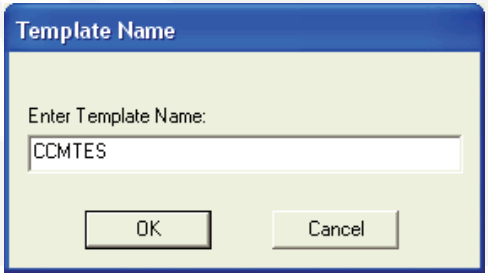

FIGURE 2-43. TEMPLATE NAME

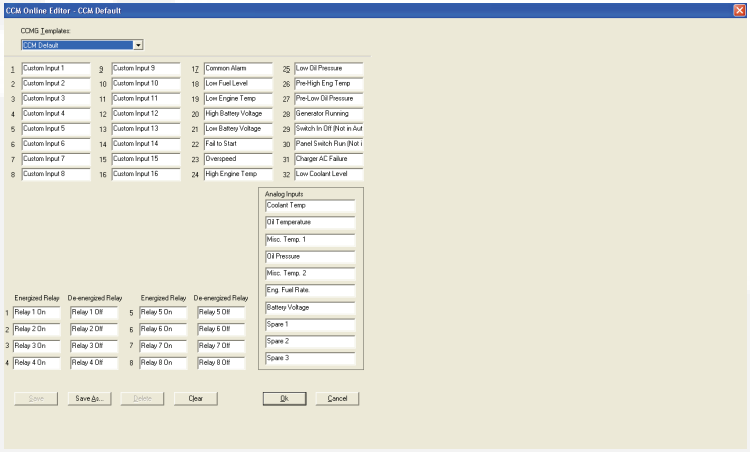

FIGURE 2-44. DEFAULT CCM-G TEMPLATE

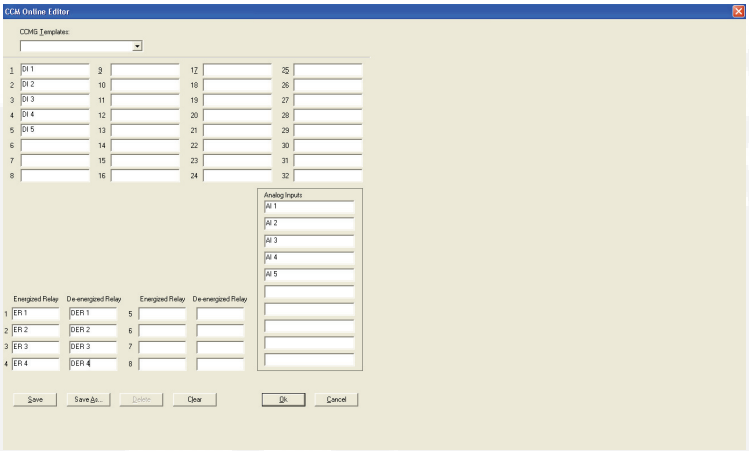

FIGURE 2-45. CUSTOM CCM-G TEMPLATE

3. Close Power Command for Windows.

4. Go to **Start –> All Programs –> Power Generation –> Setup** and navigate to the Site Setup dialog.

5. Click on **Add**. The Create Site dialog is displayed.

6. Fill in the following information (see Figure 2-46).

   - Site Type: Select Network from the drop-down list.
   - Network Type: Enter "LonWorks"
   - Network: Select your CCM name
   - Site Name: Re-enter your CCM name
   - Location: Select Local or Remote

7. Click on the **OK** button.

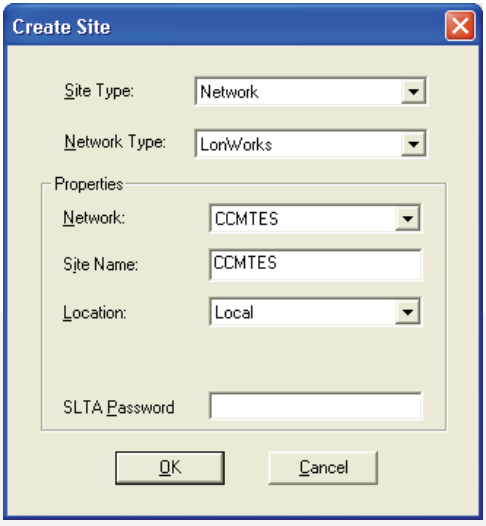

FIGURE 2-46. CREATE CCM SITE

8. From the Site Setup dialog, select the CCM name from the Site List and click on **Device Setup** (see Figure 2-47).

9. Click on "CCMG" in the Device List and select the created template (see Figure 2-48).

10. Click on the **OK** button.

11. Open the Communications dialog and select the Local or Remote connection name (see Figure 2-49).

12. Start Power Command for Windows and click on the CCM network (see Figure 2-50). Alarms, Data Log, Data Points (see Figure 2-51), and Summary View (see Figure 2-52) screens can be viewed.

    CCM relays can be activated or deactivated using the PCW Summary View screen.

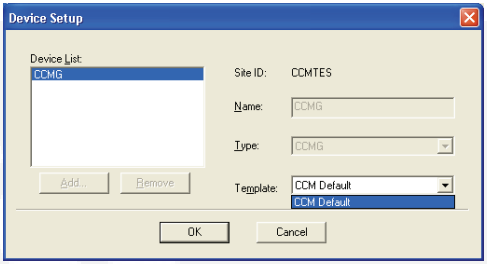

FIGURE 2-48. CCM SETUP

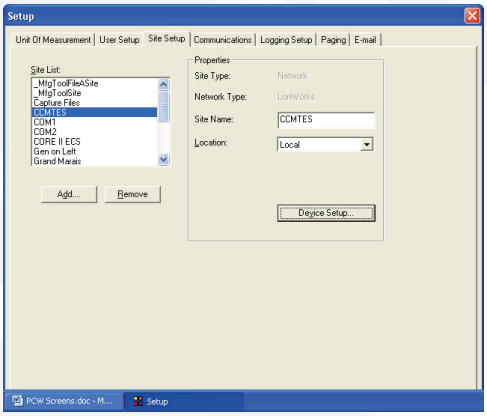

FIGURE 2-47. SELECTING THE CCM

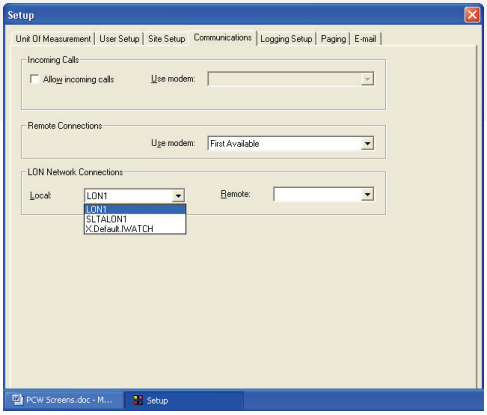

FIGURE 2-49. SELECTING THE NETWORK CONNECTION NAME

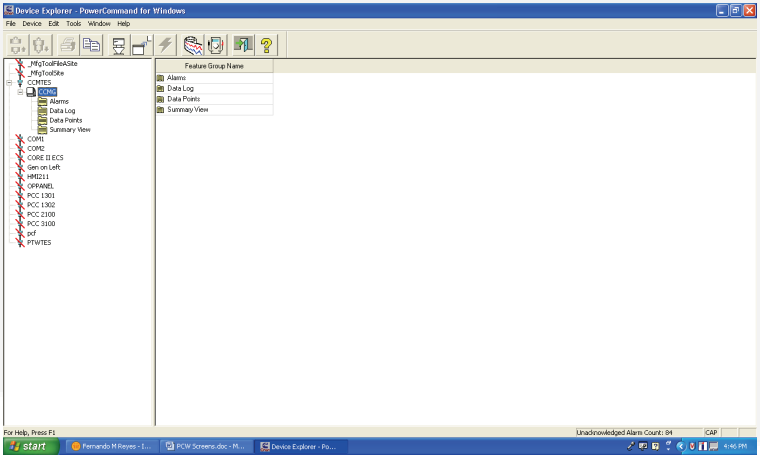

FIGURE 2-50. DEVICE EXPLORER – CCM

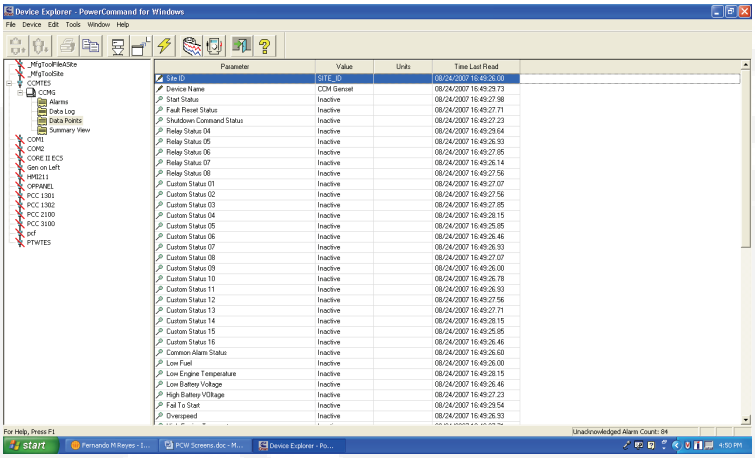

FIGURE 2-51. DATA POINTS

The Data Points screen includes information on the following parameters.

Site ID	SITE_ID
Device Name	CCM
Genset	
Start Status	Inactive
Fault Reset Status	Inactive
Shutdown Command Status	Inactive
Relay Status 04	Inactive
Relay Status 05	Inactive
Relay Status 06	Inactive
Relay Status 07	Inactive
Relay Status 08	Inactive
Custom Status 01	Inactive
Custom Status 02	Inactive
Custom Status 03	Inactive
Custom Status 04	Inactive
Custom Status 05	Inactive
Custom Status 06	Inactive
Custom Status 07	Inactive
Custom Status 08	Inactive
Custom Status 09	Inactive
Custom Status 10	Inactive
Custom Status 11	Inactive
Custom Status 12	Inactive
Custom Status 13	Inactive
Custom Status 14	Inactive
Custom Status 15	Inactive
Custom Status 16	Inactive
Common Alarm Status	Inactive
Low Fuel	Inactive
Low Engine Temperature	Inactive
Low Battery Voltage	Inactive
High Battery VOltage	Inactive
Fail To Start	Inactive
Overspeed	Inactive
High Engine Temperature	Inactive
Low Oil Pressure	Inactive
Pre-High Engine Temperature	Inactive
Pre-Low Oil Pressure	Inactive
Generator Running	Inactive
Panel Switch Off	Inactive
Panel Switch Run	Inactive
Charger AC Failure	Inactive
Low Coolant Level	Inactive
Voltage L1–N	0
Voltage L2–N	0
Voltage L3–N	0
Frequency	0.0
Current L1	0
Current L2	0
Current L3	0
Power Factor	0.00000
Kilowatts	0
KVAR	0
KVA	0
Battery Voltage	0.0
Oil Pressure	0.0
Oil Temperature	–273.2
Misc Temperature 1	–273.2
Misc Temperature 2	–273.2
Engine Coolant Temperature	–273.2
Engine Fuel Rate	0
Engine Speed	0
Spare 1	0.00
Spare 2	0.00
Spare 3	0.00

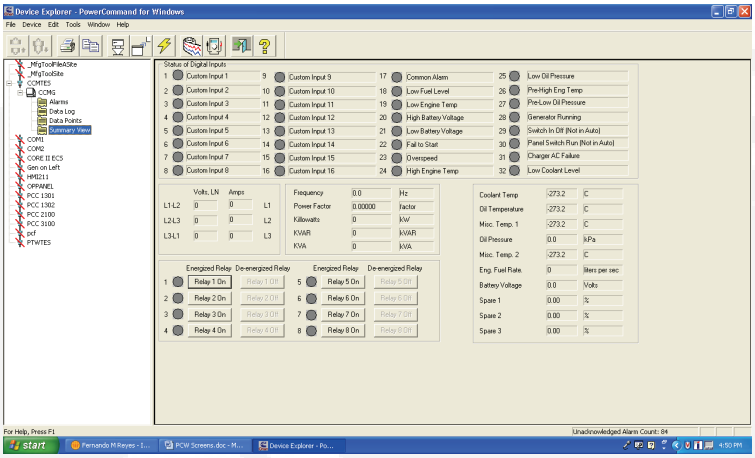

FIGURE 2-52. SUMMARY VIEW

START MENU GROUP SHORTCUTS

PCW installs **Start-Menu** shortcuts for the PCW applications (Figure 2-53). The **Read Me, Setup**, and **Uninstall** features are described in this section. **Strip Chart** and **Monitor** are described in their own sections. The **PowerCommand for Windows** (PCW) program is covered in an overview in Section 5. **RegEchDb** is only accessible if an LNS server and LonMaker are installed. The **User Guides** feature provides a link to this manual. Clicking on any one of these shortcuts launches the selected application.

ReadMe File

When PCW is installed, a ReadMe file is copied to the Power Generation group. This file contains last minute changes and instructions for using PCW. Always review these instructions during or after the initial software installation.

Uninstall

Refer to the following section for instructions on how to uninstall PCW.

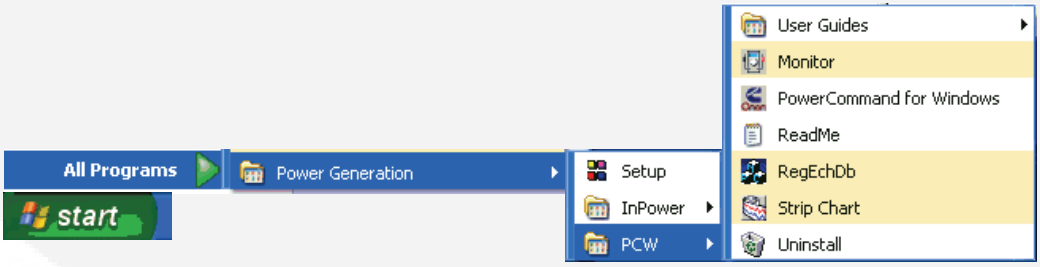

FIGURE 2-53. START MENU GROUP SHORTCUTS

UNINSTALL PCW 6.0

This procedure describes how to uninstall PCW 6.0. The Uninstall program is accessed from the PCW program group.

The uninstall program does not remove the directory "C:\Program Files\Power Generation".

To uninstall PCW:

1. Click on the **Start –> All Programs** menu, select **Power Generation – PCW – Uninstall**.
2. The program begins and displays the *Select Tools* window. Click inside the checkbox next to PowerCommand for Windows. Figure 2-54. Then click on the **Next** button to continue. Use the **Cancel** button to stop the uninstall program.
3. The *Uninstall* confirmation window is displayed. Click on the **OK** button to remove PCW from the PC. Figure 2-55.

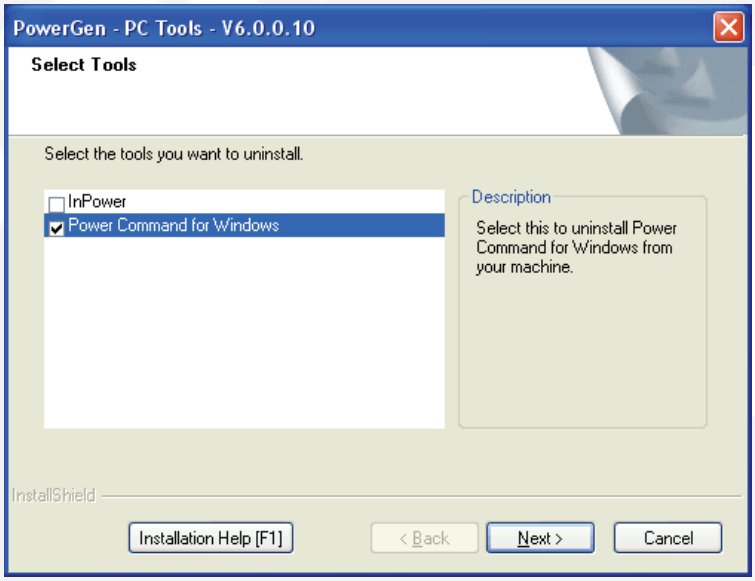

FIGURE 2-54. UNINSTALL PCW

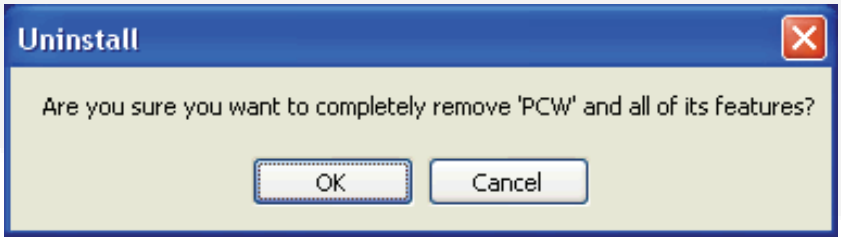

FIGURE 2-55. UNINSTALL – CONFIRMATION

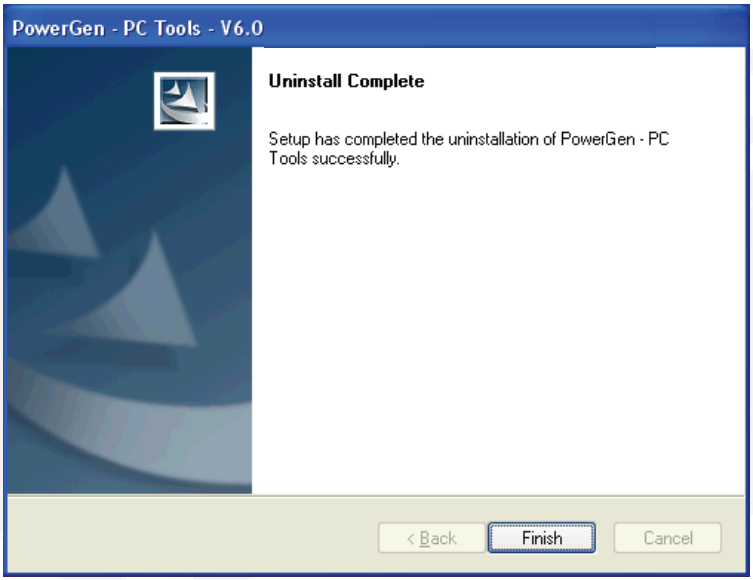

FIGURE 2-56. UNINSTALL – COMPLETE

4. An *Uninstall Complete* confirmation window is displayed to indicate that PCW was successfully removed. Click on the **Finish** button to close this window. Figure 2-56.

3. Network Applications

To monitor devices over an FT-10 network, additional installation steps are required. Network applications require the Echelon LNS server to be installed on the Monitoring PC.

For monitoring a local network, the PC requires a network interface (gateway) driver installation and setup.

In all network applications the network site database must be imported for use with PCW. Each of these procedures are described in this section.

Review the typical network installation drawings shown in Figure 1-2. If the application does not call for monitoring devices on a network, do not perform the procedures in this section.

A backup copy of the network site database is required to complete the PCW setup. Contact the network installer to obtain a backup copy of the site database. This file is required to enable PCW to create a Site for the network.

NOTE: To monitor a PCC2100 controlled genset, a PCATS, or any device other than a PCC3100, PCC3200, or PCC3201, an FT-10 network will be required.

The following setup steps must be completed to setup the monitoring PC for use over an FT-10 network.

- LNS Server Installation
- LNS Server Service pack Installation
- Gateway Driver Installation and Setup
- Dialing Configuration for Alarms
- Import the Network Site Database
- Preparing the Site Database File for PCW
- Import the Network Site Database
- Local or Remote Site Setup

LNS SERVER INSTALLATION

The PCW package for network applications includes a support CD for the LNS server and network gateway drivers.

This installation includes installing a service pack (SP7) update to the LNS server. Close all other programs, including the Microsoft Office shortcut bar. Close any programs that have been docked to the taskbar.

To install LNS software:

1. Insert the LNS CD into the CD drive.
2. Select **Run** from the taskbar **Start** menu.
3. At the prompt, type:
   D:\LNS Server\Setup.exe
   (or use the drive letter of the CD drive) and then select **OK,** or use the **ENTER** key.
   (If the setup program does not start, use the Run dialog Browse button to locate the LNS Server setup.exe file. Double click on the file to start the install.)
4. Follow the on-screen prompts, if prompted to remove any disks before rebooting, remove any disks ***except*** the installation CD.
5. The program will begin the setup and display a status bar showing the progress as the LNS server files are copied to the PC.

When the installation is completed, leave the LNS CD in the CD drive and proceed to the SP7 service pack installation.

To install the SP7 Service Pack:

Select **Run** from the the **Start** menu again, to begin the service pack installation.

1. At the prompt, type:
   D:\LNS3SP7.exe
   (or use the drive letter of the CD drive) and then select **OK,** or use the **ENTER** key.
   (If the setup program does not start, use the Run dialog Browse button to locate the service pack .exe file. Double click on the file to start the install.)
2. The install program will extract the service pack files and begin the installation. At the Welcome dialog, select **Next**, to install the files.
3. At the LNS Version ... Detected dialog, select **Yes**, to proceed with the installation.
4. Review the license agreement and select **Yes,** to accept the terms of the agreement.
5. Fill in the Name and Company information and select **Next**, to proceed.
6. Accept the default destination folder by selecting **Next**.
7. At the Setup Complete dialog, select **Finish** to restart the computer and complete the installation.

When the service pack installation is finished, close the Echelon LNS Utilities (if displayed) close it and proceed to the gateway driver installation instructions.

GATEWAY DRIVER INSTALLATION AND SETUP

The LNS CD contains drivers for FT-10 network gateway devices. Install the driver that matches the gateway device type used with the monitoring PC. Most applications will use either an SLTA-10 external gateway, or a PCLTA-20 gateway.

In this example the SLTA-10 installation and setup will be described.

1. Use Windows explorer to locate the gateway driver folder for the gateway device type used with the monitoring PC (in this case SLTA-10). Double click on the **slta10....exe** file to begin the driver installation.
2. From the WinZip Extractor window, select **Next** to begin the setup.
3. From the Setup window, select **Next** to view the license agreement.
4. Review the license agreement and select **Yes,** to accept the terms of the agreement.
5. In the Choose Destination Location window, select **Next**, to use the default destination (recommended).
6. In the Select Program Folder window, select **Next**, to create the program folder.
7. Select **No** to the option of accessing the file from DOS.
8. Click on the **Finish** button to complete the installation setup.

Gateway Module Settings

Launch the SLTA Link Manager from the **Start** menu (or the taskbar icon). Click on the **Link** menu and select **New**. Follow the instructions to setup the gateway for either local or remote applications.

Local Setup: For a local network application, enter the name and type for the link. **To operate correctly, the name must be entered exactly as shown.**

Name: LocalSLTALON1 and click on the **Local** button, click on the **Update Identifier** box to select it, then click on **Next** (Figure 3-1).

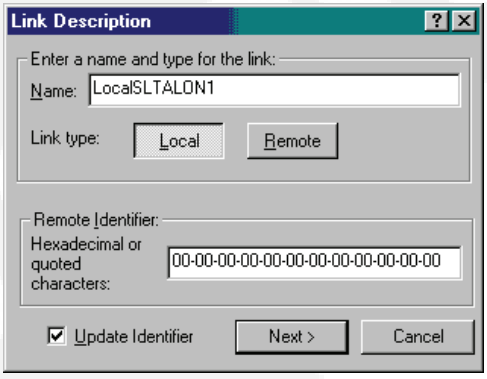

FIGURE 3-1. SLTA LOCAL SETUP

Use the **Serial Port** drop-down arrow to select the serial port that the SLTA is attached to on the monitoring PC. Use the **Speed** drop-down arrow to select **38400** as the communication speed, click on **Next** to continue.

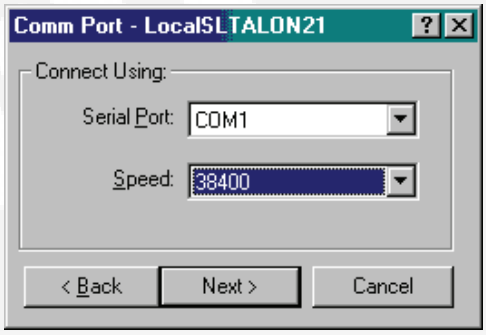

FIGURE 3-2. SLTA SETUP SPEED

Remote Setup: For a remote network application, enter the name and type for the link, use the following name. **To operate correctly, the name must be entered exactly as shown.**

Name: RemoteSLTALON1 and click on the **Remote** button. Enter the network name in single quotes. Click on the **Update Identifier** box to select it, then click on **Next** (Figure 3-3).

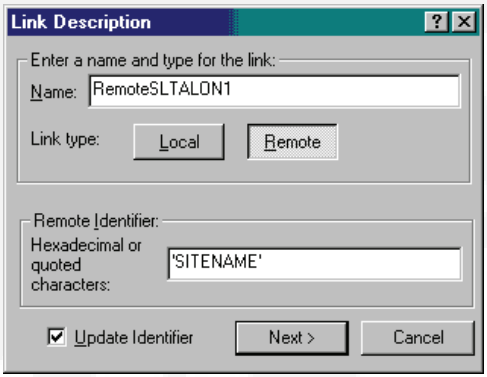

FIGURE 3-3. SLTA REMOTE SETUP

Use the Dialing Address dialog to enter the area code (if applicable) and phone number of the phone line that is connected to the modem at the remote site. Skip the Configure Line setting, connection speed will be set automatically. Click on the **Next** button and then the **Finish** button to complete the setup.

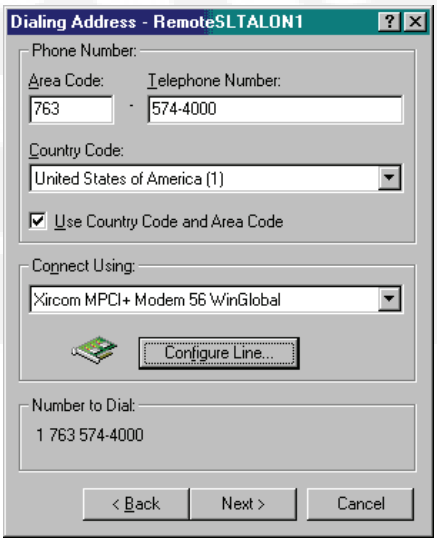

FIGURE 3-4. SLTA REMOTE DIALING ADDRESS

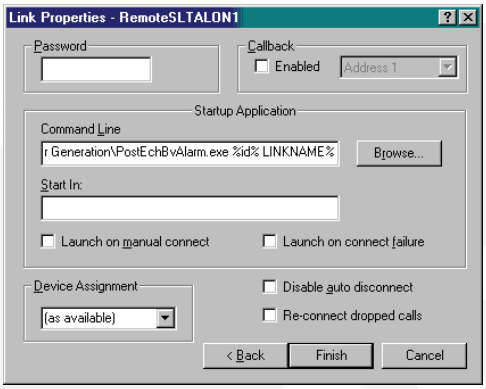

FIGURE 3-5. SLTA LINK PROPERTIES

Alarm Settings

After making the initial local or remote gateway settings, a Link Properties dialog box is displayed. This feature is used to setup the gateway for delivering alarms.

Setup the Command Line by clicking on the **Browse** button. Navigate to and select the a file named **PostEchBvAlarm.exe**. This file is located in the following directory:

C:\Program files\common files\cummins shared\power generation

Double click on each folder, beginning with the Program Files folder, until you reach the **PostEchBvAlarm.exe** file. Double click on (or open) this file, the directory path and file will be added to the Command Line.

The Command Line needs to be appended with additional instructions. Refer to Figure 3-5. Click inside the Command Line and use the right arrow key, to reach the end of the Command Line (or use the **End** key). Enter the following text, including spaces, enter a space before the first percent symbol:

%id% %LINKNAME%

Click on **Finish** , to complete the Link Properties settings. Click on **OK**, to close the SLTA Link Manager.

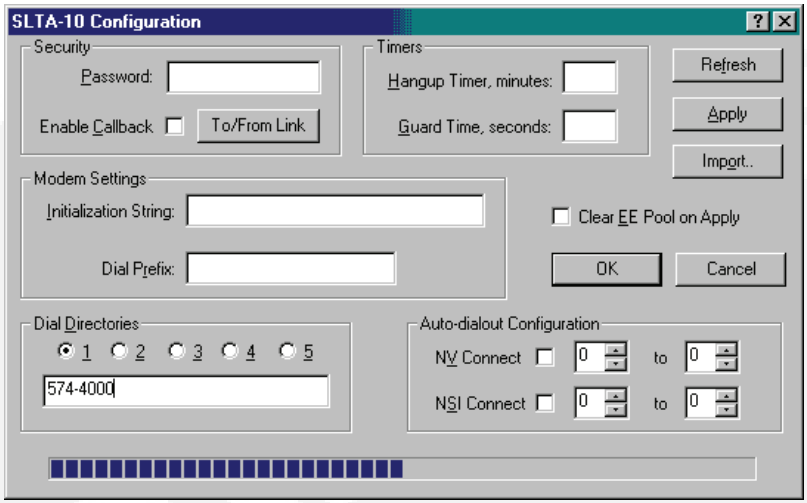

FIGURE 3-6. SLTA DIALING CONFIGURATION

Dialing Configuration for Alarms

In this step, the PC must be connected to the SLTA-10 network interface (gateway).

This feature is used to configure the gateway module with the phone number of the monitoring site(s). Start the SLTALink Manager from the **Start** menu (or the taskbar icon). Click on the **Link** menu and click on **Select/Action**, then select the gateway from the Link Name list to be setup for dialing out to the monitoring PC. Click on the gateway, and click **OK**.

Click on the Devices menu, select **ConfigureSLTA...** . When the Configuration dialog is displayed (Figure 3-6), click on the **Dial Directories** number **1** button. Enter the phone number of the modem at the primary monitoring site. Click on the **Apply** button to save the change.

Repeat the Dial Directories settings to configure up to four more monitoring sites. When an alarm is sent to the first site, if it is not received the alarm will go to the second site, and continue down the list of sites until the message is received.

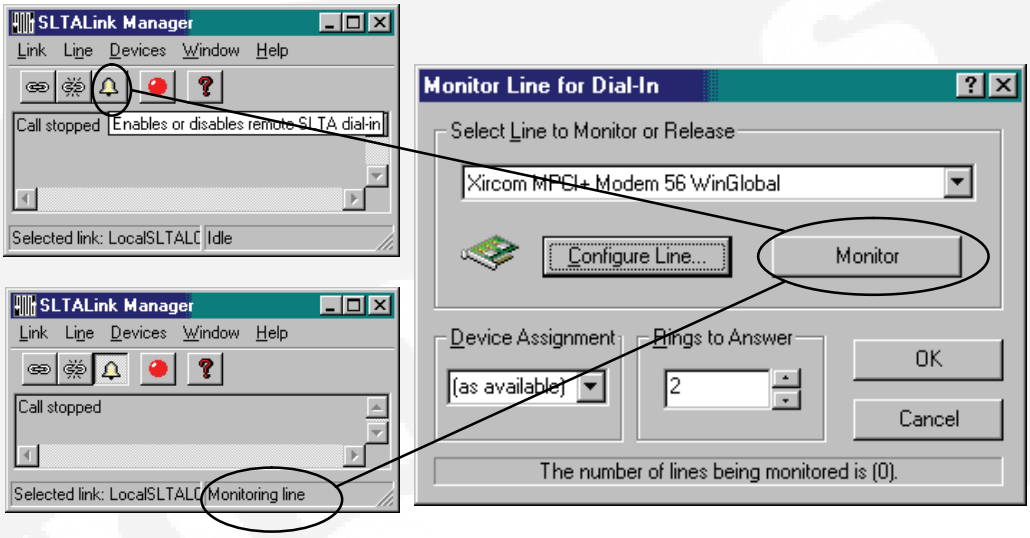

FIGURE 3-7. SLTA DIALING CONFIGURATION

Enabling the Monitoring PC to Receive Remote Alarms

In this step, the SLTA Link Manager is configured to enable the monitoring PC to receive remote alarm messages. **This is required for monitoring remote sites when PCW is operating, but the monitoring PC is not connected to the site.**

Start the SLTALink Manager from the **Start** menu (or the taskbar icon). Click on the **Bell** shaped toolbar icon.

The **Monitor Line for Dial-In** dialog will be displayed. Click on the **Monitor** button (Figure 3-7) to enable the monitoring PC to receive remote alarms. Then click **OK**. The Bell icon will be highlighted and the SLTA Link Manager status line will display the message Monitoring Line.

To disable this feature, click on the **Bell** icon again and click on the **Release** button.

IMPORTING THE NETWORK SITE DATABASE

The network site backup database is created by the network installer. The network installer uses the LonMaker for Windows **Backup** feature, and the **Backup Database** selection. LonMaker for Windows creates the backup copy of the network site, as a compressed (ZIP) file.

Note: The network name (site ID) must consist of no more than seven characters. The characters can only be upper case letters, numbers and underscores. Use of lower case letters, special characters and spaces will prevent PCW from recognizing dialed-in alarms from the site. Make sure the network installer does not use lower case letters, special characters, or spaces for the network name.

Device names in network applications must consist of no more than eight characters. The characters can only be upper case letters. Use of lower case letters, special characters, numbers and spaces will prevent PCW from recognizing the device name in an alarm message.

The site backup database file is usually small enough to be transferred to a floppy disk. Locate the site backup file (***sitename*.zip**) using Windows Explorer. Double click on the file to launch the **WinZip** utility.

Extract the file to the root drive on the monitoring PC (typically the C:\ drive). Click on the **Use Folder Names** checkbox in the Extract dialog (Figure 3-8), to maintain the correct directory structure.

Note: In applications where the site will be monitored by both a local PC and a remote PC, two unique copies of the network site database will be required. The network site database file names will be the same, but one file should be identified for use on the local PC and the other file should be identified for use on the remote PC.

When finished extracting the file, close the WinZip program and close Windows Explorer.

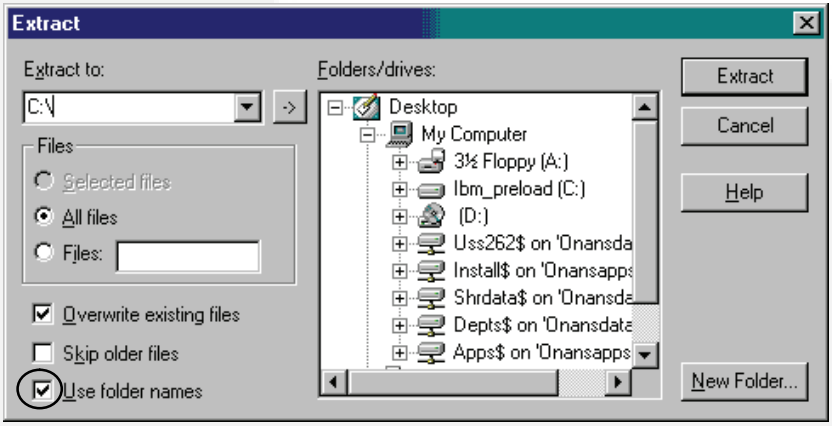

FIGURE 3-8. EXTRACT SETTINGS

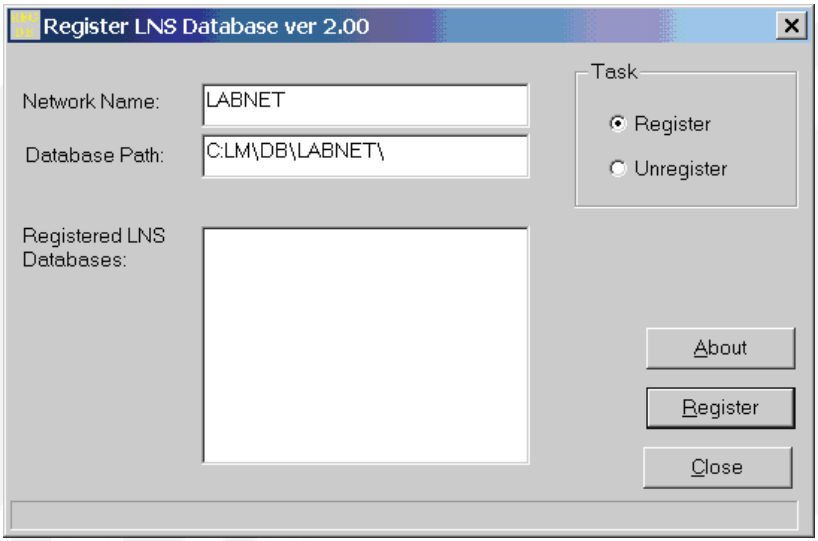

FIGURE 3-9. REGISTERING NETWORK SITE DATABASE

Prepare the Network Site Database File for PCW

To make the network site database file available to PCW, a program named RegEchDB must be run on the PC. Perform this procedure after the network site database has been imported.

1. Launch the RegEchDB program from the **Start –> All Programs –> PowerGeneration –> Power Command for Windows** folder. Click on **RegEchDB** to start the program.
2. Enter the network name. Use the exact same name as the network name provided by the network installer. (Up to seven characters consisting of only upper case letters, numbers and underscores.)
3. Enter the database path. Typically C:LM\DB*network name*. See example in Figure 3-9.
4. Confirm that the **Register** Task button is selected. Click on the **Register** button in the lower right corner of the window.
5. When the RegEchDB program finishes, a popup message informs the user that the network has been successfully registered. Click on the **OK** button to close this message. Figure 3-10
6. Click on the **Close** button, when finished preparing (registering) the network database.

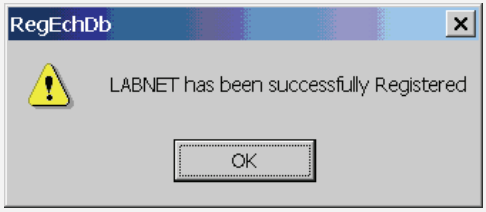

FIGURE 3-10. SITE DATABASE INSTALLED

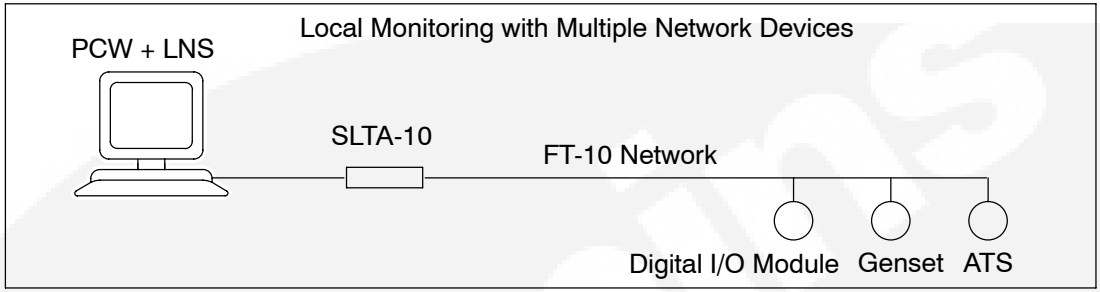

FIGURE 3-11. TYPICAL LOCAL NETWORK MONITORING SETUP

LOCAL NETWORK SITE SETUP EXAMPLE

The following procedures describe how to set-up PCW for local communication.

The **Setup** feature is accessed from the **Start** menu by clicking on the **All Programs –> Power Generation** program group. Click on **Setup**, to launch the Setup dialog.

In this example the user will define a new site for a local network application.

Site Setup

Click on the **Site Setup** tab to access the **Site Setup** dialog (Figure 2-14). Click on the **Add** button, to display the **Create Site** dialog.

Create Site

Enter the following information in the dialog to create a new remote site:

Site Type – Select **Network** from the drop down list.

Network – Use the drop–down list and select the name for the network to be monitored. (IF the network name is not present in the drop-down list, cancel the setup and return to the section on importing the network database in this section.)

Site Name – Enter the name as it appears in the preceding Network name.

Location – Enter **Local,** from the drop down list.

SLTA Password: This feature is typically not used. If the SLTA has a password, enter it here and write the password down for future use.

Click on the **OK** button to save the new site. This establishes the site, in network applications it is not necessary to create devices for the site because the devices that are at the site are imported from the network database.

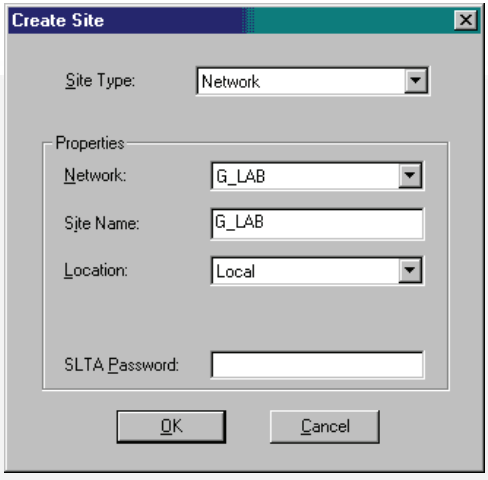

FIGURE 3-12. CREATE SITE DIALOG

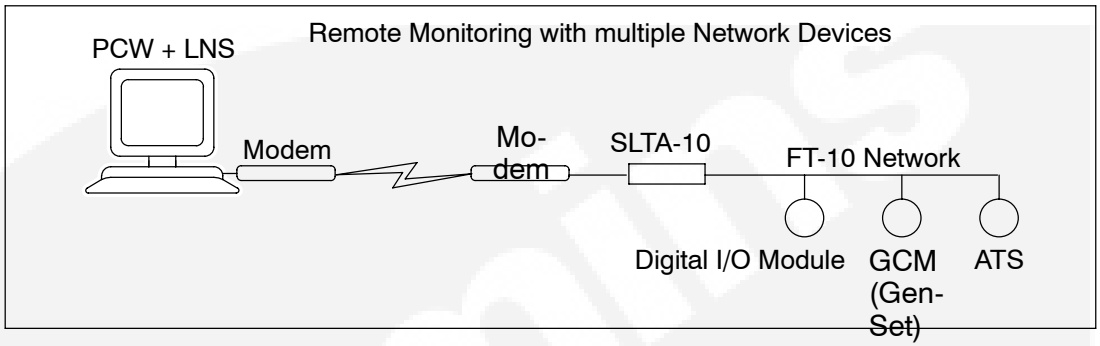

FIGURE 3-13. TYPICAL REMOTE NETWORK MONITORING SETUP

REMOTE NETWORK SITE SETUP EXAMPLE

The following procedures describe how to set-up PCW for remote communication.

The **Setup** feature is accessed from the **Start** menu by clicking on the **All Programs –> Power Generation** program group. Click on **Setup**, to launch the Setup dialog.

In this example the user will define a new remote network site.

Site Setup

Click on the **Site Setup** tab to access the **Site Setup** dialog (Figure 2-14). Click on the **Add** button, to display the **Create Site** dialog.

Create Site

Enter the following information in the dialog to create a new remote site:

Site Type – Select **Network** from the drop down list.

Network – Use the drop–down list and select the name for the network to be monitored. (IF the network name is not present in the drop-down list, cancel the setup and return to the section on importing the network database in this section.)

Site Name – Enter the name as it appears in the preceding Network name.

Location – Enter **Remote,** from the drop-down list.

Telephone Number: Enter the telephone number of the phone line connected to the modem at the site location.

SLTA Password: This feature is typically not used. If the SLTA has a password, enter it here.

Click on the **OK** button to save the new site. This establishes the site, in network applications it is not necessary to create devices for the site because the devices that are at the site are imported from the network database.

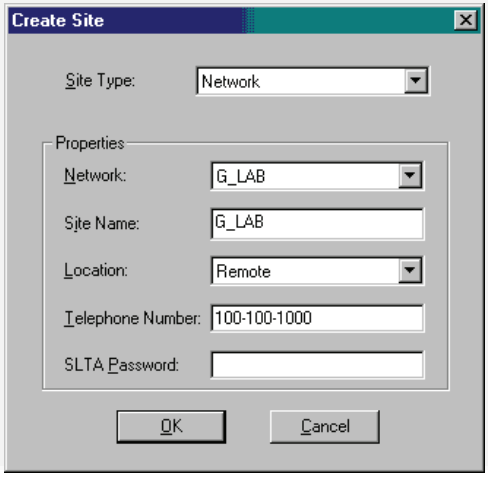

FIGURE 3-14. CREATE SITE DIALOG

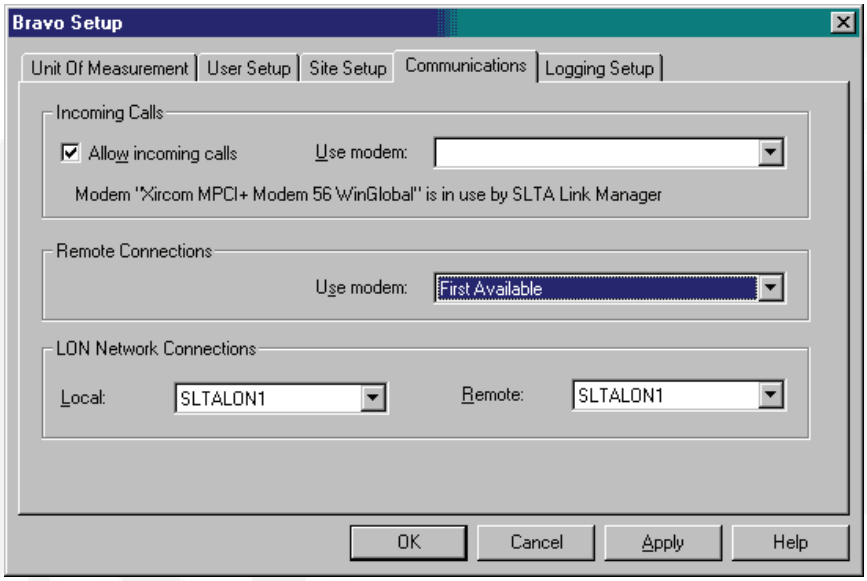

FIGURE 3-15. NETWORK COMMUNICATION SETUP

COMMUNICATIONS SETUP NETWORK SITE EXAMPLE

After setting up PCW for either a local or remote network site, the Communications setup needs to be completed.

The Communications setup feature is used to enable incoming calls for remote applications and setup remote and network connections.

Click on the **Communications** setup tab. Enable the **Allow incoming calls** checkbox, to allow incoming calls (alarms). (Check mark appears in checkbox when the feature is enabled.)

Next, establish a Lon Network Connection for Local or Remote, or both if you plan to make local and remote network connections.

Local: Click on the drop-down arrow and select **SLTALON1** from the list (or use **PCCLON1** if using PCC-10 card). Click on the **Apply** button (Figure 3-15).

Remote: Click on the drop-down arrow and select **SLTALON1** from the list (or use **PCCLON1** if using PCC-10 card). Click on the **Apply** button.

Click on the **OK** button when finished.

4. PCW Basics

This section describes the main window and user interface features.

STARTING PCW

Start PCW by selecting **All Programs** from the **Start** menu. Click on **Power Generation** and then click on **PCW**. The programs in the PCW program group will be displayed. Click on **PowerCommand for Windows,** from within the **PCW** group, to launch the PCW program and display the PCW Main Window (Figure 4-1).

THE MAIN WINDOW

The main window, named **Device Explorer**, includes the **Menu Bar**, **Toolbar**, **Status Bar**, and the left and right window panes.

The **Menu Bar** contains the groups of commands that are used to connect to a site and a device, and access PCW features. A list of menu options is available under each main menu entry (Figure 4-2).

The PCW **Menu Bar** expands to display additional menu features when PCW is connected to a device or a file.

When a **Menu Bar** command is grayed (dimmed), the command is not available. You may need to select another action (such as connecting to a site or device) before the grayed command will be displayed in black type, indicating that the feature is available.

- To display the list of options under a menu entry, move the mouse pointer to the menu name and click on the mouse button. (Clicking refers to using the mouse select button, typically the left button.)
- To select an option from a menu list, move the mouse pointer to the option name and click on it.

The **Toolbar** provides direct graphical interface shortcuts to some of the more frequently used menu options. Buttons on the Toolbar represent frequently used tool functions.

When a **Toolbar** button is grayed (dimmed), the shortcut to that command is not available. You may need to select another action (such as connecting to a site or device) before the grayed command will be displayed in color (or black type)—indicating that it is available.

Placing the mouse pointer on a **Toolbar** button, the **Status Bar** describes the function of the button. The Status Bar also shows a description of operations as they occur.

The left window pane works like Windows Explorer to navigate the directory tree. The right window pane displays the contents (or screens) for the item selected in the left window pane.

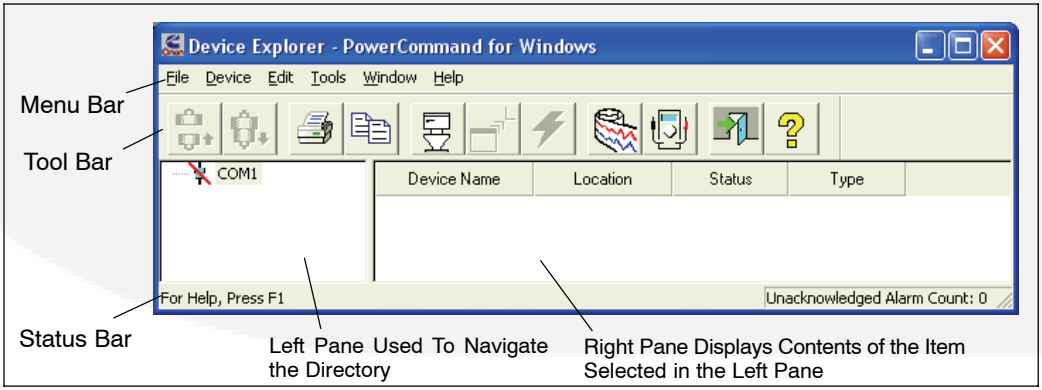

FIGURE 4-1. MAIN WINDOW

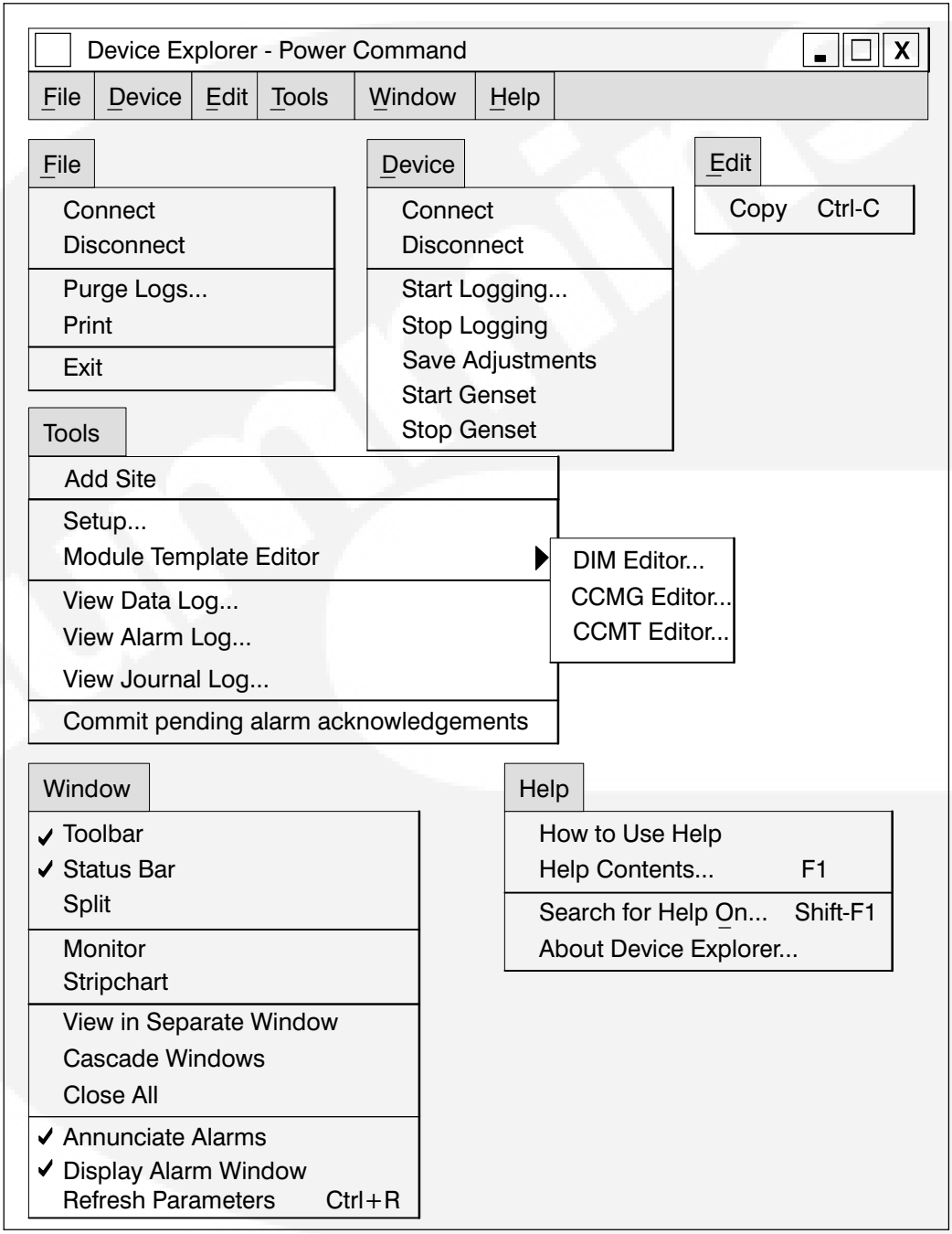

FIGURE 4-2. MENU SYSTEM CONTENTS

MENU DESCRIPTIONS

This section provides a brief description of the functions performed by each of the PCW menu commands. Some of the menus are not displayed until the program is connected to a Site or a device.

Several of the menu features have Toolbar shortcuts (see Figure 4-3), and some directories can be opened (or connected to) by double clicking on the item from the directory tree, in the left window.

File

The **File** menu allows the user to **Connect** to and **Disconnect** from a Site. *PCW* uses the term *Site* to refer to a device location that is being monitored. A site can be either local or remote. In network applications a single site may consist of one or more devices. The Site setup, (described in Section 2, includes the *COM Port* that the site is connected to on the monitoring PC.

The **File** menu allows the user to **Purge Log Data** that allows the user to purge old data from the log files. There is also a **Print** command that allows the user to print the current view, and there is an **Exit** selection, for exiting PCW.

Device

The **Device** menu is used to **Connect** to, and **Disconnect** from, a device. In order to monitor a device and receive alarm messages from it, PCW needs to be connected to the device. *PCW uses the term device when referring to a controller such as the Genset control.*

The Device menu can be used to **Start Logging** and **Stop Logging** a preselected group of data points for the connected device. PCW can be used to change a few of the devices settings, then use the **Device** menu to **Save Adjustments**. (Refer to Section 8). The **Device** Menu can also be used to **Start** or **Stop** a generator set.

Edit

The **Edit** menu can be used to **Copy** one or more data points, for use in another PCW feature like Strip Chart or Compare.

Tools

The **Tools** menu can be used to launch the **Setup** program for PCW. Starting this program from within PCW will cause the program to close all connected sites. Or the **Add** a local or remote **Site** feature can be used.

Tools provides a **Module Template Editor** for DIM's and CCM's. This feature allows you to create custom templates and edit the labels for relays and customer inputs.

A view (or report) can be created to look at the information contained in the **Data Log**, **Alarm Log**, or **Journal log**.

The **Commit Pending Alarm Acknowledgements** feature allows the user to purge alarms from the alarm log file for the connected device.

The **Window** menu can be used to set the PCW user preferences by enabling or disabling the **Toolbar** and **Status Bar**, resizing the left and right pane with **Split**, and choosing to have incoming alarm messages annunciate and display in a pop–up window.

The right pane in PCW can be spawned into a new window with the **View in Separate Window** command. Open windows can be **Cascaded** or **Closed** from the **Window** menu.

The **Monitor** and **Strip Chart** features can be launched from the Window menu.

The **Refresh** feature can be used to update all of the data points displayed in the Value field.

Help

The **Help** menu commands are used to find online help information. **Help** is also used to display PCW product and version information.

USER INTERFACE

Frequently used commands have keyboard shortcuts and toolbar access. Only commands applicable to the current active window are enabled. All other commands are grayed out.

Keyboard Access

PCW uses standard Windows keyboard conventions.

The underlined letter indicates the keyboard selection for a given menu option. For example, refer to the File Menu in Figure 4-3.

- To select the File menu, press and hold the "Alt" key and type an "F" (**Alt F**).
- To select a menu feature like Connect from the File drop down menu, type a (**C**).

Toolbar

Some frequently used commands have toolbar shortcut buttons. Figure 4-3 shows the Toolbar and lists what each of the buttons represent.

Connect/Disconnect: Use to either **Connect**, or **Disconnect**, to make or brake a connection with a site. Availability of this tool button toggles between the Connect and Disconnect icon, depending on whether the user is connected or disconnected.

Print Current View: Brings up a print dialog used to print the current view.

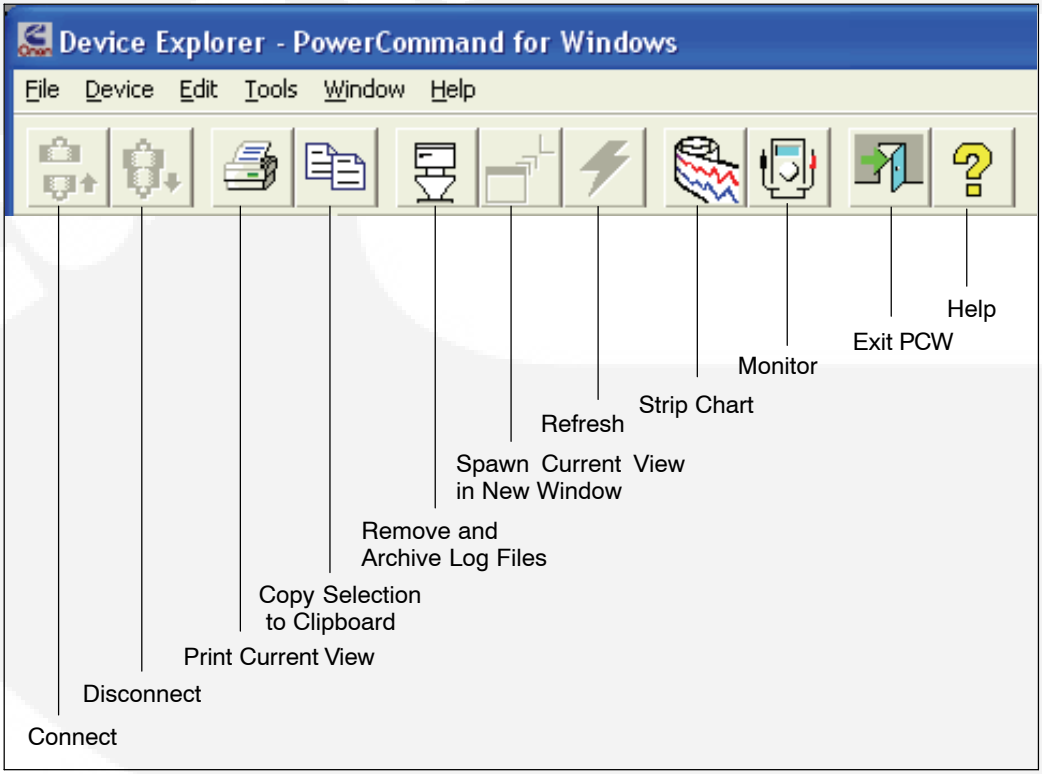

FIGURE 4-3. TOOLBAR

Copy Selection: Allows the user to copy one or more data points, for use in another PCW feature, like Strip Chart or Compare.

Remove and Archive Logs: Provides a shortcut to a dialog used to purge and archive old data from the log files.

Spawn Current View in New Window: Allows the user to launch the right pane view into a new window.

Refresh: Provides an immediate update of all the parameter values for a connected device.

Strip Chart: Launches the Strip Chart application and brings up the default charting screen for the connected device. (Refer to Section 9.)

Monitor: Launches the Monitor application and brings up the default Monitor screen for the connected device.

Exit: Used to close the PCW program.

Help: Brings up the PCW online help file.

⚠WARNING ***Electrical shock and moving parts can cause severe personal injury or death. Notify personnel before starting a generator set and before performing load transfer on a transfer switch. Refer to the equipment Operator's Manual for important safety precautions.***

Genset Start/Genset Stop: When connected to a genset control or an ATS , the toolbar expands to add a **Genset Start** and **Genset Stop** button (Figure 4-4). Use this button to start or stop a genset from PCW. The **Genset Stop** button will override a genset start signal from PCW, but it will not override a remote start signal.

Notify personnel at the site, prior to using this feature, so safety precautions can be taken.

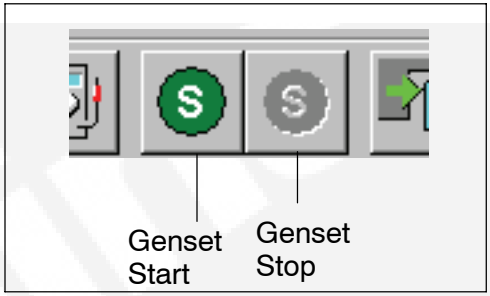

FIGURE 4-4. GENSET START/STOP TOOLBAR BUTTON

Dialog Boxes

A dialog box is a window that requires information from the user. Often, when you select a function or menu option, the software will display a dialog box. You will then provide the required information by selecting an item from a list, by clicking on an option button, or by entering text. Several different dialog boxes are used with PCW. The dialog boxes are described throughout this manual.

The following rules will apply to all the dialog boxes and system messages unless specified otherwise.

- The **Cancel** button allows you to close and exit a dialog box without saving any modifications, and without executing any commands.
- The **OK** button allows you to save any changes made and/or execute a command and close the dialog or message box.

All lists that the dialog boxes display are alphabetically sorted.

Mouse Menu Functions

In some Window views, clicking on he right mouse button will bring up a menu command related to that Window. (Some users change the right and left mouse functions to their preferences. The default settings for a two-button mouse are left for select and right for menu.)

NOTES

5. Overview of Procedures

This section provides an overview of the procedures for using PCW. Detailed descriptions of the features are described in the following sections, beginning with Section 6 on Alarms.

OVERVIEW

The first four sections of this manual cover the required setup steps and a basic description of the software. This section covers the connections for both local and remote applications along with basic operating procedures.

⚠WARNING ***Electrical shock and moving parts can cause severe personal injury or death. Notify personnel before starting a generator set and before performing load transfer on a transfer switch. Refer to the equipment Operator's Manual for important safety precautions.***

PCW can be used to monitor both local and remote sites. There are site limitations with network applications. Figure 5-1 show an example of a monitoring setup with a combination of network sites and non–network sites.

Non-Network Sites: PCW will monitor multiple non-network remote and local sites.

Network Sites: PCW is limited to monitoring one remote network site and one local network site.

Combination Sites: PCW will monitor both network and non-network sites. When this combination exists a second modem and COM port is required due to differences in the protocol between network sites and non-network sites. Refer to Figure 5-1.

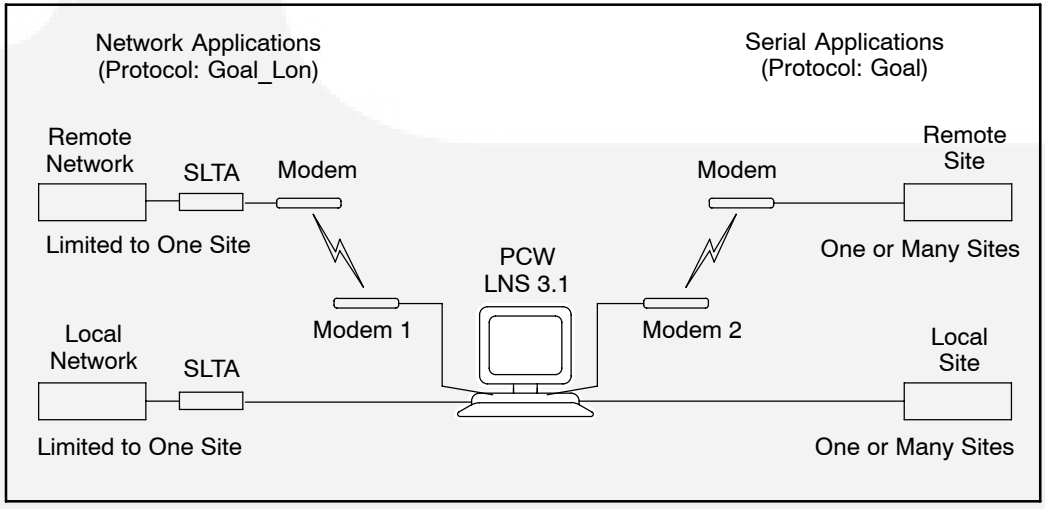

FIGURE 5-1. LOCAL AND REMOTE CONNECTIONS

CONNECTIONS TO INDIVIDUAL DEVICES (NON-NETWORK APPLICATIONS)

Connecting to a Genset

Local connection between the Monitoring PC and the genset is made with a special RS-232 serial null-modem cable. The cable has a DB9 socket on each end. PCC 3100 requires a serial communications kit for local and remote applications. Remote connections use standard modem cables.

Figures 5-2 and 5-3 show two methods of connecting to a PCC 3200 genset. The serial cable from the service PC is connected to the customer connection box. Figure 5-4 shows how to connect to a PCC 2100 control and Figure 5-5 shows how to connect to a PCC 3100 control.

Special cable part numbers are shown for the the following connection methods.

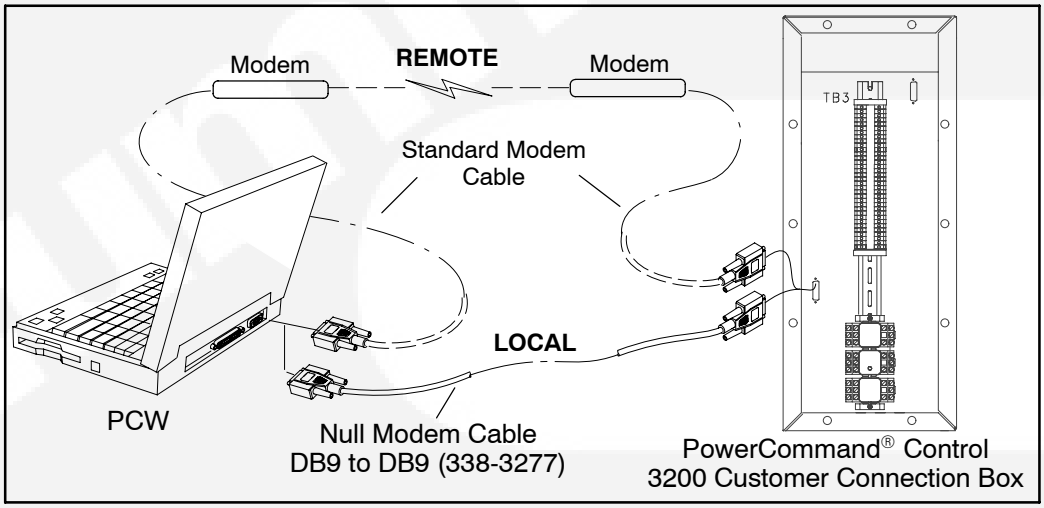

FIGURE 5-2. LOCAL AND REMOTE CONNECTION – PCC 3200 TYPE 1 CONNECTION BOX

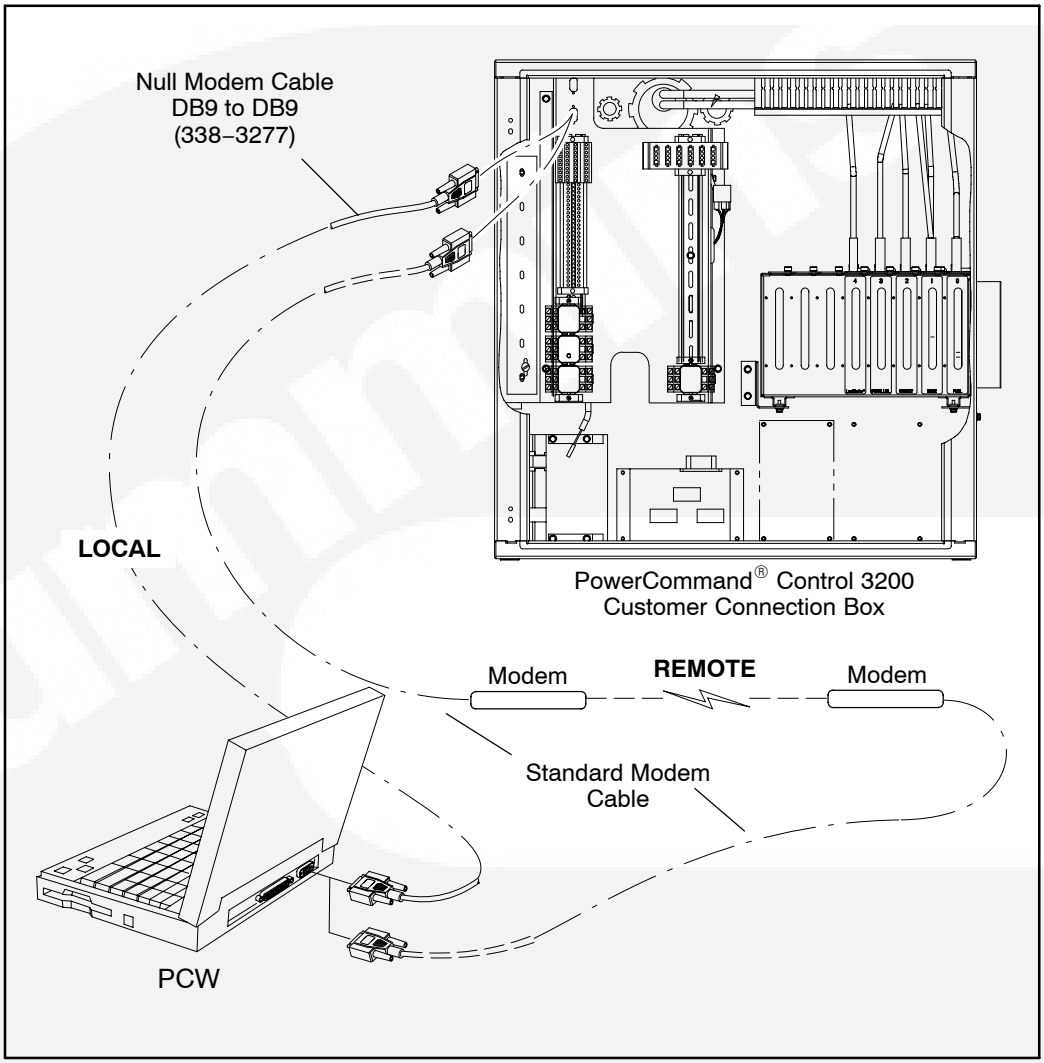

FIGURE 5-3. LOCAL AND REMOTE CONNECTION – PCC 3200 TYPE 2 CONNECTION BOX

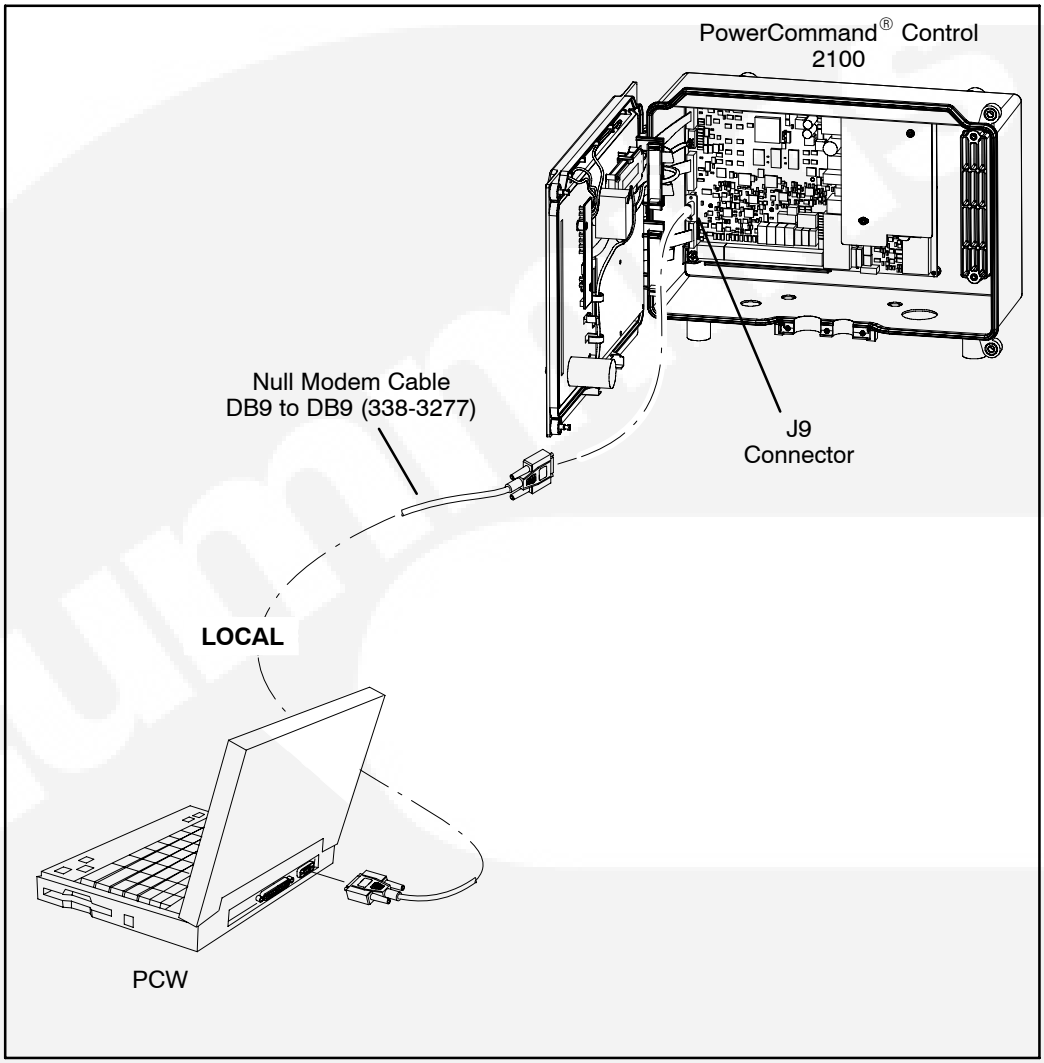

FIGURE 5-4. LOCAL CONNECTION – PCC 2100

Connecting to a PCC 2100

Local connection to a PCC 2100 is shown in Figure 5-4. Use a network connection for remote monitoring (Figure 5-7). The PCC 2100 controls requires an FT-10 network to send remote alarms.

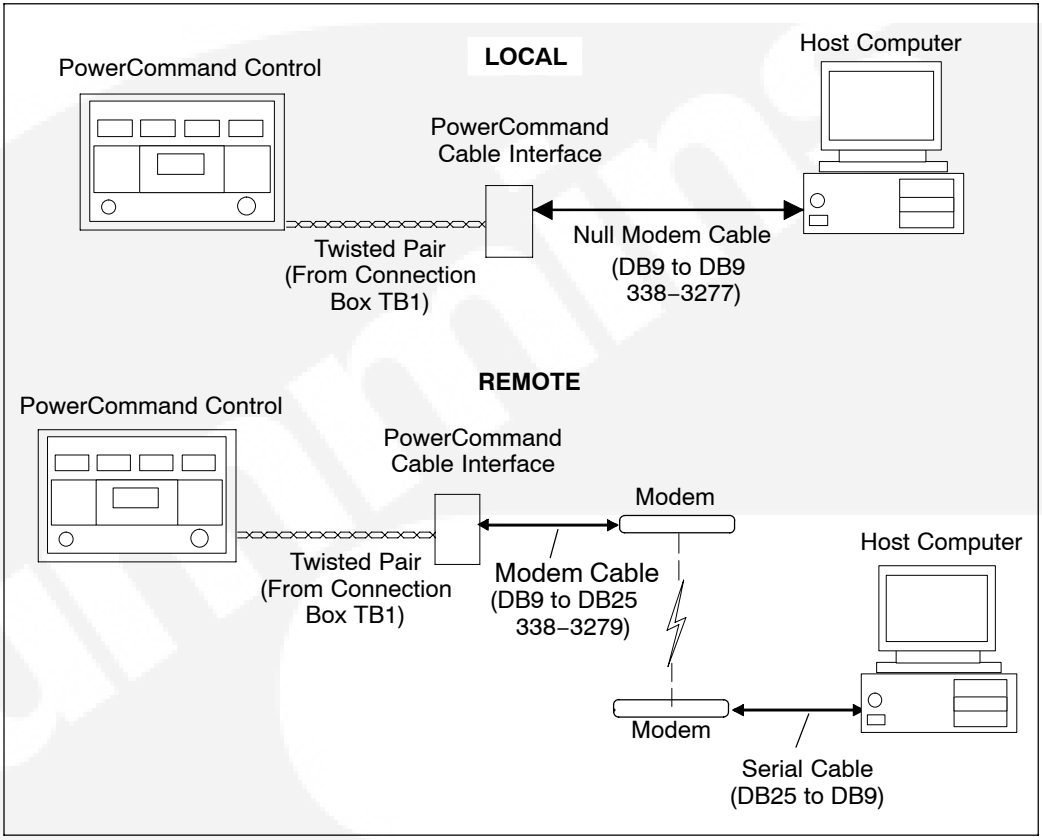

FIGURE 5-5. LOCAL AND REMOTE CONNECTION – PCC 3100

Connecting to a PCC 3100

Install the Serial Communications Kit (300–5145) using the instructions and cables provided with the kit.

Figure 5-5 shows the connection methods used for both local and remote monitoring.

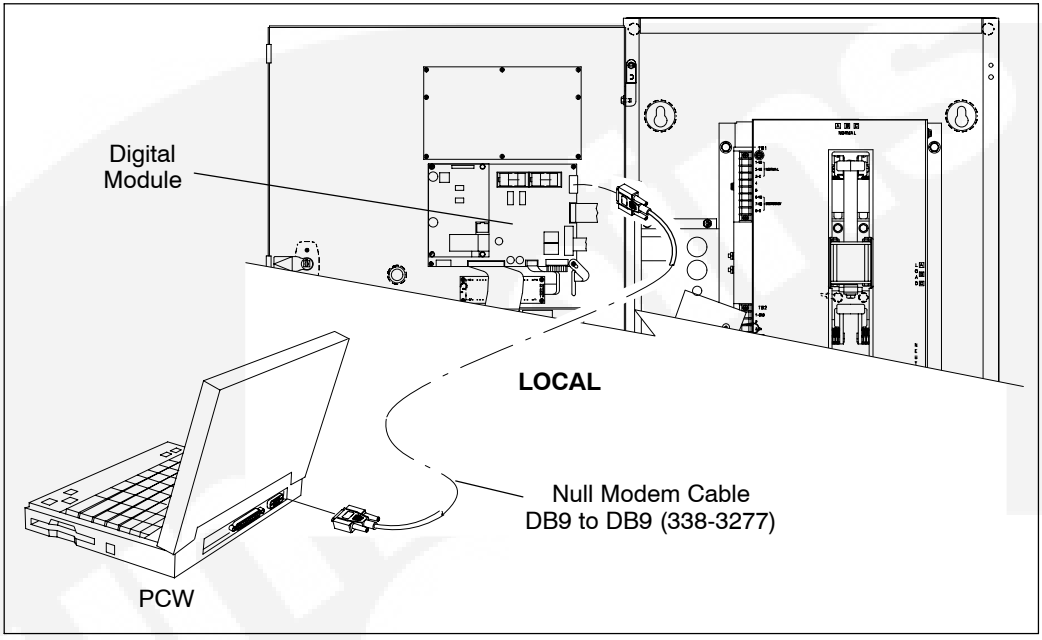

FIGURE 5-6. LOCAL AND REMOTE CONNECTION – ATS APPLICATIONS

Connecting to an ATS

Local connection between the monitoring PC and the ATS is made with a special RS-232 serial null-modem cable. The cable has a DB9 socket on each end.

Use a network connection for remote monitoring (Figure 5-7). PC-ATS controls requires an FT-10 network to send remote alarms. Remote connections use a standard modem cable.

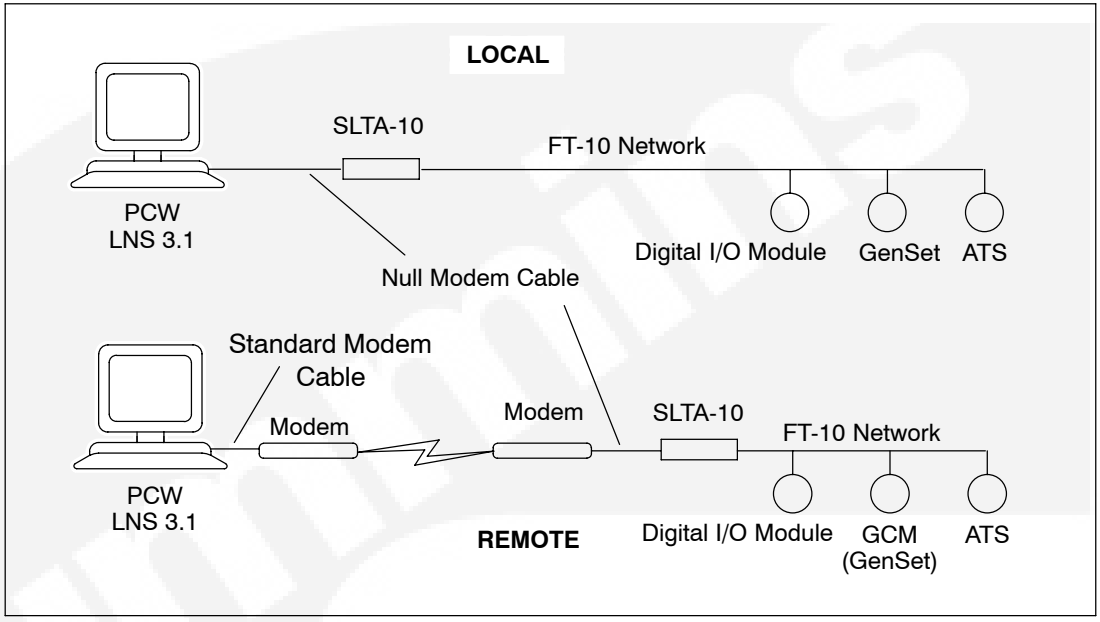

FIGURE 5-7. LOCAL AND REMOTE NETWORK CONNECTIONS

CONNECTIONS TO A LOCAL OR REMOTE FT-10 NETWORK

In network applications the local connection between the gateway and the monitoring PC is made with a null-modem cable.

For remote network applications a standard modem cable is used between the monitoring PC and the modem. A null modem cable is used between the gateway at the remote site and the modem at the remote site.

STARTING THE PCW PROGRAM

Start PCW by selecting **Programs** from the **Start** menu. Click on **Power Generation** and then click on **PCW**. The programs in the PCW program group will be displayed. Click on **Power Command,** from within the **PCW** group, to launch the PCW program and display the Main Window (Figure 5-8).

If the System Administration feature is used (Section 2), the level of user access is determined by their Windows logon. No passwords are required by PCW to start the program or open sites.

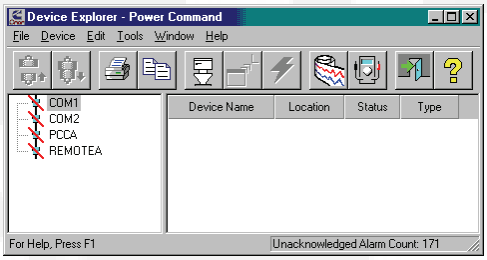

FIGURE 5-8. PCW MAIN WINDOW

CONNECTING TO A SITE

After starting PCW, connect to the port (typically the site name created in Site Setup). Double click on the port (or click on the port [site] and then click on the **Connect** button, on the toolbar).

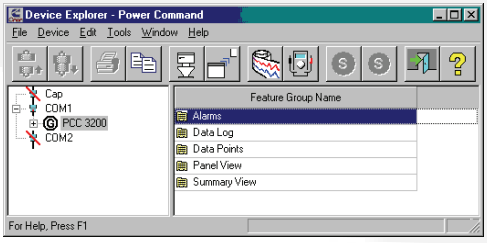

FIGURE 5-9. PCC CONTROL FEATURES

The device (or devices in network sites with more than one device) will be displayed in the Device Explorer directory (Figure 5-9).

To monitor a device, connect to it by double clicking on it (or click on the device and then click on the **Connect**, from the **Device** menu).

For PCC genset and ATS controls, Device Explorer displays the features that are available in the directory, listed under the device in the left pane (Figure 5-9). These features are:

- Alarms
- Data Log
- Data Points
- Panel View
- Summary View

A brief description of each of these features is provided here, and each subject is covered in detail in the following sections.

Alarms

When the user starts PCW, and connects to a Site, and a Device, the **Alarm** folder will appear below the device, in the Device Explorer directory (Figure 6-1). The **Alarms** directory contains a list of the alarms that have been received by PCW from the device. For a detailed description of this feature, refer to Section 6.

When the PCW program is open, it is not necessary to connect to remote sites to receive alarms. The program can be docked to the task bar. When a remote alarm is sent to the monitoring PC an alarm popup will be displayed, and the alarm will be annunciated and logged.

To create and view a custom report of logged alarms, refer to Tools and Report, Section 13.

Data Log

When the user starts PCW, and connects to a Site and a Device, the user will be able to start logging data. (Data will only be logged while PCW is connected to the device.)

Logged data can be viewed using the **Data Log (Report)** feature (Figure 7-3). The report can be created while you are connected to a device, or at anytime using the reports feature.

To view the report while you are connected to a device, click on the **Data Log** folder, shown below the device, in the Device Explorer directory, to launch the report in the right pane. The **Refresh** button, on the toolbar, can be used to update the report while you are connected to the device. Refer to Data Log, Section 7, for details on this feature.

If you are not connected to the device, you can create a data log report from the **Tools – View Data Log** menu pick. This feature allows you to select the time period that you would like the Data Log Report to cover, and it launches the report in a new window. (Also see Tools and Reports, Section 13).

Data Points

When the user starts PCW, and connects to a Site, and a Device, the **Data Points** folder is displayed below the device, in the Device Explorer directory (Figure 8-1). The **Data Points** directory contains a list of preselected data points, based on the device type.

Data Points will display current information (updated approximately every second, network application updates may take several seconds between updates.)

Refer to Data Points, Section 8, for complete details.

Panel View

When the user starts PCW, and connects to a Site, and a Device, the **Panel View** folder is displayed below the device, in the Device Explorer directory.

The **Panel View** feature provides a graphical view of the device control panel. The view displays current information for the device being monitored (updated approximately every second, network application updates may take several seconds between updates.)

Some of the buttons in the Panel View perform functions when you click on them. These features are described in detail in Panel View, Section 9.

Summary View

When the user starts PCW, and connects to a Site and a Device, the **Summary View** feature will appear in the directory below the device, in Device Explorer (Figure 10-1). The **Summary View** directory contains a list of pre-selected parameters (based on device type).

The **Summary View** will display current information (updated approximately every second, network application updates may take several seconds between updates.)

Refer to Summary View, Section 10, for complete details.

Tools and Reports

The Tools features include the Module Template Editor used to add custom labels to the DIM, CCM-G and CCM-T. The Tools menu also allows the user to create reports from the data log (View Data Log) alarm log (View Alarm Log) and the journal (View Journal Log).

Refer to Tools and Reports, Section 13, for examples of how to use these features.

NOTES

6. Alarms

ALARMS

PowerCommand for Windows can be used to view the alarm history for a device and monitor for alarm messages. Alarm messages that have been received by PCW are logged, and a report can be created from the Alarm Log.

This section describes how to view the alarms that have been received by PCW, and how to use the alarm notification feature for incoming alarms. Refer to Section 13 for information on creating an Alarm Report.

In order to receive an alarm from network applications, the Site Name, created in PCW's site setup must exactly match the network name created for the network.

PCW will not share a phone line between sites with networks (SLTA) and sites without a network (Goal/RS–232). To receive alarm messages, one modem and one phone line will be needed for network applications and one modem and one phone line will be needed for sites without a network.

In all applications, only alarm messages that have been configured with the PC service tool to *dial out*, will be received.

VIEWING ALARMS

When the user starts PCW, and connects to a Site, and a Device, the **Alarm** folder will appear below the device, in the Device Explorer directory (Figure 6-1). The **Alarms** directory contains a list of the alarms that have been received by PCW from the device.

The Alarm view provides the following alarm details:

Code: Alarm (fault code) identification number.

Level: This field displays the severity of the alarm. The levels are None, Warning and Shutdown.

Status: Indicates if the alarm is currently Active, or if it is Inactive.

Site: Shows the Site Name where the device being monitored is located.

Module: Shows the name of the device that is being monitored.

Time Occurred: Provides the date and time that the alarm condition first occurred.

User: Lists the user identification of the person using PCW, to view the alarms.

Description: Provides a description of the alarm.

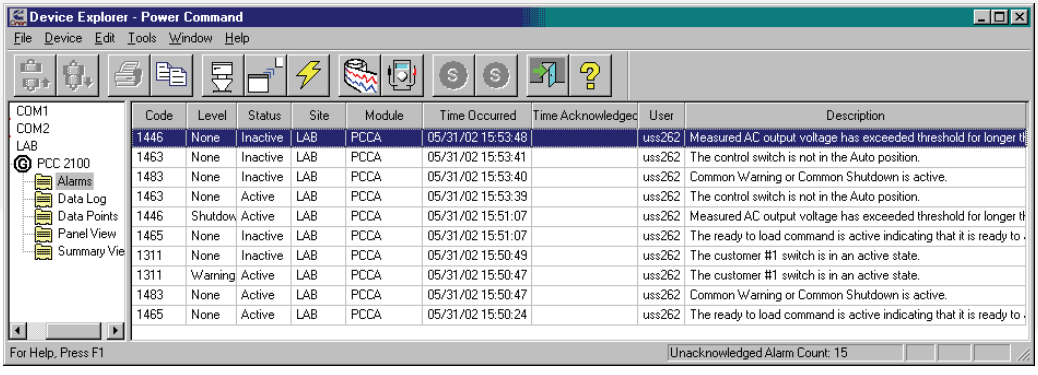

FIGURE 6-1. ALARMS

The most recently received alarm is added at the top of the list. Alarms received while the Alarm directory is displayed, will appear in the window immediately.

If this folder is empty, confirm that the network was named properly and the site setup name exactly matches the network name.

Alarm acknowledgement from PCW removes the alarm from the PCW alarms received history only. PCW does not acknowledge or remove the alarm from the device.

RECEIVING ALARMS

The alarm notification feature launches when PCW is started, and it closes when the PCW session is ended. PCW displays an **Alarms** popup message as soon as the message is received.

Use the Windows menu drop-down list to setup PCW to annunciate incoming alarm messages and to display popup alarm message as new alarms are received. Figure 6-2.

Select **Annunciate Alarms**, from the Windows drop–down list to enable (checked) the audible alert when a new unacknowledged alarm is received.

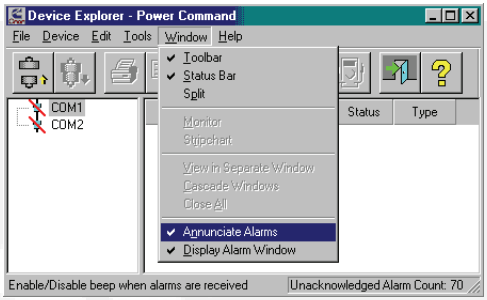

FIGURE 6-2. NOTIFICATION SETUP

Select **Display Alarm Window**, from the Windows drop-down list, to enable (checked) the Alarms Popup message when a new unacknowledged alarm is received.

Note: The network name (site ID) must consist of no more than seven characters. The characters can only be upper case letters, numbers and underscores. Use of lower case letters, special characters and spaces will prevent PCW from recognizing dialed-in alarms, from the site. Make sure the network installer does not use lower case letters, special characters, or spaces for the network name.

Device names in network applications must consist of no more than eight characters. The characters can only be upper case letters. Use of lower case letters, special characters, numbers and spaces will prevent PCW from recognizing device name in an alarm message.

Alarm Pop-up

When the Display Alarm Window feature is enabled, the Alarm Pop-up message (Figure 6-3) is displayed each time a new alarm is received.

PCW does not need to be connected to the site to receive the alarm messages, but PCW program does need to be open. To enable the PC to receive remote alarms, refer to **Enabling the Monitoring PC to Receive Remote Alarms**, in Section 3.

The popup message provides the alarm code (fault code number), site identification and device name (if named properly), date and time of the alarm, and a description of the fault or event.

After viewing the alarm, clicking on the **OK** button to close the pop-up message until the next time PCW receives an alarm message.

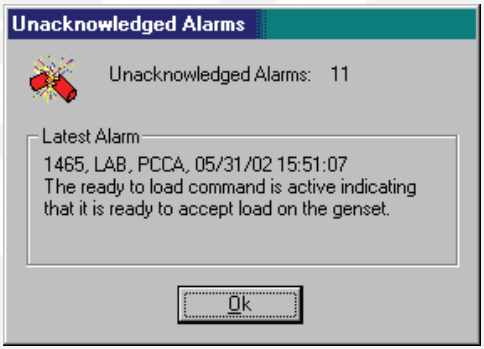

FIGURE 6-3. ALARMS POP-UP

NOTES

7. Data Log

The **Data Log** feature allows the user to log (record) a group of preselected data points and view the logged data using the **Data Log View (Report)** feature.

The user can also create a custom **Monitor** set-up, for logging and viewing user selected data points. (The Monitor feature is described in Section 11.)

DATA LOG

The **Data Log** feature is used to record a group of preselected data points. A view of the logged data can be opened, from the Data Log folder, in a **Data Log Report**. The data points available are based on the device type. Data must be logged before the data points can be viewed. Using the logging feature is described next, followed by a description of the Data Log Report.

Logging and Managing Data

When the user starts PCW, and connects to a Site and a Device, the user will be able to start logging data for that device. (Data will only be logged while PCW is connected to the device and data logging has been stated.)

Start data logging by selecting **Start Logging,** from the **Device** menu. The Logging Interval dialog will be displayed (Figure 7-1).

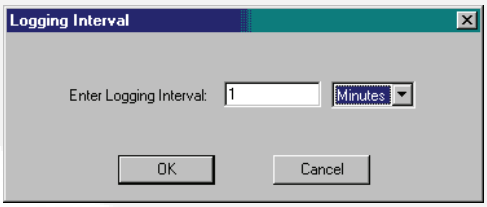

FIGURE 7-1. LOGGING INTERVAL

Select the desired logging interval between 1 and 240 minutes (in minutes or hours, up to 4 hours).

Some logging features are configured using **Setup**. These include setting the logging path (directory location where logged data is stored) and related logging settings. Also included in the Setup feature is a Disk Space Estimator. Review these settings and features described in Section 2.

Logged data can be removed from the data log directory by selecting **Purge Logs,** from the **File** menu, or click on the Purge Logs icon, on the toolbar.

The Purge Logs dialog allows the user to remove data that is from 1 to 99 days old (Figure 7-2). Select the device that you wish to remove the logged data from in the the Device Log(s) list, then click on the **Purge** button. (Alarms and Journal log files are covered in the Tools section, 13.)

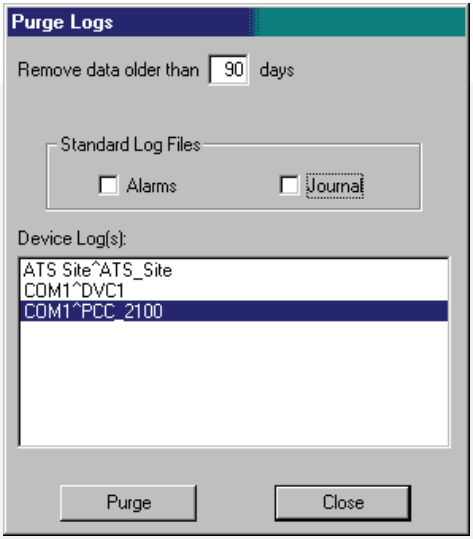

FIGURE 7-2. PURGE LOGS

VIEWING LOGGED DATA

Logged data can be viewed using the **Data Log Report** feature (Figure 7-4). The report can be created while you are connected to a device, or at anytime.

To view the report while you are connected to a device, click on the **Data Log** folder, listed below the device, in the Device Explorer directory, to launch the report in the right pane. The **Refresh** button, on the toolbar, can be used to update the report while you are connected to the device.

If you are not connected to the device, you can create a data log report from the **Tools – View Data Log** menu pick. This feature allows you to select the site, select the device, and select the time period that you would like the Data Log Report to cover (Figure 7-3), and it launches the report in a new window. (Also see Tools, Section 13).

The **Data Log Report** displays data that is in the data log for a specific device (data is only logged while PCW is connected to a device, and the logging feature has been started). The report can be printed by using the Print and Print Setup buttons.

The Data Log Report displays all of the pre-selected data points (based on device type) at the selected logging interval. The earliest logged data is displayed at the top of the report.

A toolbar is added at the top of the report that adds report navigation, details about the size of the report, and report searching capability.

To search the report, enter the search criteria, like a specific date, and click on the binoculars icon, on the toolbar. The first occurrence of the item being searched will be highlighted. Clicking on the binoculars again will bring up the next occurrence.

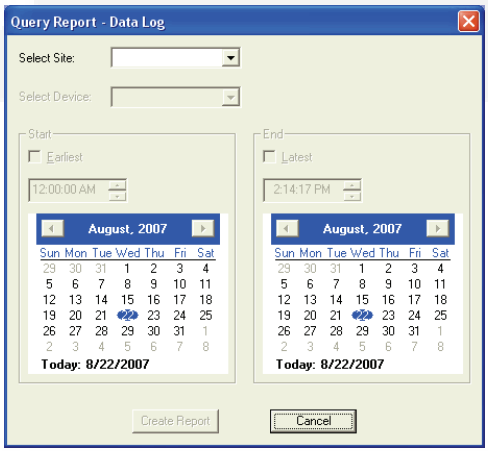

FIGURE 7-3. DATA LOG SETUP

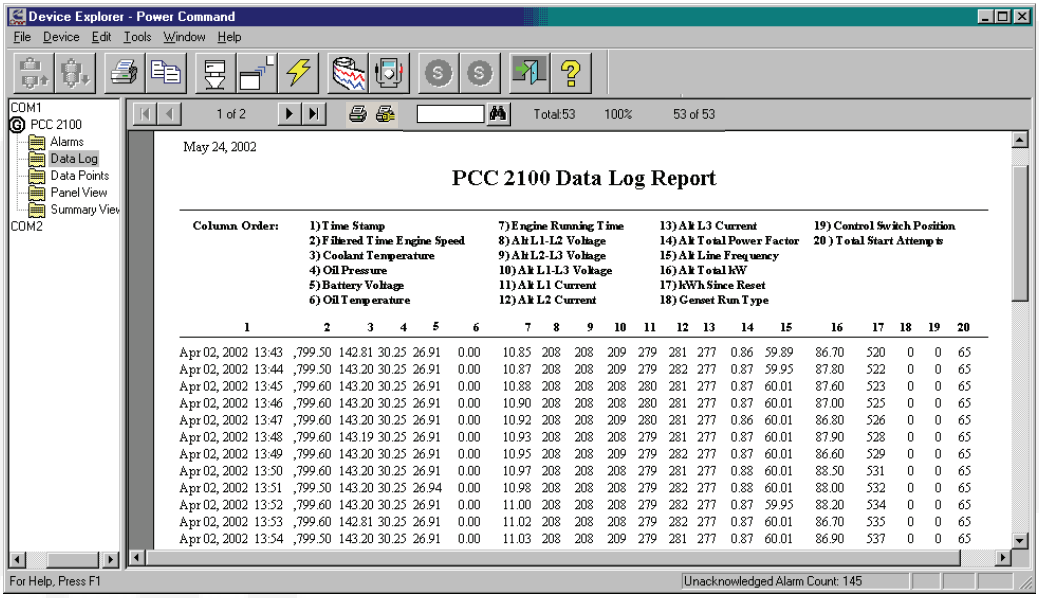

FIGURE 7-4. DATA LOG REPORT (PCC 2100)

NOTES

8. Data Points

DATA POINTS

The Data Points feature allows the user to monitor a group of preselected data points. Each device type has its own group of predefined data points.

The Data Points group includes measured values, switch or relay states, and text messages. Some of the data points can be configured or edited from PCW. This function would typically be performed by a service person as part of a one-time setup procedure.

⚠WARNING ***Electrical shock and moving parts can cause severe personal injury or death. Notify personnel before starting a generator set and before performing load transfer on a transfer switch. Refer to the equipment Operator's Manual for important safety precautions.***

The user can select individual data points from the Data Points view to be logged or charted, using the Monitor and Strip Chart features, described in Sections 11 and 12.

Individual data points can also be compared for a device, or between devices, using the Compare feature, described later in this section.

VIEWING DATA POINTS

When the user starts PCW, and connects to a Site, and a Device, the **Data Points** folder is displayed below the device, in the Device Explorer directory (Figure 8-1). The **Data Points** directory contains a list of preselected data points, based on the device type.

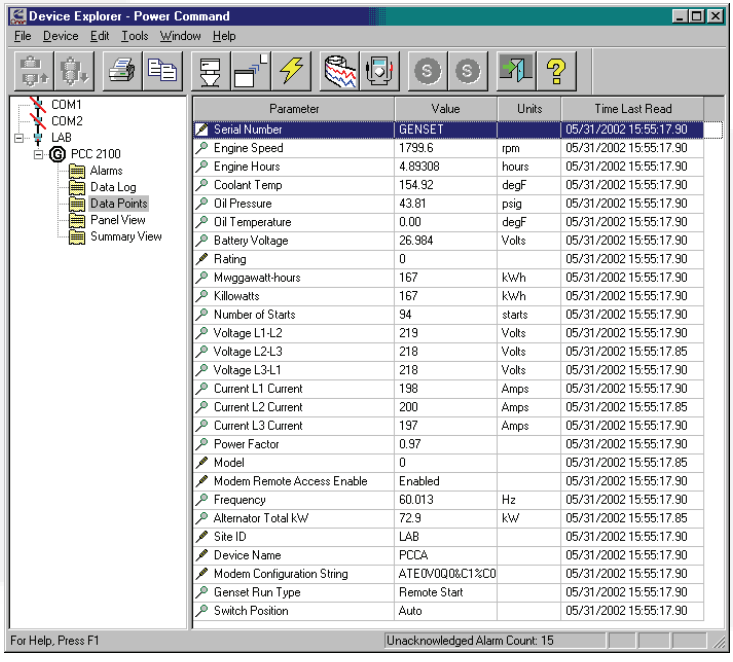

FIGURE 8-1. DATA POINTS VIEW – PCC 2100

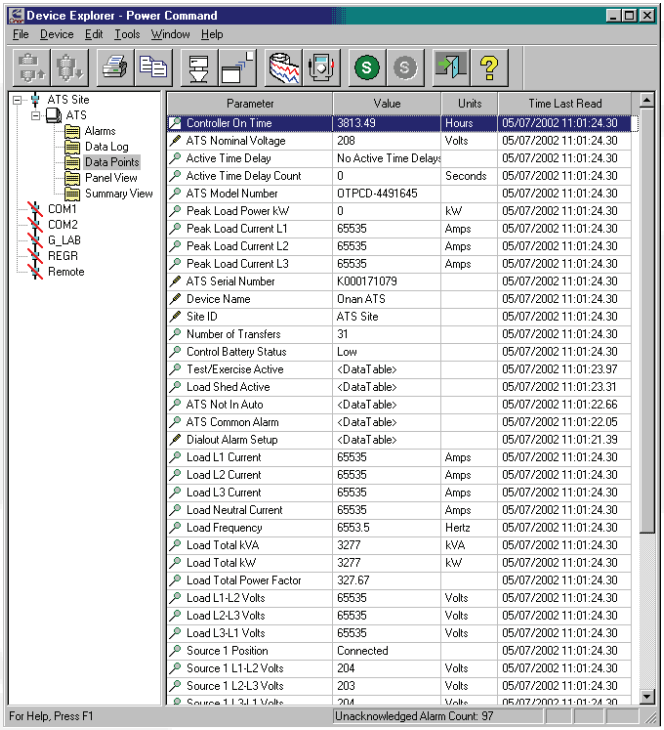

FIGURE 8-2. DATA POINTS VIEW – ATS

Data Points will display current information (updated approximately every second, network applications may take several seconds between updates.)

The **Data Points** view provides the name of the data point (Parameter), the current value, the unit of measure being used (Units) and the last time that the data point value was updated (Time Last Read).

DATA POINT ADJUSTMENTS

Making adjustments would typically be performed by a service person, as part of a one-time setup procedure.

Located to the left of each data point is an icon that indicates if the data point can be adjusted (refer to Figure 8-2). The screwdriver icon indicates that the data point can be changed (written to) using PCW. The magnifying glass indicates that the data point can only be monitored (read only).

Each data point displays the current value and the unit of measure for that value. Review this information before making adjustments. Data point value trims and settings are displayed. ***Trims*** are numeric values that are entered directly into the Value cell. ***Settings*** are selected from drop down lists, and they consist of several types of values such as On/Off and Enable/Disable.

To change a data point value, double click inside the Value cell of the data point that you wish to change. The current value will be highlighted, if there are only a few choices, a drop–down arrow will be displayed next to the Value.

If an arrow is displayed, click on the arrow to view a drop-down list of the available settings. Click on the desired setting, and it will be entered into the Value cell.

If you do not see an arrow, begin typing the new value, the new value entry will overwrite the current value. If the value entered is above or below the range of acceptable values, an error message dialog box will be displayed. Review the information in the dialog box to see the value limits, before clicking **OK,** to close the error message dialog box.

Saving Adjustments

Edit Mode: When selected, a data point value remains in the edit mode, as indicated by a flashing cursor (numeric values) or the drop down arrow (settings). When finished making adjustments, press the enter key or click on another parameter value to exit the edit mode.

Saving Adjustments: Adjustments are written to the device as they are entered. To make these changes permanent, click on the **Device** menu and select **Save Adjustments**. Press the **Reset** button, on the GLC LonWorks card (PCC 3200) or NCM (PCC 2100 or ATP-PC), to download the new data from the base board to the LonWorks card.

COMPARE

The **Compare** feature is launched from within the Data Points view. Click on the first data point that you would like to compare, then use the menu button on the pointing device (usually right mouse button) and select **Compare**, from the popup menu (Figure 8-3).

The Compare Utility will launch and indicate that 1 parameter has been selected, and identify the device it is associated with, Figure 8-4.

To add a datapoint to compare with the first one, select the device, and then select the datapoint from the Data Points view. Drag-and-drop (or Edit Copy and Paste) the data point to the right window in the Compare Utility.

Click on the Compare toolbar icon to begin comparing the two data points.

The **View Errors Only** filter is used when comparing groups of data such as two similar devices. This feature will list only the differences between the devices.

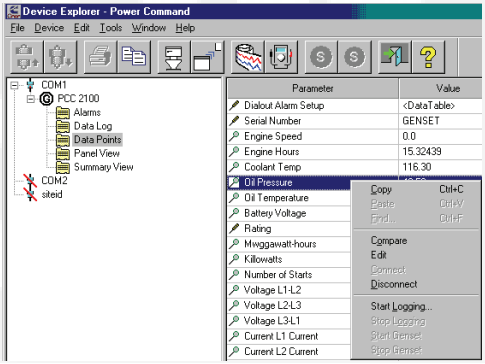

FIGURE 8-3. COMPARE FEATURE

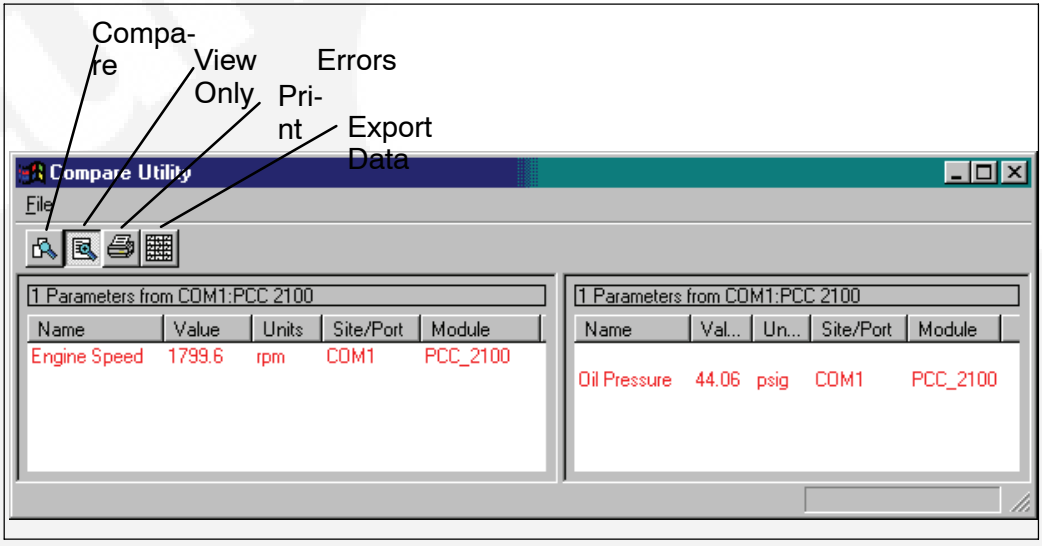

FIGURE 8-4. COMPARE UTILITY

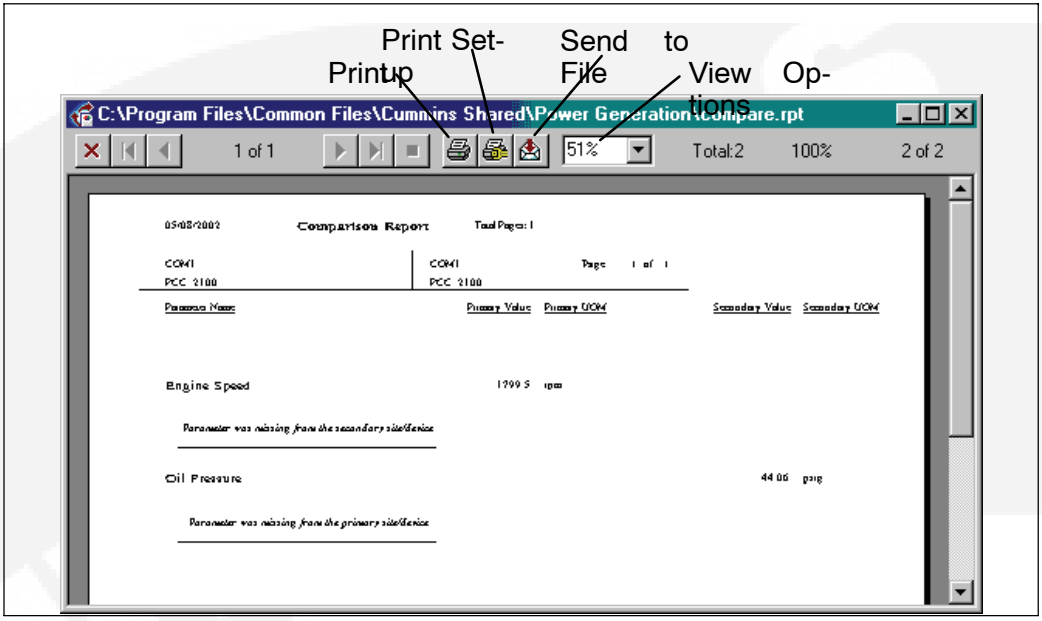

FIGURE 8-5. COMPARE – PRINT

The data can be printed from a print dialog by clicking on the **Print** button, on the toolbar. The standard Windows print dialog is displayed.

Reports are designed to print on either Letter (8 1/2 by 11 inch) or A4 size sheets.

PCW does not support narrow or other non-standard printers, including 32-column printers.

Exporting Compare Data

Compare data can be sent to a file by using the **Export Data** toolbar button. Click on the **Export Data** button, and the **Save As** dialog will be displayed (Figure 8-6).

This window contains a **Save as Type** dialog and a **Save In** dialog. Use the **Save In** drop-down list to select the desired file format.

Enter the file name and select the drive and directory location for the file, then click the **OK** button to start the the export process.

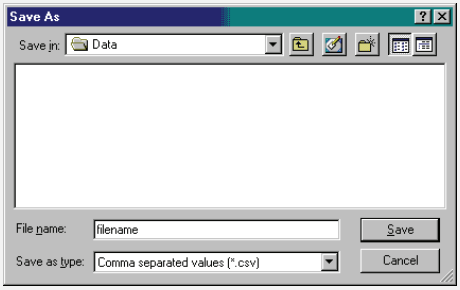

FIGURE 8-6. COMPARE – EXPORT

NOTES

9. Panel View

PANEL VIEW

The **Panel View** feature provides a graphical view of the device control panel. The view displays current information for the device being monitored (updated approximately every second, network applications may take several seconds between updates.)

⚠WARNING ***Electrical shock and moving parts can cause severe personal injury or death. Notify personnel before starting a generator set and before performing load transfer on a transfer switch. Refer to the equipment Operator's Manual for important safety precautions.***

Some of the buttons in the Panel View perform functions when you click on them. These features are described in the following section. Adjustment and calibration functions are not available from the PC.

USING PANEL VIEW

When the user starts PCW, and connects to a Site and a device, the **Panel View** folder is displayed below the device in the Device Explorer directory.

NOTE: Not all devices have a panel view.

Figures 9-1 through 9-4 show examples of panel views. The PCC 2100, shown in Figure 9-1 provides similar features to the PCC 3200 and PCC 3100.

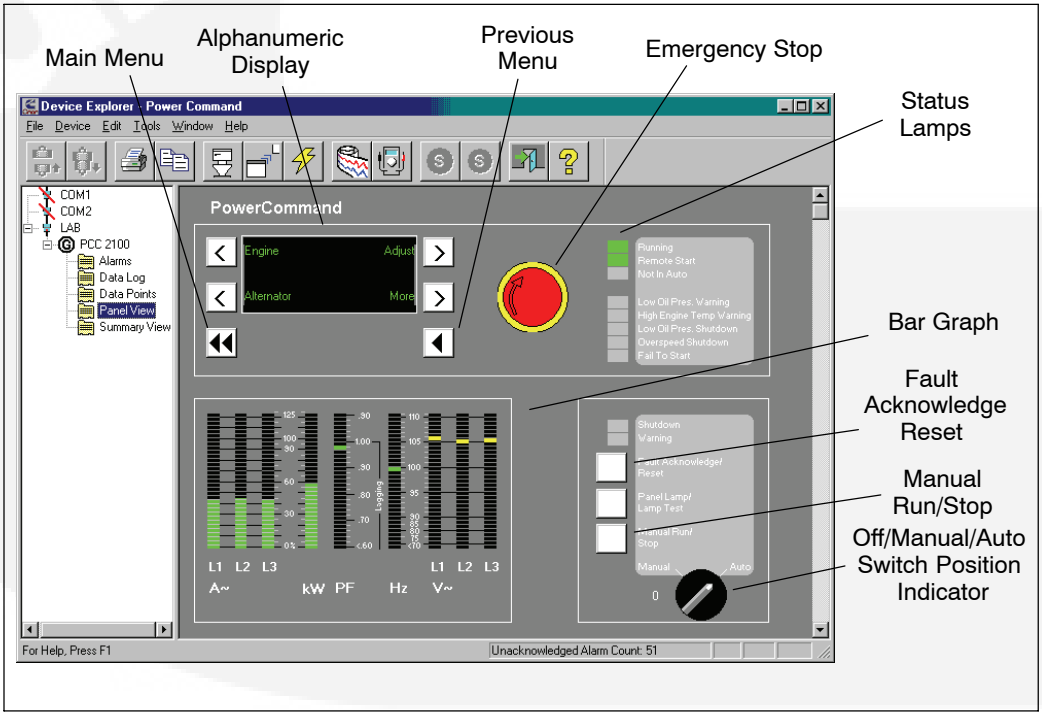

FIGURE 9-1. PANEL VIEW – PCC 2100

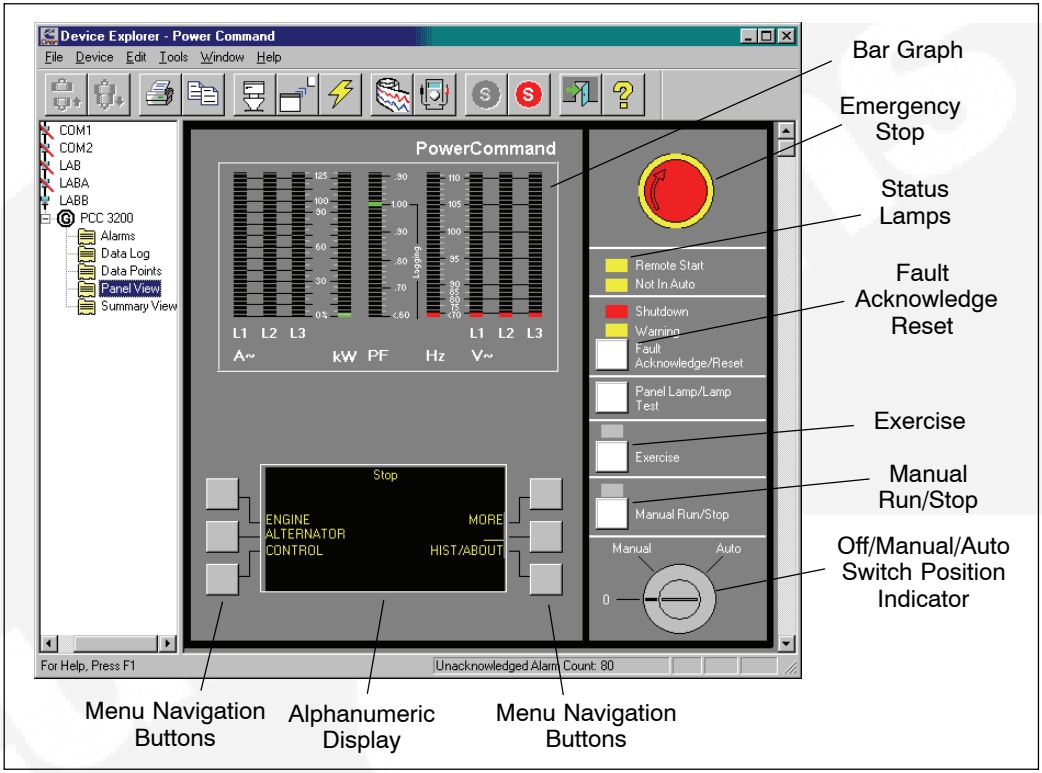

FIGURE 9-2. PANEL VIEW – PCC 3200

Refer to the genset or ATS operator's manual for a full description of the control panel features. The following provides a general description of the Panel View features for all of the device types.

Alphanumeric Display: The display simulates the control panel display. The genset data can be viewed using the navigation buttons around the display. Click on the navigation arrows to view the desired information.

Bar Graph: Displays the current genset or ATS metering information.

Off/Manual/Auto: Display the current position of the selector switch.

Manual Start/Stop: Allows the user to remotely start or stop the genset. The selector switch on the genset must be in the Auto position. As a safety precaution, always notify personnel at the site before remotely operating the genset.

Exercise (PCC 3200): Performs the Exercise function. Click on the Exercise to initiate a genset exercise. As a safety precaution, always notify personnel at the site before remotely operating the genset.

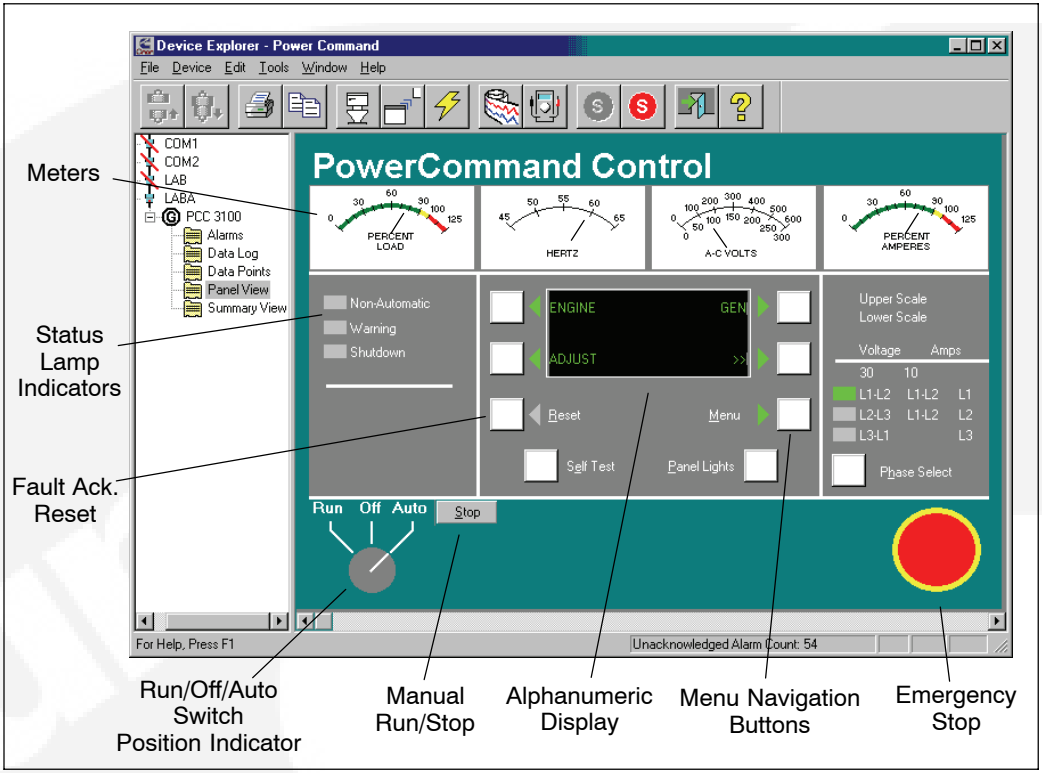

FIGURE 9-3. PANEL VIEW – PCC 3100

Emergency Stop: Performs Emergency Stop function. Click on the **Emergency Stop** button to initiate the E-stop. The button displays the word *Stopped* during an E-stop. The E-stop must be removed at the site, click on the button again after the E-stop has been cleared to reset the button.

NOTE: Emergency Stop must be reset (cleared) at the generator set. You cannot reset an Emergency Stop from the monitoring PC.

Fault Acknowledge Reset: Allow the user to acknowledge faults. When a fault occurs (and is then corrected,) the **Reset** button allows you to reset the module before restarting it.

Status Lamps: Displays current status of each of the fault indicator lamps.

Meters (PCC 3100): Displays genset metering information.

Run/Off/Auto (PCC 3100): Display the current position of the selector switch.

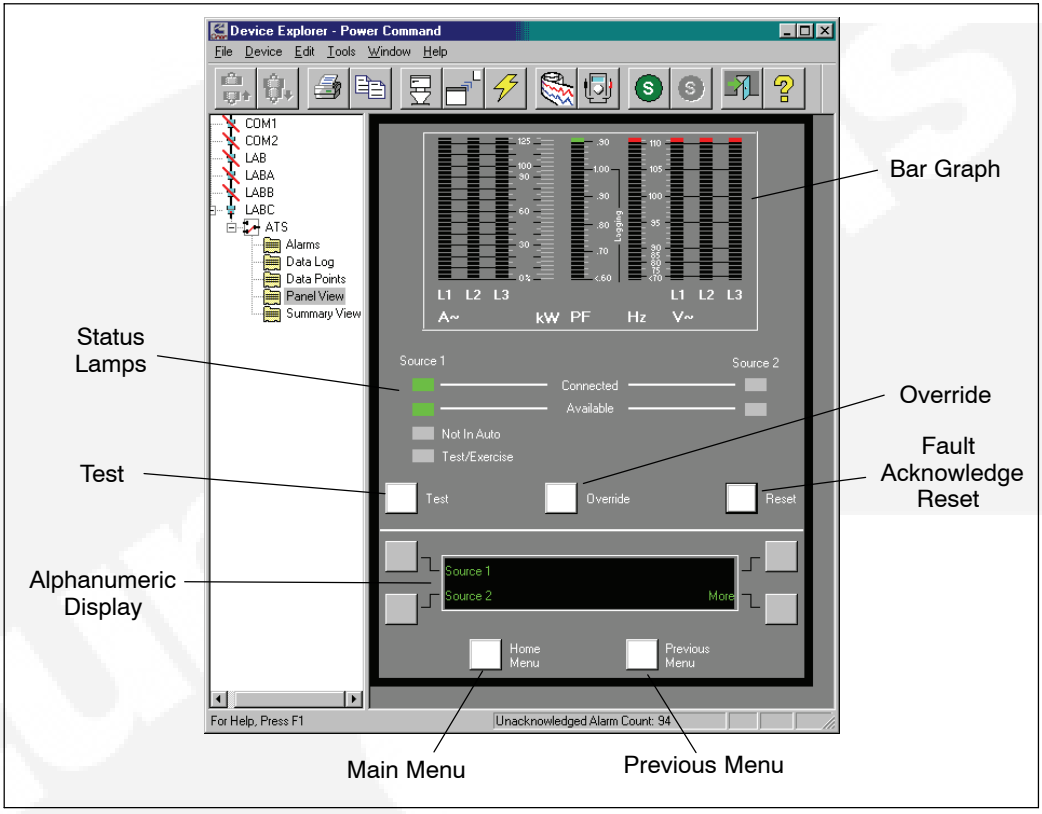

FIGURE 9-4. PANEL VIEW – OTPC

Test (ATS): Performs the test function. Click on the **Test** button to initiate a genset and transfer switch test. As a safety precaution, always notify personnel at the site before remotely operating the genset.

Override (ATS): Performs the override functions. Click on the **Override** button to bypass time delays.

10. Summary View

This section describes the Summary View feature. This feature is used to monitor a group of preselected data points for a device.

USING SUMMARY VIEW

When the user starts PCW, and connects to a Site and a Device, the **Summary View** feature will appear in the directory below the device, in Device Explorer (Figure 10-1). The **Summary View** directory contains a list of pre-selected parameters (based on device type).

Digital I/O Modules (DIM) and Controls Communication Modules (CCM-G and CCM-T) will display the summary view. The standard template will be used, or a custom template can be created and applied to the device (refer to Tools, Section 13). When a custom template is created, the Summary View will display the labels created in the custom template.

When the user is connected to a device, the **Summary View** will display current information (updated approximately every second, network applications may take several seconds between updates.)

PCC 2100 Example

Figure 10-1 shows a group of preselected data points for a genset with a PCC 2100 control. When the **Summary View** directory is selected, in the left pane, the device's data points appear in the right pane.

Each device type has a unique list of preselected datapoints. The device in this example (PCC 2100) has the following preselected parameter groups:

- Alternator Data
- Engine Data
- Control Status

The data in each of these groups is updated when PCW connects to the device. The data continues to update along with the date and time of the update, shown in the lower right corner of the right pane.

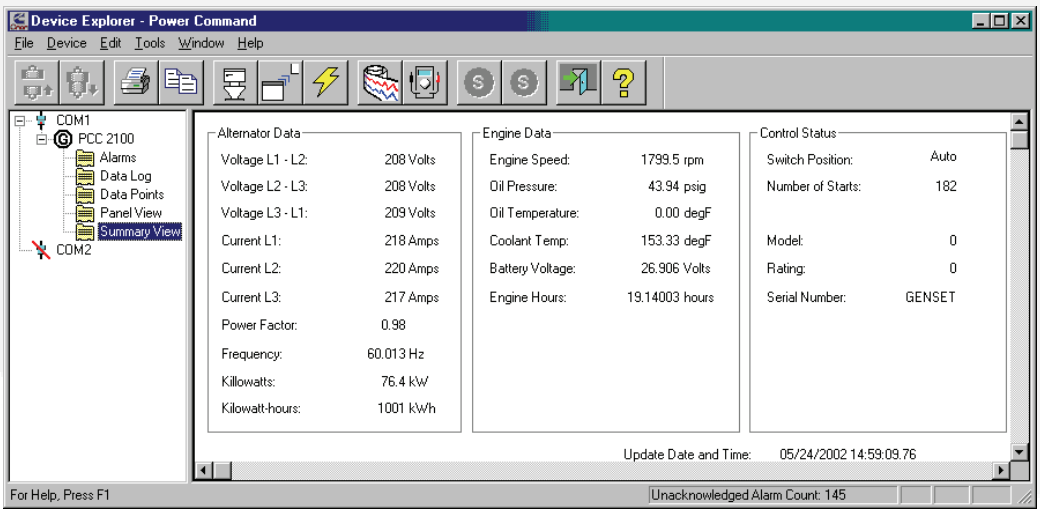

FIGURE 10-1. PCC2100 SUMMARY VIEW

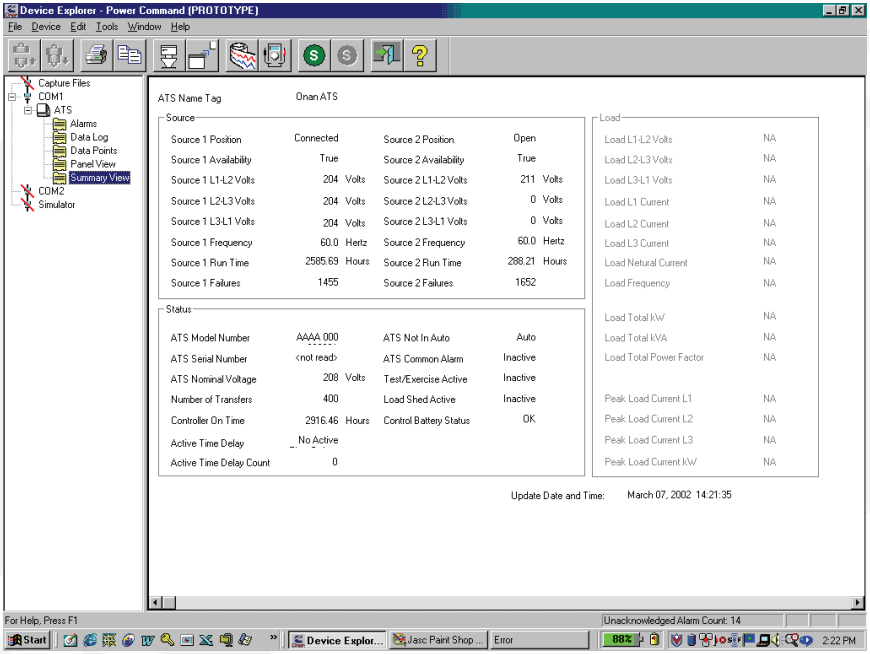

FIGURE 10-2. OTPC SUMMARY VIEW

OTPC Transfer Switch Example

Figure 10-2 shows a group of preselected data points for an OTPC transfer switch. When the **Summary View** directory is selected, in the left pane, the device's data points appear in the right pane.

Each device type has a unique list of preselected datapoints. The device in this example (OTPC) has the preselected parameter groups shown in Figure 10-2.

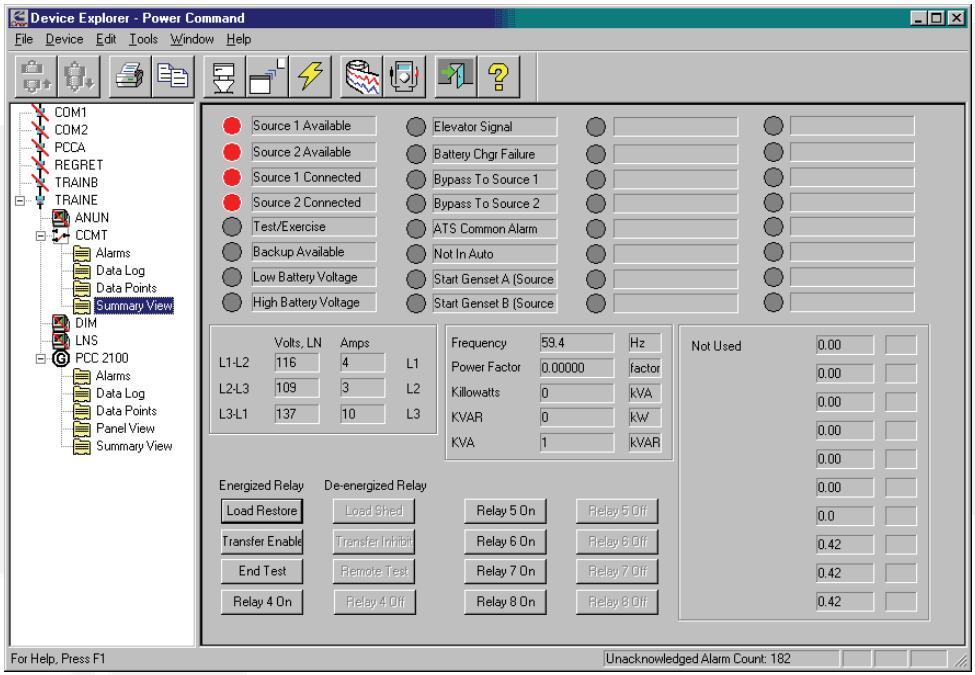

FIGURE 10-3. CCM SUMMARY VIEW (CCM-T SHOWN)

DIMs and CCMs

Digital I/O Modules (DIM) and Controls Communication Modules (CCM-G and CCM-T) will display a Summary view. The view will display the standard template or a custom template if setup. A custom template can be created and applied to the device (refer to Tools, Section 13). When a custom template is created, and applied to the device, the Summary View will display the labels created in the custom template.

CCM-G and CCM-T Summary View Example

Figure 10-3 shows the **Summary View** for a Transfer Switch Control Communications Module (CCM-T). When **the Summary View** directory is selected, in the left pane, the device's data points appear in the right pane. The CCM-G Summary View shows the status of the 32 discrete inputs, 8 relays and 10 analog inputs.

Relays can be energized and de-energized by clicking on the relay buttons in the summary screen.

A symbol resembling a gray or red light indicates the status of each relay and digital input.

- The energized (active) relays are displayed with their respective status lights turned on (Red).
- The de-energized (inactive) relays are displayed with their respective status lights turned off (Gray).
- The active inputs are displayed with their respective status lights turned on (Red).
- The inactive inputs are displayed with their respective status lights turned off (Gray).

For a description of how to customize the module labels, refer to Tools, Section 13.

The status for each relay and input is updated when PCW connects to the device. The status

continues to update along with the date and time of the update, shown in the lower right corner of the right pane.

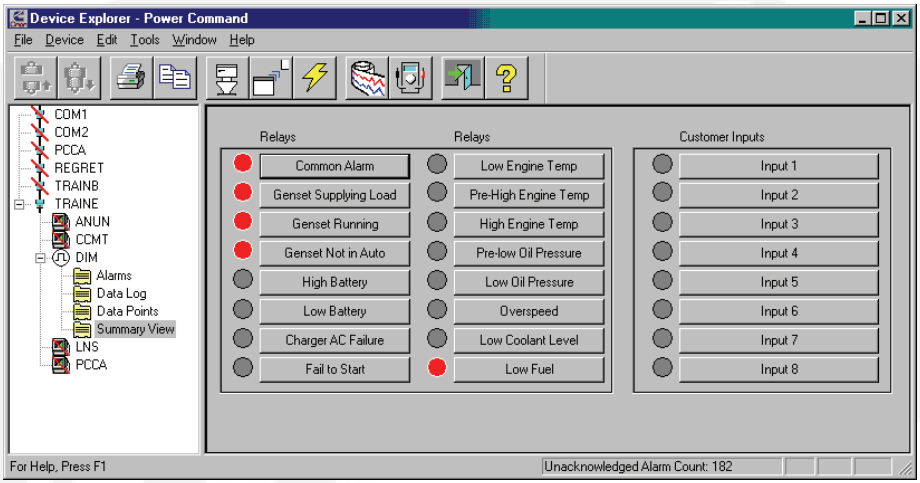

FIGURE 10-4. DIGITAL I/O MODULE SUMMARY VIEW

Digital I/O Module Example

Figure 10-4 shows the **Summary View** for a Digital I/O Module (DIM).

When the **Summary View** directory is selected, in the left pane, the DIM module summary screen is displayed in the right pane.

The **Summary View** shows the status of the 8 standard relays, 8 optional relays (if equipped) and the 8 customer inputs.

A symbol resembling a gray or red light indicates the status of each relay and digital input.

- The energized (active) relays are displayed with their respective status lights turned on (Red).
- The de-energized (inactive) relays are displayed with their respective status lights turned off (Gray).
- The active inputs are displayed with their respective status lights turned on (Red).
- The inactive inputs are displayed with their respective status lights turned off (Gray).

The labels for the module can be customized in the **Tools – Module Template Editor**. For a description of how to customize the module labels, refer to Section 13.

The status for each relay and input is updated when PCW connects to the device. The status continues to update along with the date and time of the update, shown in the lower right corner of the right pane.

NOTES

11. Monitor

This section describes how to use the Monitor and Datalog features. There are two methods of monitoring parameters, the user can create a custom Monitor dialog for viewing selected parameters, or the user can view pre-selected parameters, based on the device type.

MONITOR AND DATALOG

The Monitor and Datalog features are used to view and record (datalog) parameters. The user can monitor preselected parameters with Device Explorer, or they can select the specific parameters they want to monitor and record, using the Monitor Dialog feature.

PCW's Device Explorer allows the user to navigate and view preselected parameters. Refer to the section named Using Monitor, for details.

MONITOR DIALOG

The Monitor Dialog allows the user to select the parameters they want to view, set a sampling rate and enable the data logging feature. Sampling allows real-time data viewing. Data logging stores information in a file for later use.

The Monitor Dialog is displayed when the Monitor command is launched from either the **Start** menu or the **Monitor** button, on the PCW toolbar.

Monitor Dialog Features

The Monitor Dialog is shown in Figure 11-1. This section describes how to use the Monitor Dialog features.

File Menu: Used to create a **New** Monitor file or to **Open** an existing Monitor file. Also used to **Save** changes to an opened file or **Save As...,** to save changes to a new file. **Recent** allows the user to view recently opened files and is used as a shortcut to open a file.

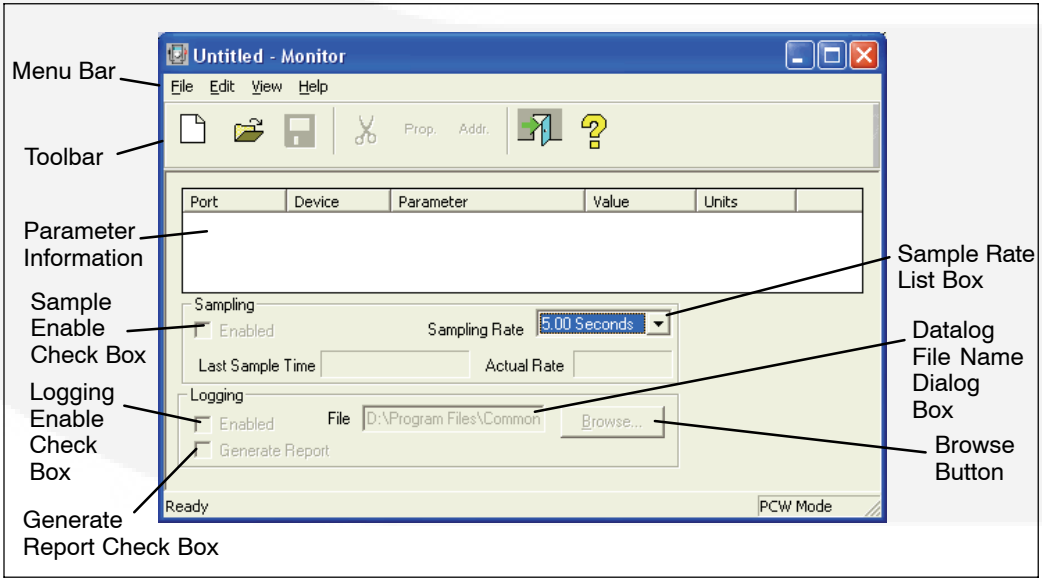

FIGURE 11-1. MONITOR DIALOG FEATURES

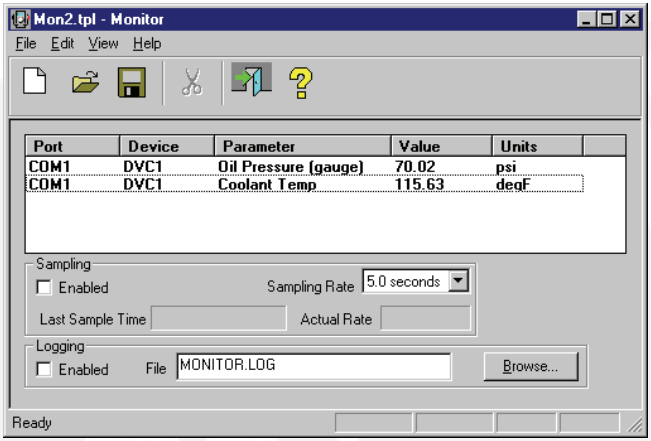

FIGURE 11-2. TYPICAL MONITOR DIALOG

Edit Menu: Use the **Edit** menu commands to **Add**, **Delete**, **Edit**, **Cut**, **Copy**, and **Paste** parameters into and out of the Monitor Dialog.

View Menu: Use the **View** command to hide or display the **Toolbar** and **Status Bar**.

Help Menu: Provides PCW **Help Topics** and **About Monitor** help.

Sampling: The **Monitor** dialog will sample at the selected setting. To select the sample rate, click on the **Sampling – Enabled** check box (enabled when checked). Enabling the Sampling feature activates the **Sampling Rate** list box. Select the desired sampling rate from the list box. Sample rates are available from 0.05 seconds to 60 seconds.

Logging: **Logging** allows the user to log parameter information to a .LOG file (at the selected Sampling Rate). **Sampling** must be enabled to use this feature. Before enabling data logging, enter a name in the file dialog. The log file uses the tab delimited file format. To select the **Logging** feature, click on the **Logging – Enabled** check box (enabled when checked). Enabling the **Logging** feature starts datalogging. To stop data logging, disable the **Logging** check box. Data can be logged to the default (Monitor.LOG) file. The **Browse** button allows the user to locate and overwrite a .LOG file in another directory. A report can be generated if you click on the **Generate Report** check box.

Adding Parameters

Parameters can be added to the Monitor Dialog by selecting **Edit – Add** from the Menu bar or by clicking on the **Add** button, on the toolbar. The **Add** command launches PCW. Use Device Explorer to locate, select and copy the parameters that you want to add to the **Monitor** dialog.

After selecting a parameter, use the drag-and-drop procedure to add the parameter to the Monitor Dialog. (Or use the right menu button to **Copy** it, then move the cursor to the Monitor Dialog and use the right menu button again to **Paste** the parameter into the Monitor Dialog.)

Monitor settings can be saved to a template (.TPL file). These files are saved in the Monitor subdirectory of PCW. The template file stores the COM port information, this prevents the file from working on another COM port.

Each monitor screen provides the ability to log sampled values into a tab delimited .LOG file. This file format allows the data to be imported into Microsoft Excel.

12. Strip Chart

STRIP CHART

The Strip Chart feature displays data in a graphical form on a real-time strip chart. Up to six parameters can be displayed in one chart. Data is scrolled from right to left, so the most recent data appears at the right.

Chart parameters can be saved to chart file (.TPL file), allowing the user to save custom parameter selections and settings. The chart file will store the charts graph settings (Y-axis limits, sampling rate, line styles, etc.) and port identification. A chart file can be used with other ports. Chart files are saved in the Strip Charts directory.

Data is not logged using the Strip Chart feature, refer to the **Monitor** section if data logging is required.

Figure 12-1 shows a typical strip chart. Each of the parameters contained in the chart are named in the legend at the top of the chart.

The **Y-Axis** displays the range of each parameter value. The **Time** that the sample was taken for each interval is displayed at the bottom of the chart.

Starting the Strip Chart Feature

The Strip Chart feature can be launched in two ways:

1. Launch **Chart** from the Windows **Start –> All Programs** menu, under the **Power Generation –> PCW** group shortcuts.
2. Start PowerCommand for Windows, connect to a device, then click on the **Strip Chart** button, on the toolbar.

Starting a strip chart from PowerCommand, while connected to a device, allows PCW to identify the device and display the correct strip chart file type. This prevents accidentally opening a strip chart file for the wrong device type.

If the chart file does not exist, Strip Chart will display the **File-Open** screen, with a listing of chart files in the **Strip Charts** directory.

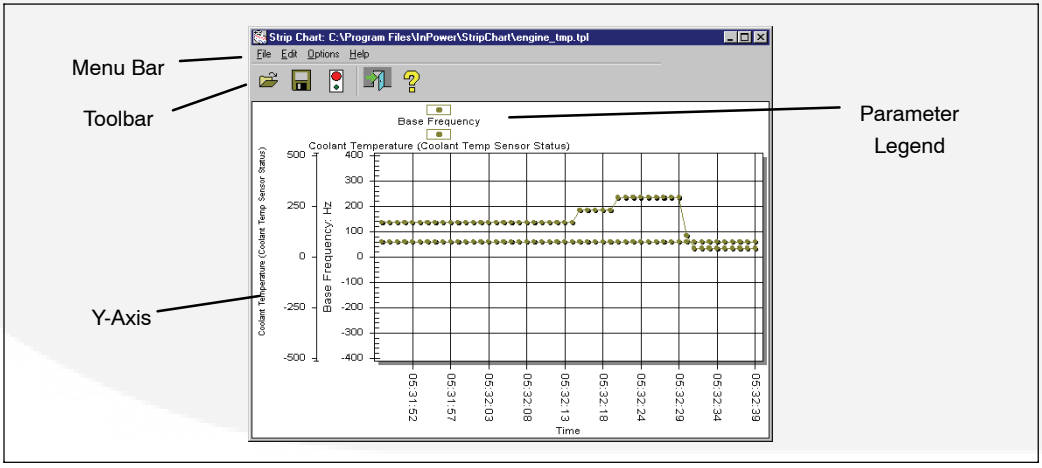

FIGURE 12-1. TYPICAL STRIP CHART

CREATING A CUSTOM STRIP CHART

Strip charts can be customized by adding or deleting parameters, adjusting the sampling rate, changing line styles, changing the Y-axis limits and making format changes.

The user can customize an existing strip chart, or create a new strip chart and define each of its properties. To create a new strip chart, launch the Strip Chart feature from the **Start -> All Programs** menu, without specifying any chart file to open.

Adding Parameters

Click on **Add Parameters**, from the **Edit** menu, to launch PCW. To add parameters to the strip chart, drag individual parameters from PCW (right pane) and drop the parameter on the strip chart. Multiple parameter selections may be dragged and dropped on the Strip Chart, to add several parameters at once. Parameters can also be added by selecting a parameter and using the **Edit – Copy** command from PCW and the **Edit – Paste** command from the Strip Chart menu bar.

Since parameters with different units of measure may be added to the graph, a separate Y-axis will be displayed for each graphed parameter.

As parameters are added to the graph, an additional Y–axis will appear, indicating the parameter's description and unit of measure. A new legend item will appear at the top of the graph, indicating the point shape and color that will be used when plotting the parameter's values, and these values will automatically begin to be displayed.

Immediately after the first parameter is added to the Strip Chart graph, the applet automatically begins monitoring parameter values at half-second intervals. The sampling rate may be modified via the **Options** dialog, described later in this section.

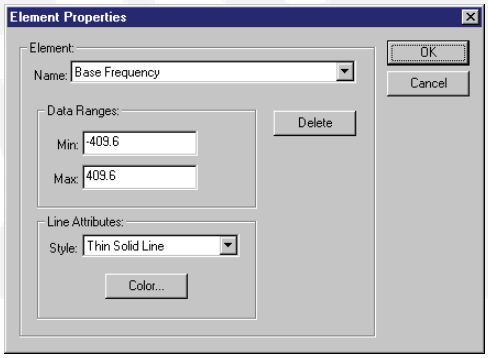

FIGURE 12-2. PARAMETER PROPERTIES

Parameter Properties Dialog

The **Parameter Properties** dialog, shown in Figure 12-2, is accessible from the **Edit – Properties** menu.

The **Name** combo box, at the top of the dialog, provides access to each of the parameters currently displayed on the Strip Chart. The user may delete the selected parameter from the strip chart by clicking on the **Delete** button.

The **Data Ranges** associated with the selected parameter may be modified by entering new values into the edit boxes. These new values will control the minimum and maximum data values displayed on the Y-axis of the graph.

The **Line Attributes** may also be modified by selecting a new line style from the **Style** combo box. A new line color may be selected by clicking on the **Color** button, which invokes the Windows common Color dialog. Current changes are applied after the user clicks on the **OK** button, to close the dialog.

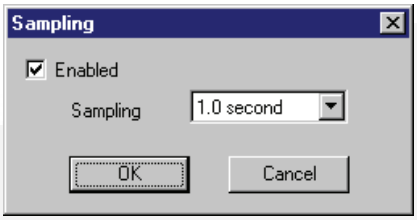

FIGURE 12-3. SAMPLING RATE DIALOG

Sampling Rate Dialog

The Sampling rate feature is available from the Strip Chart – **Options** menu. The **Sampling Rate** dialog, shown in Figure 12-3, allows the user to select the strip chart sampling rate. Sampling can be enabled or disabled using the **Sampling Enable** feature (see **Strip Chart Menu Bar Functions**).

When finished customizing the strip chart, choose the **File–Save As...** menu option. Name the file and save in the **Strip Charts** directory.

Note: Saving a Custom Strip Chart saves only the chart settings, it does not save (log) data.

See **Context Menu** for additional commands that are available for customizing strip charts.

Strip Chart Menu Bar Functions

This section describes each of the menu commands that are available from the Strip Chart menu bar.

File-Open: Allows the user to specify a particular chart (.TPL) file to load from the list of chart files, in the Strip Chart directory. Logged data (.LOG file) can also be opened and viewed with the Strip Chart feature.

After a .TPL file has been selected, the applet will open the file and load the parameters and settings from that file. Since parameter values will be graphed, only the first six parameters that have numeric values will be accepted.

File- Save: Allows saving the current selection of parameters to a chart file.

File - Save As: Allows saving the current set of parameters to a new chart file name and/or location.

File-Close: Closes the Strip Chart

Edit-Add Parameter: Allows adding parameters to the Strip Chart graph from PCW. This command opens PCW, allowing the user to select parameters to be added to the Strip Chart. Drag individual parameters from PCW and drop the parameter on the Strip Chart graph.

Edit-Paste: Allows pasting the parameter(s) from the Windows clipboard into the strip chart. The **Paste** menu option will remain disabled until one or more parameters have been cut or copied to the Windows Clipboard.

Edit-Properties: Opens the **Element Properties** dialog. (This feature can also be activated by double clicking on the parameter names in the strip chart's legend.) The **Element Properties** dialog allows the user to perform a variety of commands relating to the display properties of the Strip Chart.

Options-Sampling: This option displays the **Sampling Rate** dialog, which allows the user to change the strip chart sampling rate. The sample rate is adjustable from 0.05 seconds to 60 seconds.

Options-Sampling Enable: This option is used to enable or disable the collection of sample data. A check mark is displayed next to **Sampling Enable** on the **Options** drop down menu to indicate that the feature is enabled. Click once on **Sampling Enable** to stop collecting sample data. Click on it again to start collecting sample data again.

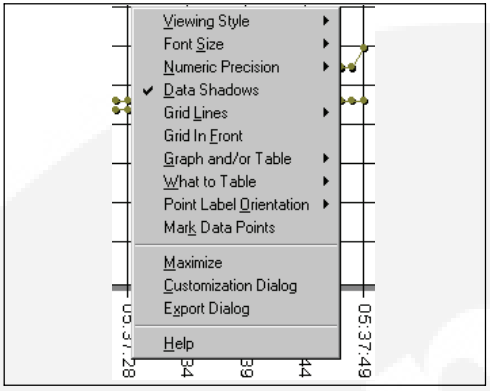

FIGURE 12-4. CONTEXT MENU FEATURES (RIGHT MENU BUTTON)

Context Menu Features

The **Context Menu**, shown in Figure 12-4, may be accessed by clicking on the right mouse button (or equivalent pointing device button) while the cursor is inside the graph. This set of menu items provides the users with additional customization features.

Viewing Style: This controls the viewing style of the object. Possible values include color, monochrome, or monochrome with symbols.

Font Size: This controls the font size used in the graph's image creation process. The font sizes available are large, medium, or small.

Note: It is recommended that the user change the Font Size to the Medium setting, or Large setting if only a few parameters are being monitored. This selection will make it easier to read the parameter legends.

Numeric Precision: This controls the number of decimal places associated with the graph's data. Possible values include zero, one, two or three decimal places.

Data Shadows: This controls whether shadows will be placed behind plotting method graphics. The shadows add depth to the images; however, they will slow image creation significantly when graphing many subsets and/or points.

Grid Lines: This controls the horizontal and vertical lines that make up the graphs grid. Possible values include horizontal and vertical grid lines, horizontal grid lines only, vertical grid lines only, or no grid lines.

Grid In Front: This controls whether the graphs grid is placed behind or in front of the plotting method graphics.

Graph and/or Table: This controls what is displayed in the graph's area. Possible values include graph, table, or graph with table.

What to Table: This controls what information is included in the objects table. Possible values include tabling those subsets that are graphed or tabling all subsets.

Point Label Orientation: This controls the orientation of the point labels. Possible values include automatic, horizontal, or vertical.

Mark Data Points: This controls whether data-points are marked with a small circle.

Maximize: This function maximizes the graph display. To return to the default display size, click inside the solid bar at the top of the window or use the **Esc** key.

Customization Dialog: This function displays the chart Customization dialog.

Export Dialog: Graphs can be exported in the formats shown in Table 12-1, for the listed destinations. This dialog allows the user to print a Strip Chart (see Printing a Strip Chart, Figure 12-6).

TABLE 12-1.

FORMAT	DESTINATIONS
Metafile	Clipboard, File, and Printer
Bitmap	Clipboard and File
OLE Object	Clipboard
Text / Data	Clipboard and File

Help: Displays graph-related help topics.

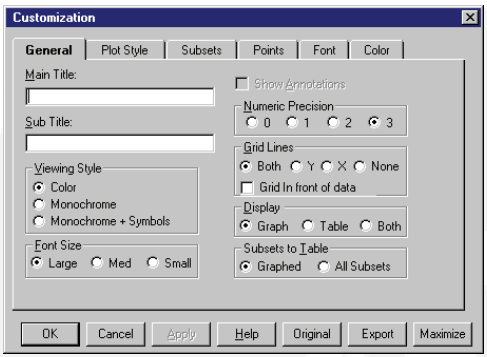

FIGURE 12-5. CHART CUSTOMIZATION DIALOG

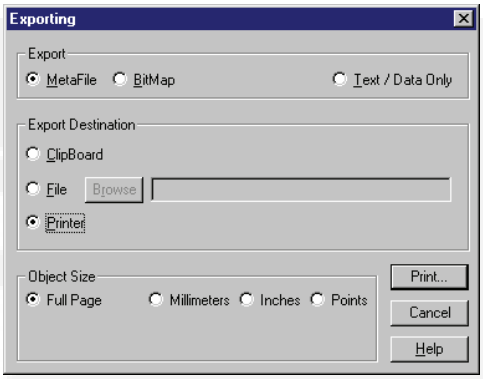

FIGURE 12-6. EXPORT – PRINT DIALOG

Chart Customization Dialog

An additional level of editing is available that allows the user to customize the chart dialog. To access this feature, double click within the chart to display the **Customization** dialog. This dialog has tabs for each of the editable features.

Click on the desired tab to view the available settings for that feature. These features can be used to enhance the chart by changing border colors, text size and colors, and many other chart display features.

Printing a Strip Chart

A Strip Chart can be printed by using the Export dialog (Figure 12-6). Use the right menu button to access the Export Dialog, then select the **Printer** radio button and select the **Print** button.

Viewing Logged Data

Logged data, created with the Monitor feature (refer to Monitor Section 6) can be displayed with the Strip Chart feature. Select **Open** from the Strip Chart **File** menu. Enter the .LOG file location and name.

Strip Chart will display logged data. Since the data is not being displayed on a real-time basis, the data is static. Use the left and right arrow buttons, located on the keyboard, to navigate the data within the .LOG file.

NOTES

13. Tools and Reports

This section describes the features that are available from the **Tools** menu drop-down list. These features include the Module Template Editor and View Data Logs, View Alarm Logs, and View Journal Logs. Viewing the logs allows the user to create a report to view specific devices for a specific time period.

PCW does not need to be connected to a site to use these tools. Module templates can be created and reports can be viewed any time.

MODULE TEMPLATE EDITOR

This feature allows you to edit the labels for Online Summary screens. These editable summary screens are called Module Templates**.** Templates are created by selecting the module type in the **Module Template Editor**, from the **Tools** menu.

There is one Digital I/O Module (DIM) template and two Controls Communications Module templates (CCM-G for genset applications and CCM-T for ATS applications).

You can customize the templates and give them a unique name with the **Save As** feature. A customized template can be used by more than one device of the same type.

Open the desired template from the **Tools** menu, select: **Module Template Editor–>DIM Editor,** or **CCM-G Editor,** or **CCM-T Editor.**

The following section covers a typical template for each application, beginning with the DIM template. Figure 13-1 shows a new DIM template.

If you wish to create a custom template, enter whatever you want displayed in the fields. an example is shown in Figure 13-2.

By selecting the DIM Default from the pull-down menu, the default template is displayed (see Figure 13-3).

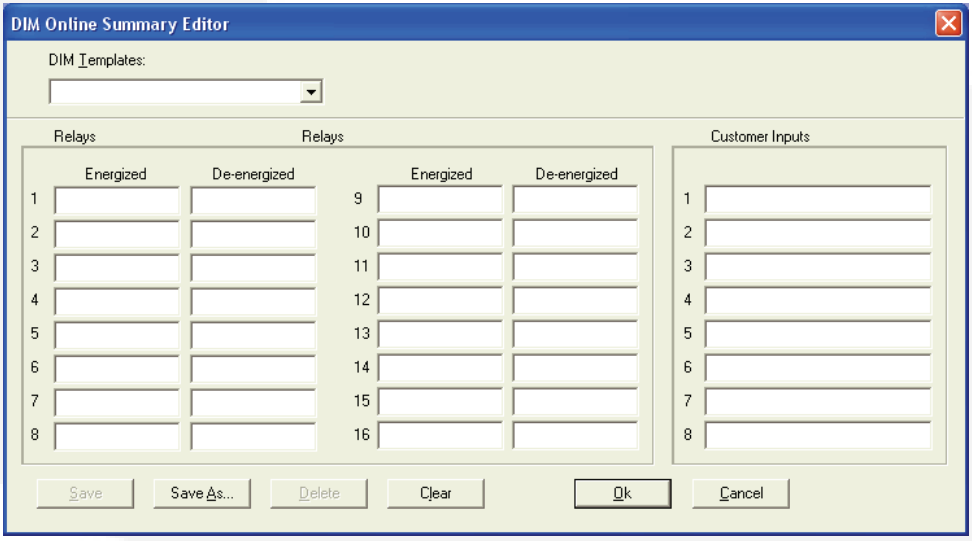

FIGURE 13-1. DIM ONLINE SUMMARY TEMPLATE DIALOG BOX

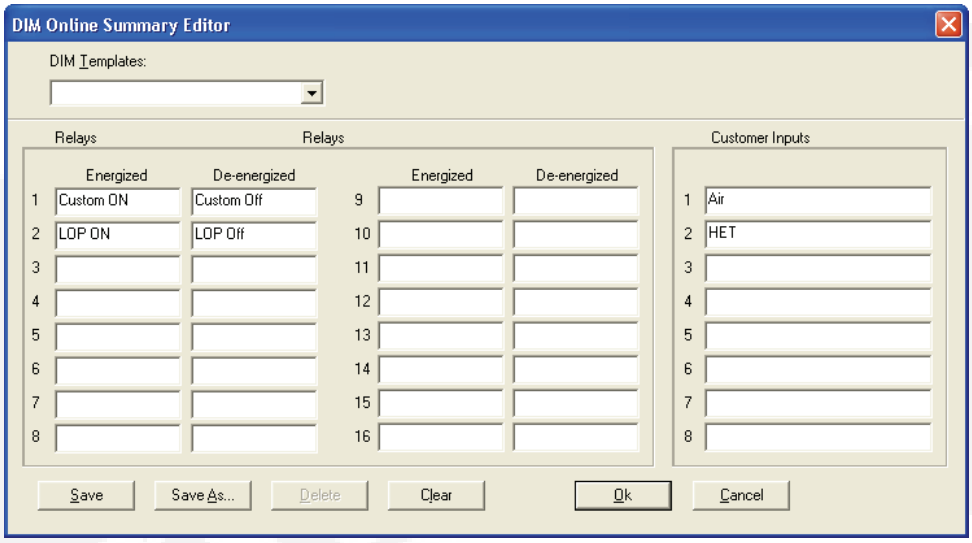

FIGURE 13-2. CUSTOMIZED DIM ONLINE SUMMARY TEMPLATE

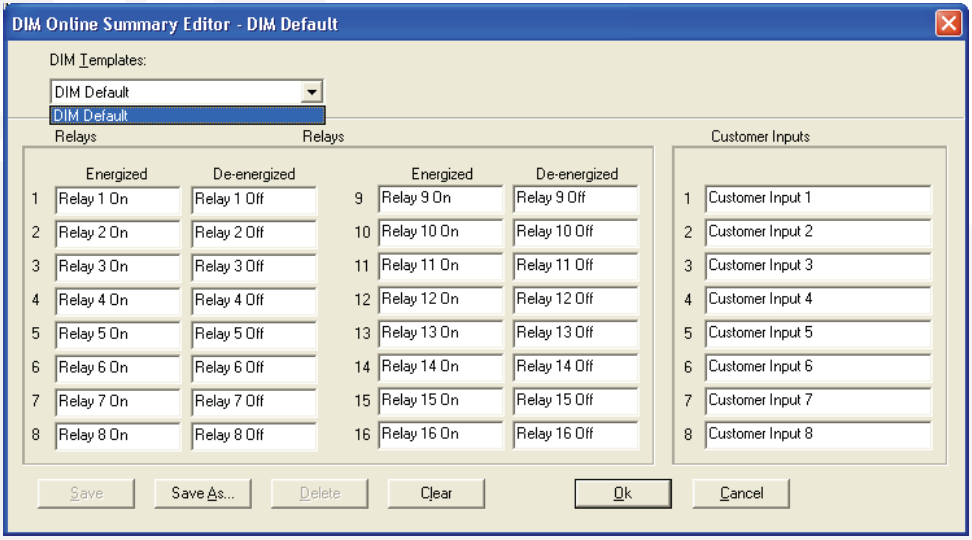

FIGURE 13-3. DEFAULT DIM ONLINE SUMMARY TEMPLATE

DIM Template

The **DIM Template** drop-down arrow is used to access any previously created templates. These templates can be removed (**Delete**), or used to create new templates. The **Clear** button will remove all of the labels that have been entered.

The **OK** button allows you to close the template after viewing it. **Cancel** closes the template without saving changes.

The default DIM template is shown in Figure 13-3.

To create a new template, open a new (or existing) DIM template, enter the desired labels for the 16 relays and 8 discrete inputs into each of the edit boxes. (Example assumes expansion relay board is included, otherwise use the first eight relays). Use the tab key to move to the next edit box (Figure 13-2).

When you are finished entering all of the desired labels, click on the **Save As** button. A dialog will popup allowing you to enter the new template name (Figure 13-4). Enter the new template name and click on the OK button to save the template.

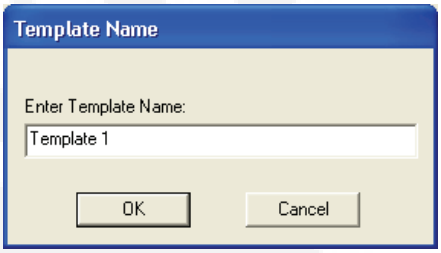

FIGURE 13-4. TEMPLATE NAME

Apply the changes to the DIM using the PCW setup feature. A network site containing the DIM will be needed (refer to Section 3).

Select the site from the **Site List**. Click on the **Device Setup** button to view the **Device List**. In this example, select the DIM (DIMB) from the list (Figure 13-5). Click on the Template drop-down arrow and select the name of the template to be applied to the device (in this example the template was named NFPA 110).

Click on the **OK** buttons for the Create Device and Device Setup dialogs, then click on **Apply** to save the settings. Click on **OK** to complete the setup and close the **Site Setup** dialog.

After applying the template to the device, connect to the network site and the device. The Summary View will display the customized template.

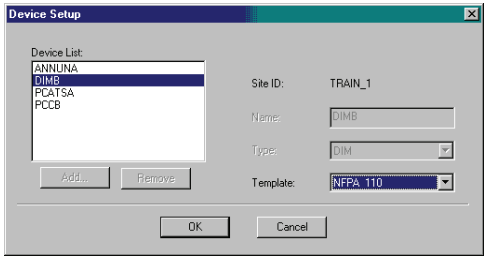

FIGURE 13-5. DIM DEVICE SETUP

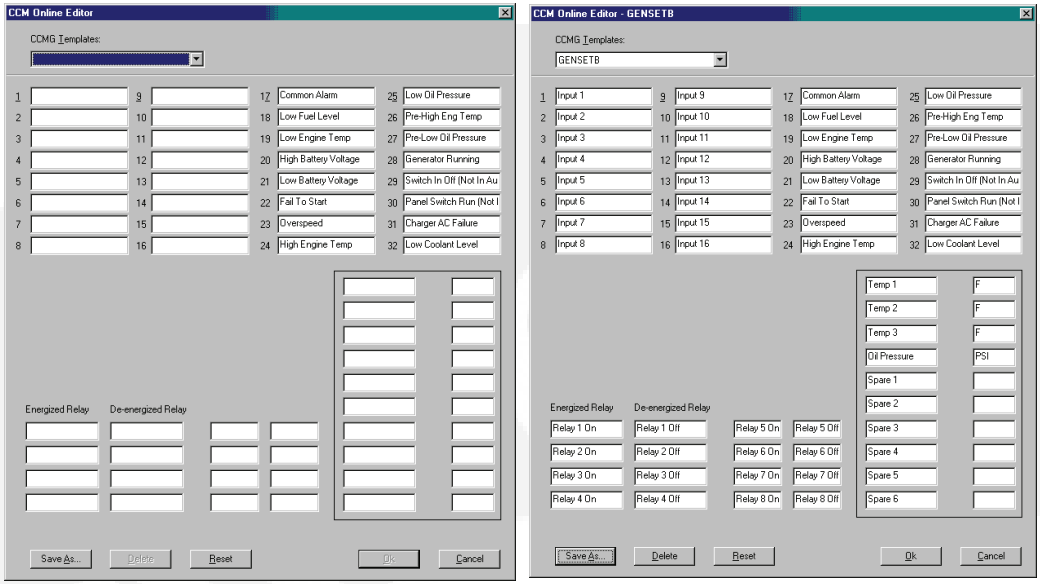

FIGURE 13-6. CCM-G ONLINE TEMPLATES

CCM-G Template

The **CCM-G Template** drop-down arrow is used to access any previously created templates. These templates can be removed (**Delete**), or used to create new templates.

The **Reset** button will return all of the labels to the original settings.

The **OK** button allows you to close the template after viewing it. **Cancel** closes the template without saving changes.

To create a new template, open a new (or existing) CCM-G template, enter the desired labels for the 16 discrete inputs (inputs 17 through 32 are already labeled), 10 analog inputs, and 8 relays. Use the tab key move to the next edit box (Figure 13-6).

When finished entering all of the desired labels, click on the **Save As** button. A dialog will popup allowing you to enter the new template name. Enter the new template name and click on the **OK** button to save the template.

Apply the changes to the CCM-G using the PCW setup feature. A network site containing the CCM-G will be needed (refer to Section 3).

Select the site from the **Site List**. Click on the **Device Setup** button to view the **Device List**. In this example, select the CCM-G (CCMG) from the list (Figure 13-7). Click on the Template drop-down arrow and select the name of the template to be applied to the device (in this example the template was named Genset B).

Click on the **OK** buttons for the Create Device and Device Setup dialogs, then click on **Apply** to save the settings. Click on **OK** to complete the setup and close the **Site Setup** dialog.

After applying the template to the device, connect to the network site and the device. The Summary View will display the customized template.

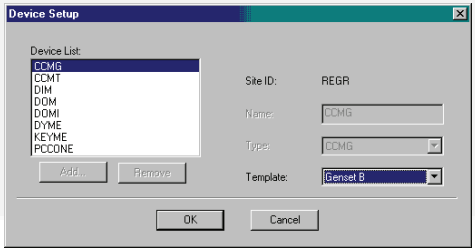

FIGURE 13-7. CCM-G DEVICE SETUP

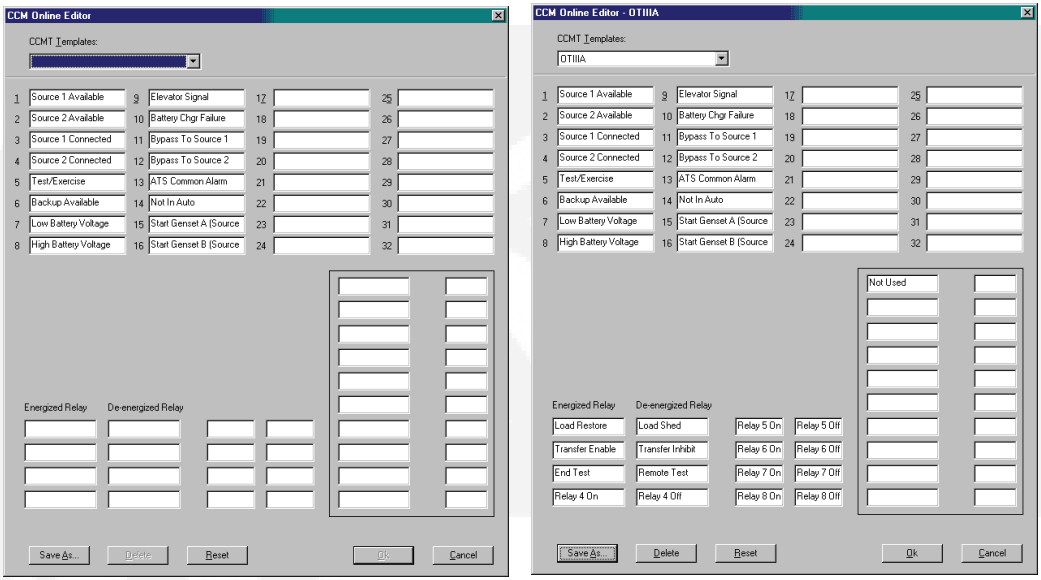

FIGURE 13-8. CCM-T ONLINE SUMMARY TEMPLATES

CCM-T Template

The **CCM-T Template** drop-down arrow is used to access any previously created templates. These templates can be removed (**Delete**), or used to create new templates.

The **Reset** button will return all of the labels to the original settings.

The **OK** button allows you to close the template after viewing it. **Cancel** closes the template without saving changes.

To create a new template, open a new (or existing) CCM-T template, enter the desired labels for the 16 discrete inputs (inputs 1 through 16 are already labeled), 10 analog inputs, and 8 relays. Use the tab key move to the next edit box (Figure 13-8).

When finished entering all of the desired labels, click on the **Save As** button. A dialog will popup allowing you to enter the new template name. Enter the new template name and click on the **OK** button to save the template.

Apply the changes to the CCM-T using the PCW setup feature. A network site containing the CCM-T will be needed (refer to Section 3).

Select the site from the **Site List**. Click on the **Device Setup** button to view the **Device List**. In this example, select the CCM-T (CCMT) from the list (Figure 13-9). Click on the Template drop-down arrow and select the name of the template to be applied to the device (in this example the template was named OTIII).

Click on the **OK** buttons for the Create Device and Device Setup dialogs, then click on **Apply** to save the settings. Click on **OK** to complete the setup and close the **Site Setup** dialog.

After applying the template to the device, connect to the network site and the device. The Summary View will display the customized template.

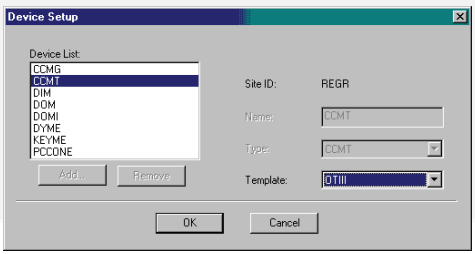

FIGURE 13-9. CCM-T DEVICE SETUP

REPORTS

The Tools menu allows the user to create a custom report from the log files. Data is automatically recorded in the Alarms Log when alarms are received. The Journal log also is updated automatically. It is important to note that the Data Log information is only collected while you are connected to the device, and the logging feature is enabled (refer to section 7).

Data Log Report

To create a custom report form the Data Log, select **View Data Log** from the **Tools** menu.

Select the **Site** and **Device** from the drop-down arrow to create a report for a specific device (Figure 13-10).

Next, select the date and time period that you would like the report to cover, or click on the **Earliest** and **Latest** check boxes to get a report for all of the data on the selected device. Click on the **Create** button, to create and launch the report.

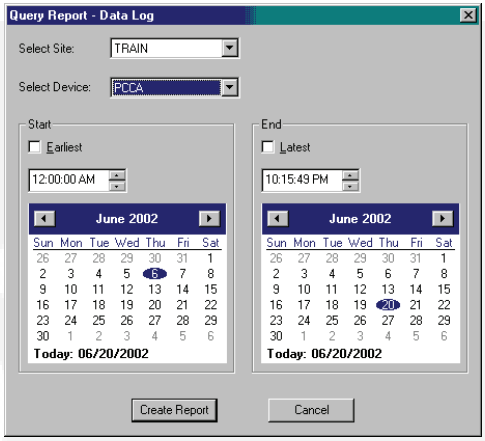

FIGURE 13-10. DATA LOG REPORT

The Custom report is display in a new window (Figure 13-11). The report can be navigated by using the left and right arrow buttons on the toolbar to page through the report. The report can be printed by using the Print and Print Setup buttons.

The search tool (binoculars) can be used to find a specific data point. Enter the search criteria in the edit box next to the binoculars and click on the **Binocular** button.

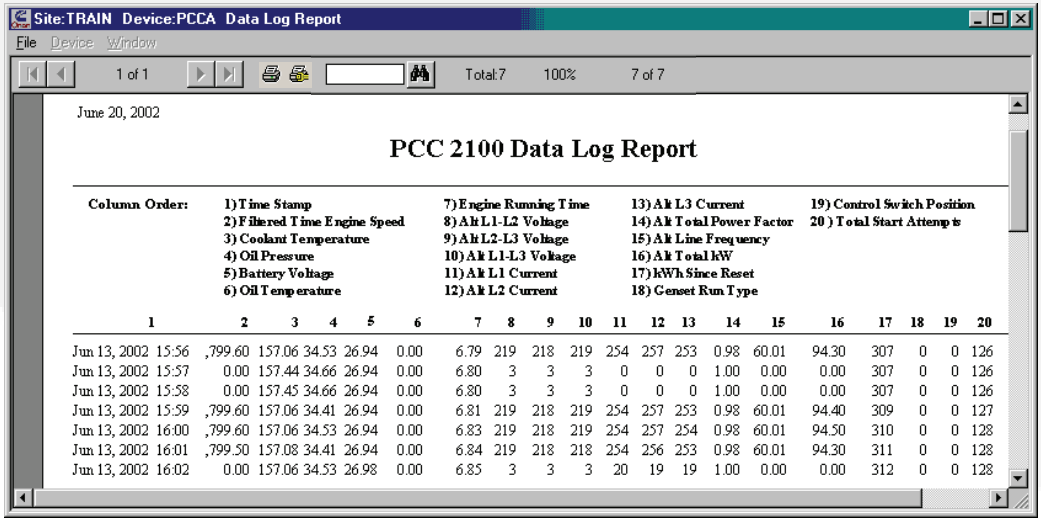

FIGURE 13-11. CUSTOM DATA LOG REPORT

Alarm Report

Each time an alarm is received from a device, the alarm is recorded in the log file. To create a custom report from the Alarms Log, select **View Alarm Log** from the **Tools** menu.

Select the **Site** and **Device** from the drop-down arrow to create a report for a specific device (Figure 13-12).

Next, select the date and time period that you would like the report to cover, or click on the **Earliest** and **Latest** check boxes to get a report for all of the data on the selected device. Click on the **Create** button, to create and launch the report.

The Custom report is display in a new window (Figure 13-13). The report can be navigated by using the left and right arrow buttons on the toolbar to page through the report.

The search tool (binoculars) can be used to find a specific alarm. Enter the search criteria in the edit box next to the binoculars and click on the **Binocular** button.

To view the Alarms Log (see Figure 13-14) and print it, select File –> Print from the menu bar when the Alarms Report is displayed. The report can be printed by using the Print and Print Setup buttons.

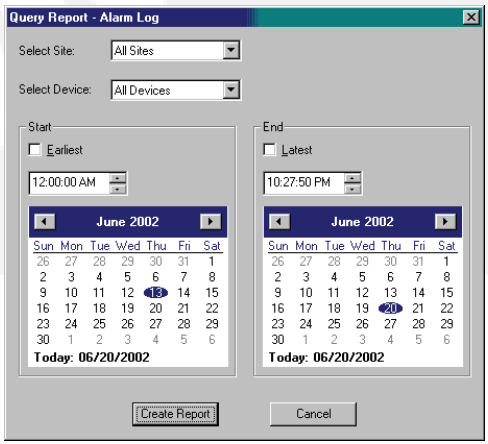

FIGURE 13-12. ALARMS REPORT

Site: Device: Alarm Report

File Device Window

Code	Level	Status	Site	Module	Time Occurred	Time Acknowledged	User	Description
1451	Warning	Active	Site 1		06/19/02 11:01:59		uss262	Alternator and Bus Voltages are out of calibration.
441	None	Active	Site 1		06/19/02 11:00:47		uss262	Battery voltage is at or below the low battery voltage thresh
1463	None	Inactive	TRAIN	PCCA	06/13/02 16:02:20		uss262	The control switch is not in the Auto position.
1483	None	Inactive	TRAIN	PCCA	06/13/02 16:02:19		uss262	Common Warning or Common Shutdown is active.
1463	None	Active	TRAIN	PCCA	06/13/02 16:02:18		uss262	The control switch is not in the Auto position.
1311	None	Inactive	TRAIN	PCCA	06/13/02 16:02:17		uss262	The customer #1 switch is in an active state.
1311	Shutdow	Active	TRAIN	PCCA	06/13/02 16:02:14		uss262	The customer #1 switch is in an active state.
1465	None	Active	TRAIN	PCCA	06/13/02 15:59:55		uss262	The ready to load command is active indicating that it is rea
1465	None	Inactive	TRAIN	PCCA	06/13/02 15:59:29		uss262	The ready to load command is active indicating that it is rea
1465	None	Active	TRAIN	PCCA	06/13/02 15:58:25		uss262	The ready to load command is active indicating that it is rea
1463	None	Inactive	TRAIN	PCCA	06/13/02 15:58:18		uss262	The control switch is not in the Auto position.
1483	None	Inactive	TRAIN	PCCA	06/13/02 15:58:17		uss262	Common Warning or Common Shutdown is active.
1463	None	Active	TRAIN	PCCA	06/13/02 15:58:16		uss262	The control switch is not in the Auto position.
1311	None	Inactive	TRAIN	PCCA	06/13/02 15:56:44		uss262	The customer #1 switch is in an active state.
1311	Shutdow	Active	TRAIN	PCCA	06/13/02 15:56:41		uss262	The customer #1 switch is in an active state.
1465	None	Inactive	TRAIN	PCCA	06/13/02 15:56:41		uss262	The ready to load command is active indicating that it is rea
1483	None	Active	TRAIN	PCCA	06/13/02 15:56:41		uss262	Common Warning or Common Shutdown is active.

FIGURE 13-13. CUSTOM ALARMS REPORT

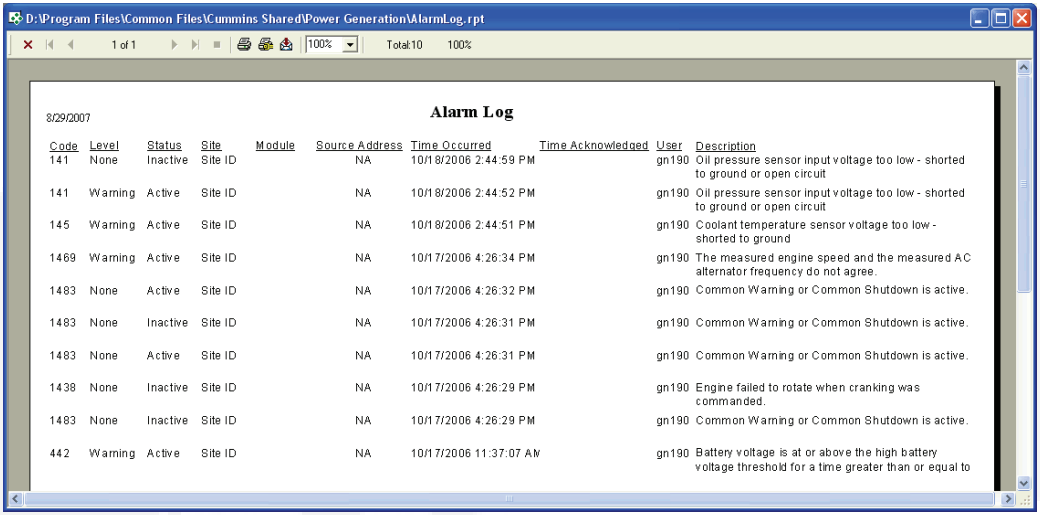

FIGURE 13-14. ALARMS LOG

Journal Report

Each time PCW is used a journal entry is created in the log file. To create a custom report from the Journal Log, select **View Journal Log** from the **Tools** menu.

Select the date and time period that you would like the report to cover, or click on the **Earliest** and **Latest** check boxes to get a report for all of the data in the Journal log (Figure 13-15).

Next, Click on the **Create** button, to create and launch the report.

The Custom report is display in a new window (Figure 13-16). The report can be navigated by using the left and right arrow buttons on the toolbar to page through the report.

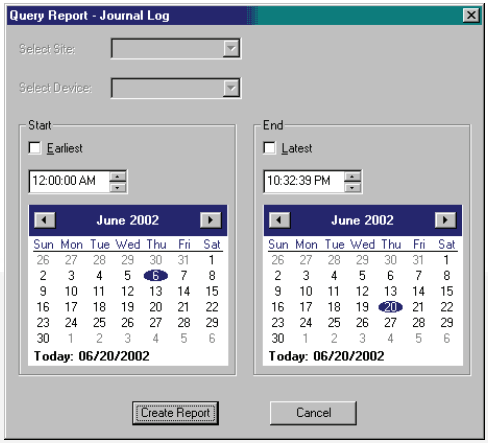

FIGURE 13-15. JOURNAL REPORT

The search tool (binoculars) can be used to find a specific journal entry. Enter the search criteria in the edit box next to the binoculars and click on the **Binocular** button.

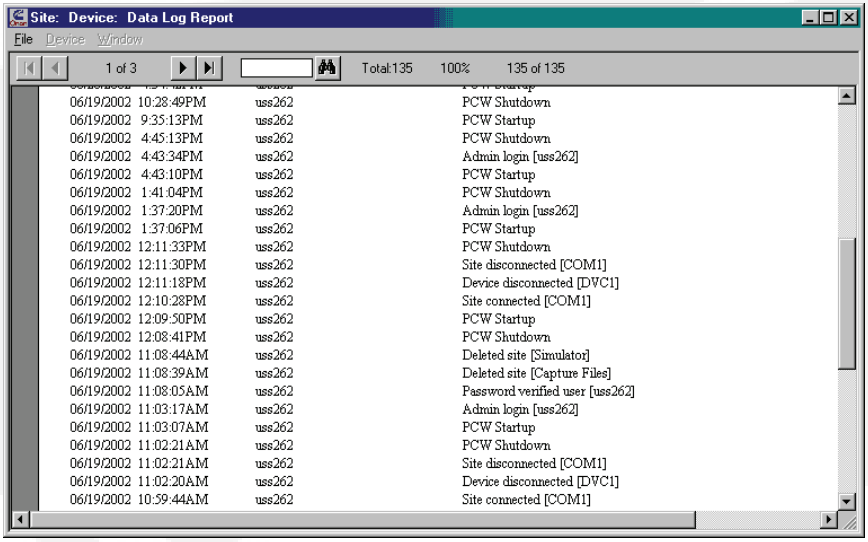

FIGURE 13-16. CUSTOM JOURNAL REPORT

NOTES

14. Window Menu

Use the **Window** menu features to manage the Device Explorer Window and to launch or hide additional windows and features.

TOOLBAR AND STATUS BAR

The **Toolbar** and **Status Bar** are selected (checked) by default. To remove them from the Device Explorer window, click on them (unchecked). To return these features to the Device Explorer window, return to the Windows menu and click on them again.

SPLIT

The Split feature allows the user to easily resize the left and right window panes. Drag the active centerline between the left and right pane to the preferred size.

MONITOR

Launches the Monitor dialog. Refer to the Monitor Section for details on this feature.

STRIP CHART

Launches the Strip Chart feature. Refer to the Strip Chart Section for details on this feature.

VIEW IN SEPARATE WINDOW

(Window) View in Separate Window launches a new window for the information that is currently being displayed in the Device Explorer right pane.

CASCADE WINDOWS

(Window) Cascade is the standard Windows function to cascade open windows (Figure 14-1). This feature stacks all open windows that were launched from the Device Explorer **View In Separate Window** feature. The windows are stacked so that the title bars can be read.

CLOSE ALL

(Window) Close All closes all open windows that were launched from the Device Explorer **View In Separate Window** feature. This command closes open sites. From the **Window** menu**,** select: **Close All.**

All remaining open windows are shown on the Taskbar.

ANNUNCIATE ALARMS AND DISPLAY ALARM WINDOW

Annunciate Alarms and **Display Alarm Window** features are selected (checked) by default. To disable alarm annunciation, click on the the feature in the Windows menu to disable it (unchecked).

To prevent the **Alarm Window** from automatically popping up, whenever an alarm message is received, click on **Alarm Window** in the Window menu drop-down list (unchecked).

To restore these features, Go the the Windows menu drop-down list and click on them again.

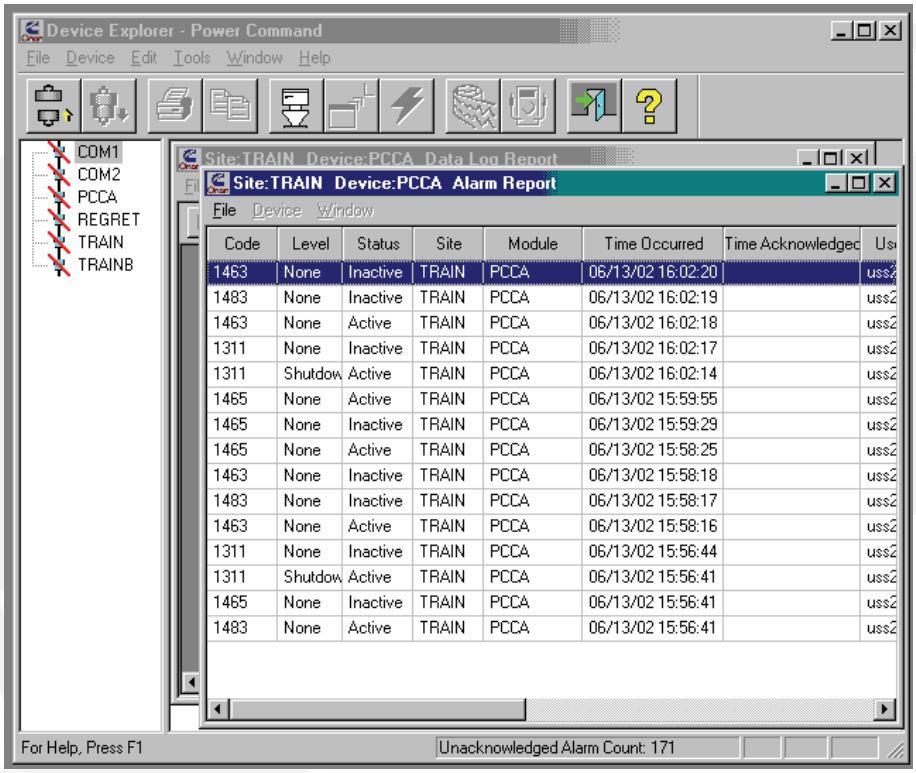

FIGURE 14-1. CASCADE WINDOWS

15. Paging

This feature is used to send event messages to an alphanumeric pager. Remote applications will send event messages that are configured for dialout. This feature requires WinBEEP 32 software on the monitoring PC.

PAGING APPLICATIONS

Figures 15-1 illustrates typical monitoring applications using the paging feature for both local and remote installations. Refer to Figure 15-2 for local and remote network applications.

The PCC 3100 and PCC 3200 controls support PCC serial communications for monitoring without the use of an FT-10 network. PCC 2100 and PC-ATS require a network card to send remote messages. All other devices (CCM-G, CCM-T) must be monitored over an FT-10 network.

Note: Devices that are installed in a network with autobinding (self-installed networks) cannot be monitored with PCW.

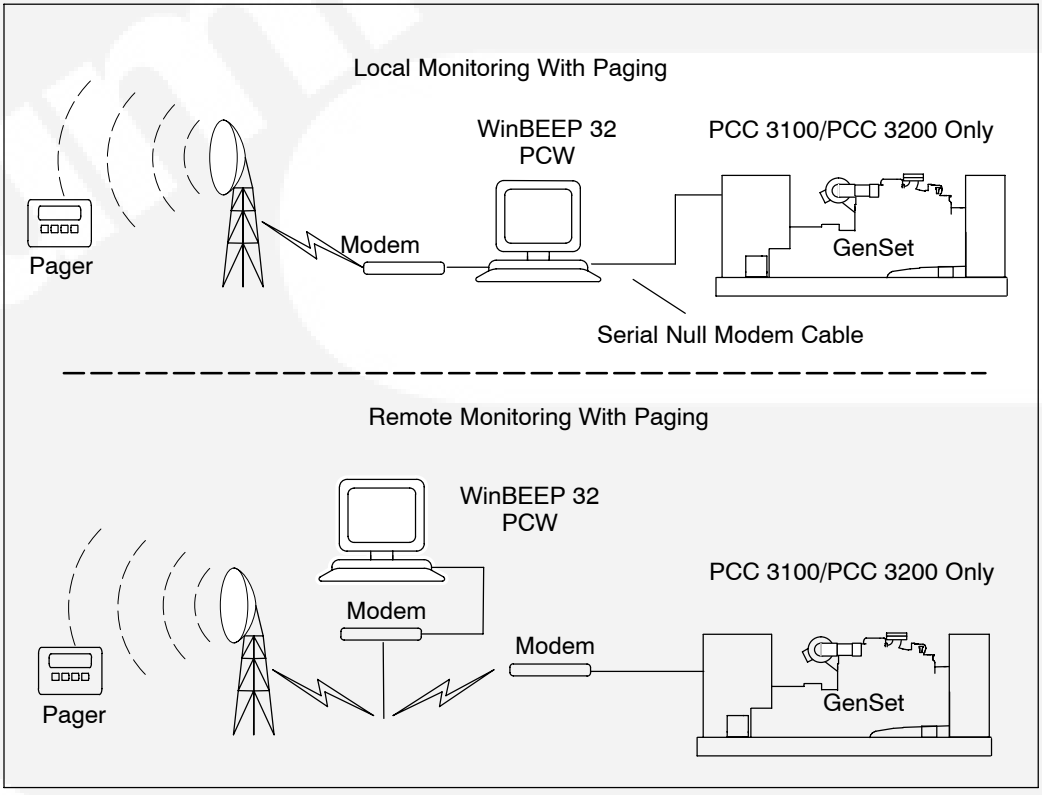

FIGURE 15-1. TYPICAL PAGING APPLICATIONS

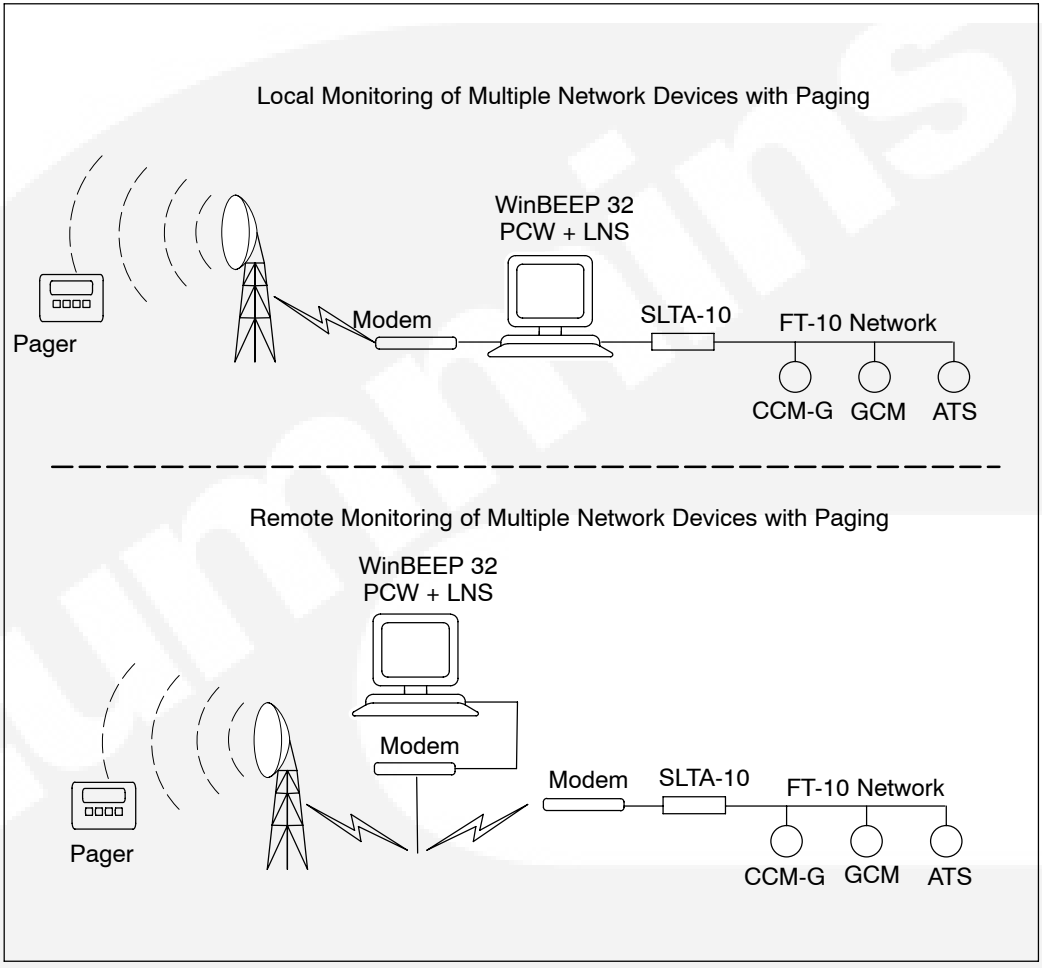

FIGURE 15-2. TYPICAL PAGING APPLICATIONS WITH FT–10 NETWORK

Figure 15-2 illustrates typical network monitoring applications that include the use of the paging feature.

The following section describes the necessary setup procedures for WinBEEP 32 and PCW.

To configure the PCC 3100 to dialout out events for remote paging, the network installer should use the plug–in for this device (refer to the FT–10 Network Installation and Operation manual 900–0529).

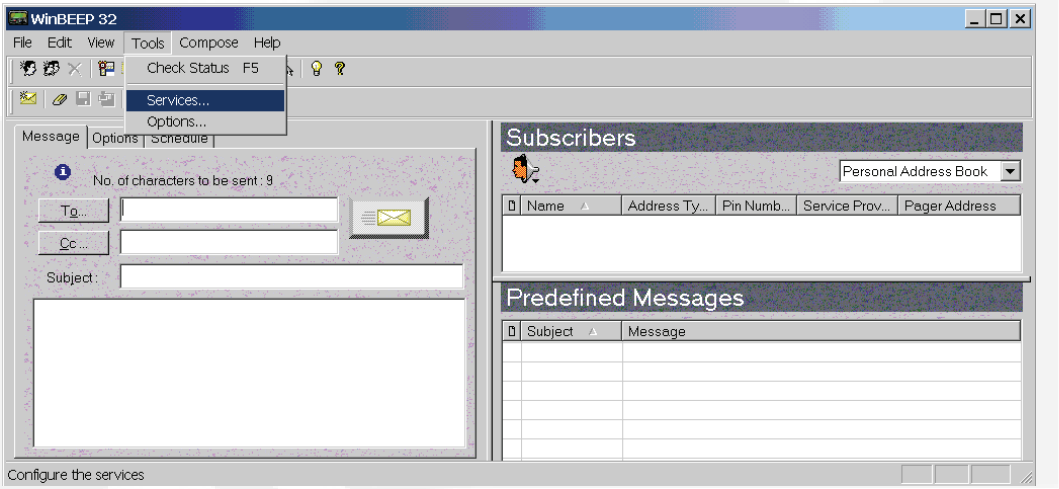

FIGURE 15-3. WINBEEP MAIN WINDOW

WINBEEP SETUP

WinBEEP is a messaging program that is used to send messages from your computer via a modem to a pager. In this application, it will be used to forward predefined event messages from a device to an alphanumeric pager. This program can also be used to keep a history of the messages being sent and their status. Refer to the WinBEEP User's Guide for information on these features.

Install WinBEEP 32 using the installation instructions provided with the program. Figure 15-3 shows the WinBEEP 32 main window, with the **Tools** menu selected.

The following section covers the steps used to configure the WinBEEP 32 program for use in power generation paging applications.

Each of the following steps must be performed before using the pager feature:

- Modem Setup
- Service Provider Setup
- Agents
- Send Options
- New Subscriber Setup
- Phone and Modem Options
- Addressing Message
- Network Applications
- PCW Site Setup for Paging

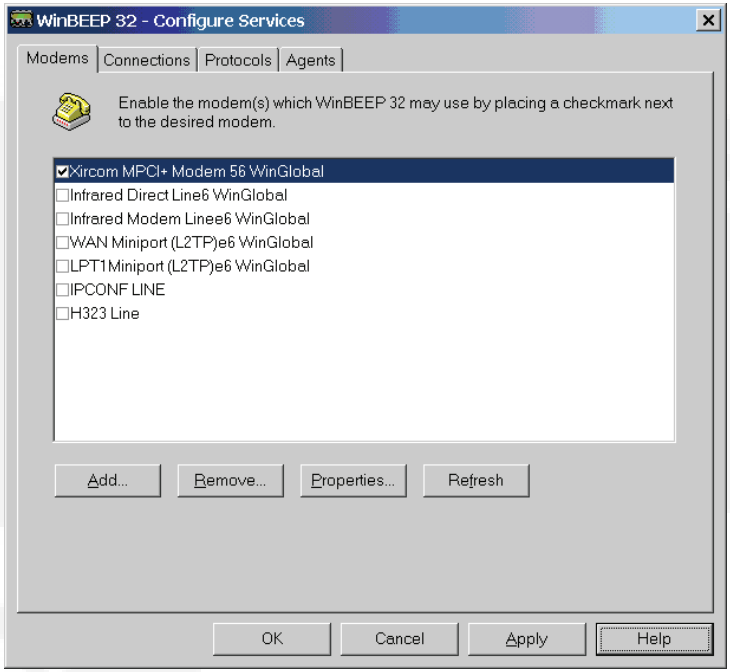

FIGURE 15-4. SERVICES – MODEM

Modem Setup

A modem must be installed and configured on the computer for paging. Use the following steps to setup the modem.

1. Launch WinBEEP 32 from the **Programs** menu. Click on the **Tools** menu and select **Services**. Figure 15-3.
2. In the **Configure Services** widow (Figure 15-4), click on the **Modems** tab.
3. Locate the modem on the PC that will be used to send messages, and click on the checkbox next to it (Figure 15-4). When it is selected, a check will appear in the box.
   (If the modem you want to use is not on the list, click on the **Add** button to use the Windows install feature to add the modem.)
4. Click on the **Apply** button to make the selection.

Proceed to Service Provider Setup.

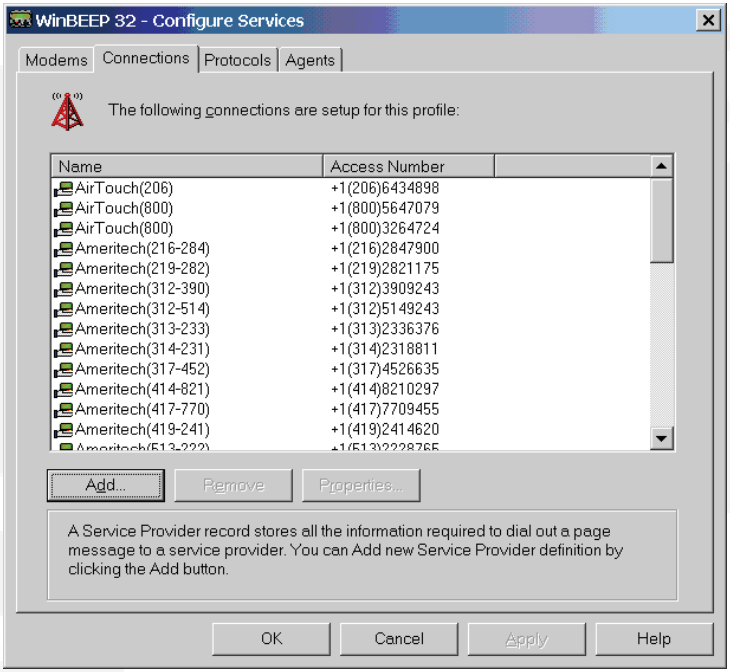

FIGURE 15-5. SERVICES – CONNECTIONS

Service Provider Setup

The service provider is the service that delivers messages to pagers. The service provider receives the massages sent by WinBEEP and forwards them to the subscriber(s). Use the following steps to setup the Service Provider.

1. Click on the **Connections** tab and then click on the **Add** button. Figure 15-5.
2. In the Select Connection Type window, select the **Wireless Dial-Up Service**, and click on the **OK** button (Figure 15-6).

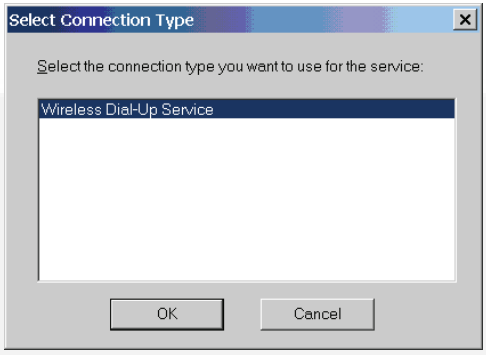

FIGURE 15-6. CONNECTION TYPE

4. The Add New Service Provider Wizard window is displayed to help guide you through the setup. Click on the **Next** button to proceed. Figure 15-7.
5. Enter the display name for the service provider in the dialog box, up to 30 characters. Enter the name of the pager service provider being used.
6. Click on the drop-down arrow to select the communication device (modem). Select the modem previously setup. Click on the **Next** button to proceed. Figure 15-8.

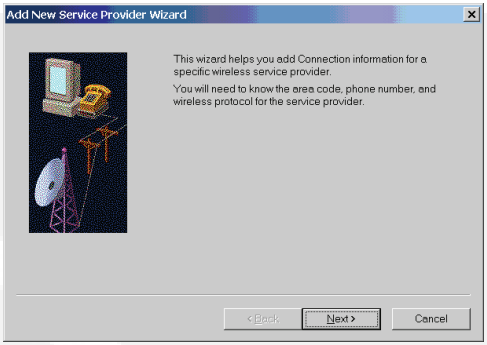

FIGURE 15-7. ADD NEW SERVICE PROVIDER WIZARD

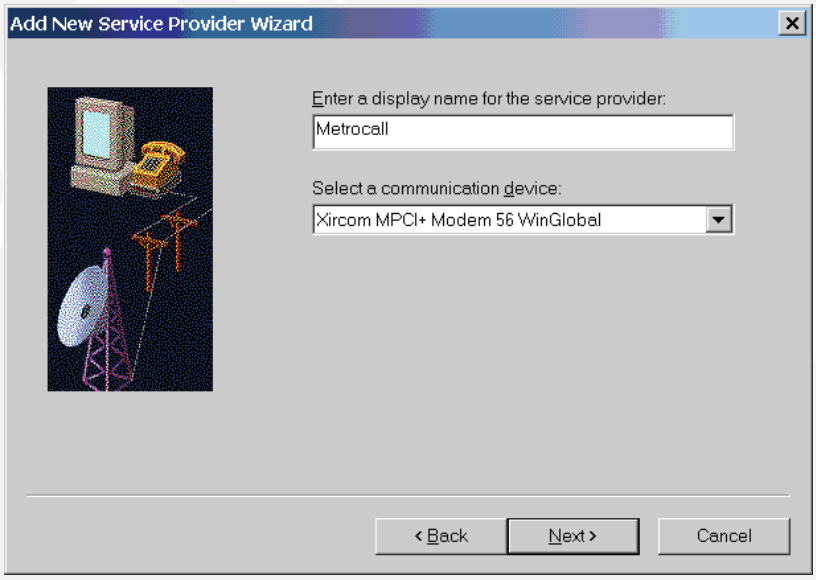

FIGURE 15-8. NEW SERVICE PROVIDER NAME

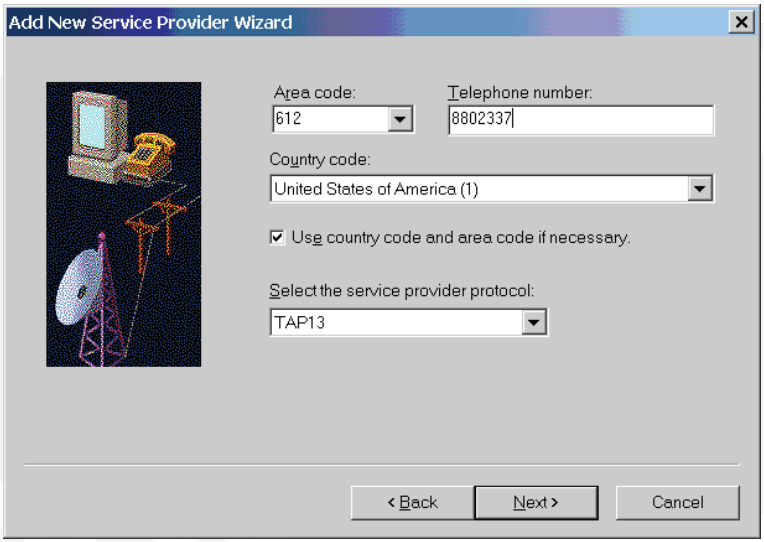

FIGURE 15-9. SERVICE PROVIDER PHONE SETTINGS

7. The next Service Provider Wizard window is used to enter the number of the modem the service provider uses to route messages to the pager. (This is not the same as the pager number.) If you do not know the number, contact the service provider and request the number for the modem that they use to route messages to the pager.
8. Select the area code from the drop-down list or enter it. Enter the telephone number, up to 30 characters. Dashes are not needed.
9. Select the country code from the drop-down list.
10. Select the service provider protocol from the drop-down list. Use the TAP13 selection. Click on the **Next** button to proceed. Figure 15-9.

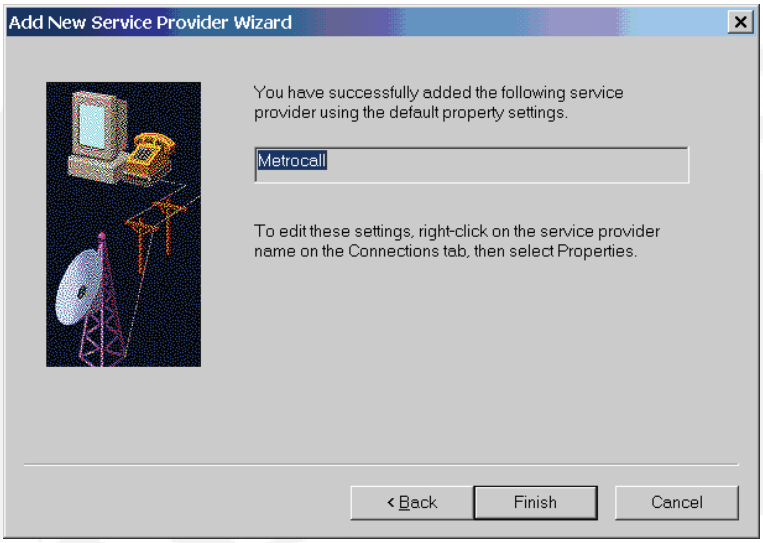

FIGURE 15-10. SERVICE PROVIDED ADDED

11. The next window is displayed to confirm that the service provider has been successfully added. Click on the **Finish** button to proceed. Figure 15-10.

When the service provider has been successfully added, the program returns to the Configure Services window. You can select the newly created service provider from the list and view the properties for the service provider by clicking on the **Properties** button. In this setup we are going to use the default settings. You can also delete service providers from this screen. Figure 15-11.

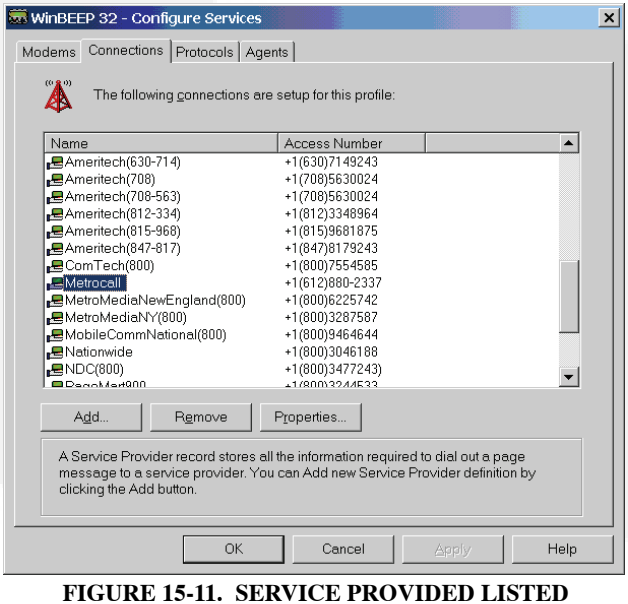

FIGURE 15-11. SERVICE PROVIDED LISTED

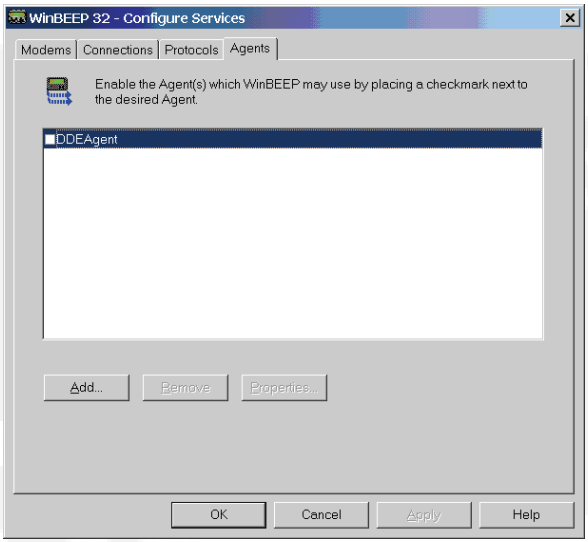

FIGURE 15-12. AGENTS

Agents

A new ASCII agent will be created and used for this application. The ASCII agent enables applications that can create an ASCII text file. The ACSII agent was installed with WinBEEP, but it needs to be added, configured and selected as the agent.

1. Click on the **Agents** tab, then click on the **Add** button, to add the new agent. Figure 15-12.
2. Select the **ASCII Agent** from the Installed Agents list and click on the **OK** button to proceed. Figure 15-13.

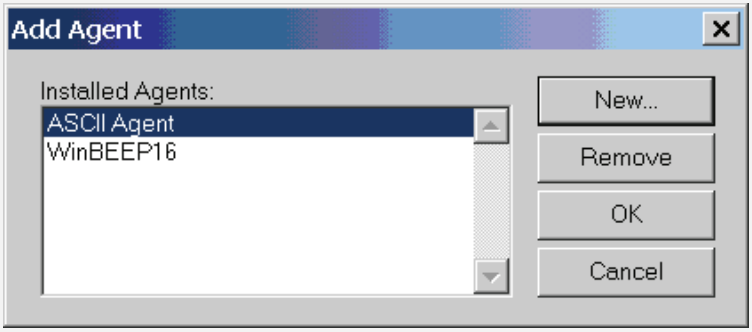

FIGURE 15-13. ADDING AGENT

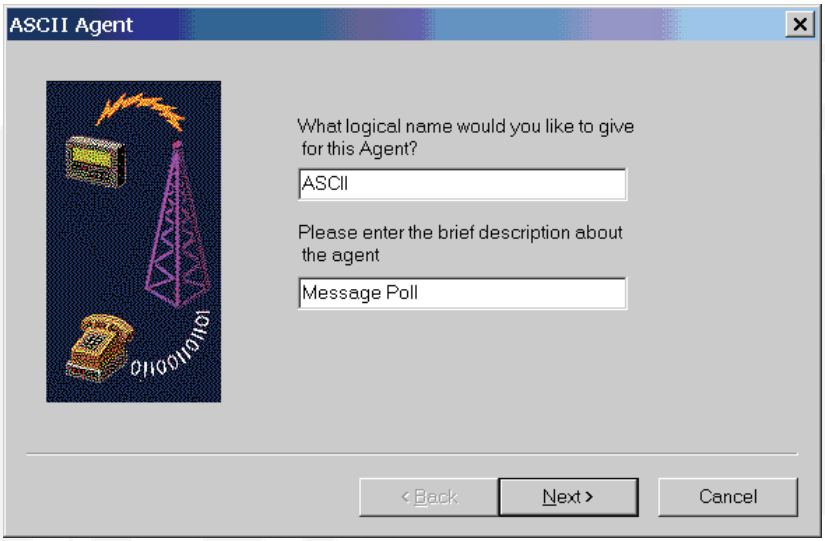

FIGURE 15-14. ASCII AGENT NAME

3. Enter a name for the this agent "*ASCII*" and a description "*Message Poll.*" Then click on the **Next** button. Figure 15-14.
4. Enter the Polling interval, in half minute increments. This interval determines how often the agent checks the directory for new files to send. Figure 15-15.
5. Create an ASCII folder in a suitable drive and location. This will be used to store saved messages. Enter the path and directory to the newly created ASCII folder or use the browse (...) button to locate and select the directory location. This directory specifies the location of the saved files. Click on the **Finish** button to complete this setup.

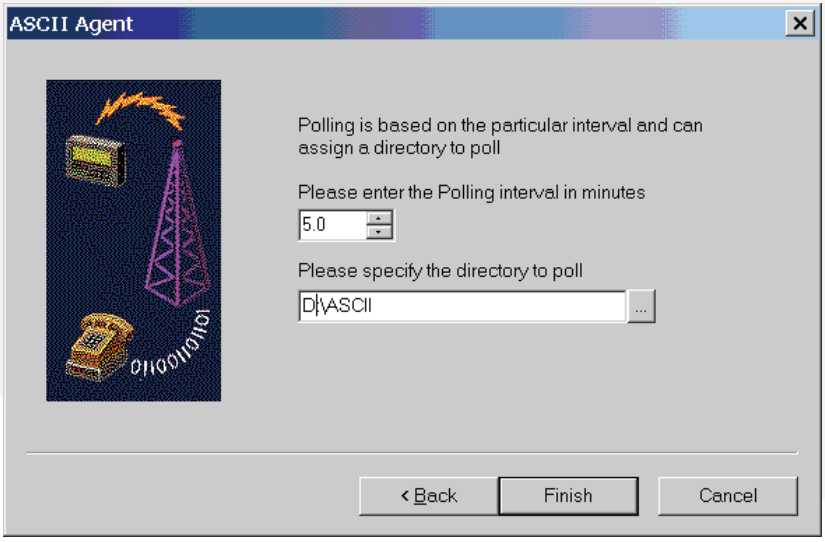

FIGURE 15-15. ASCII AGENT SETUP

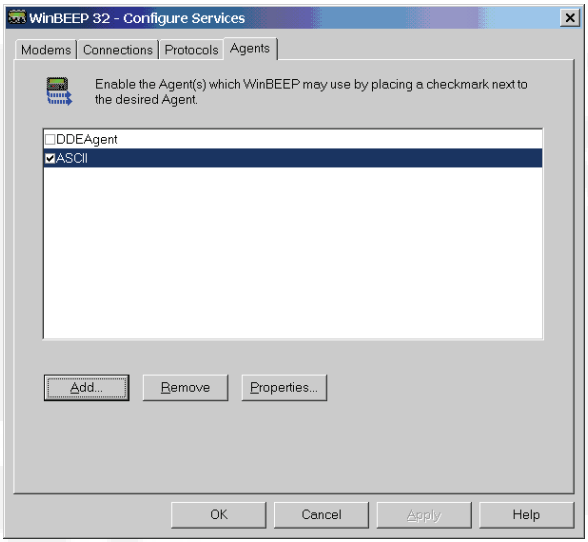

FIGURE 15-16. SELECTING THE NEW ASCII AGENT

6. Make sure the checkbox next to the ASCII agent is selected, to enable this as the agent used with WinBEEP 32.

7. Click on the **OK** button, to complete this setup.

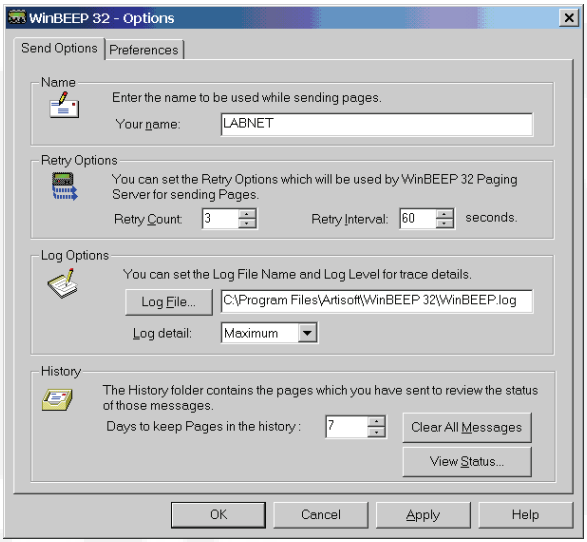

FIGURE 15-17. SEND OPTIONS

Send Options

The Options feature allows you to add a name to all outgoing messages. This feature also allows you to set the retry count, create a log file, and configure the History folder.

1. Select **Tools–Options** from menu bar.
2. Enter the Name (typically the site name, or the network name for the site). Figure 15-17.
3. Set the Retry Options using the arrows to select the number of retries and the interval between retries in seconds.
4. Set the Log Options by specifying the Log File path. Enter the path or click on the **Log File** button to browse to the file or create a new one. Use the **Maximum** setting (default setting) for the log detail.
5. Use the arrows to set the number of days to store messages in the history folder.
6. The **Clear All Messages** button can be used to clear messages from the History folder. The **View Status** button can be used to view the status on messages that have been sent.
7. When finished setting the send options, click on the **Apply** button, then click on the **OK** button.

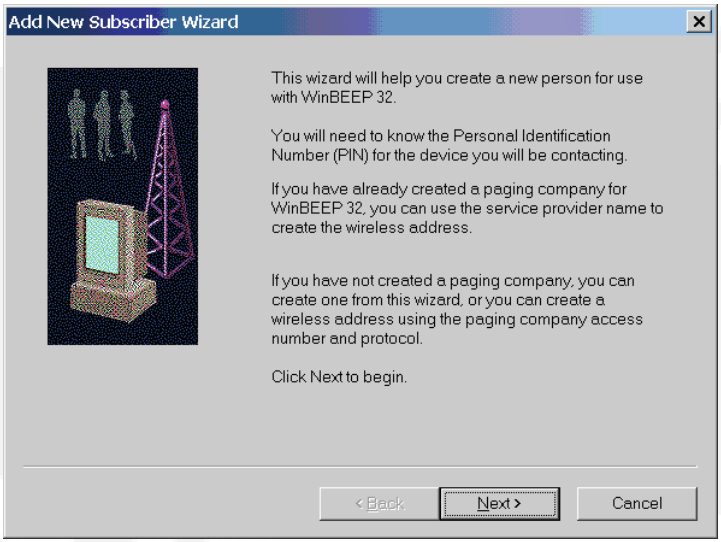

FIGURE 15-18. NEW SUBSCRIBER WIZARD

New Subscriber Setup

Create a new subscriber using the Subscriber Wizard. The *subscriber* is the person who will receive the messages on their pager. A number of subscribers can be combined in a subscriber group. Refer to the WinBEEP instructions for creating and using Subscriber Groups.

1. Select **File–New Subscriber** from the menu bar to launch the New Subscriber Wizard. Click on the **Next** button to proceed. Figure 15-18.
2. Select the **Wireless dailup address** button. Then click on the **Next** button. Figure 15-19.

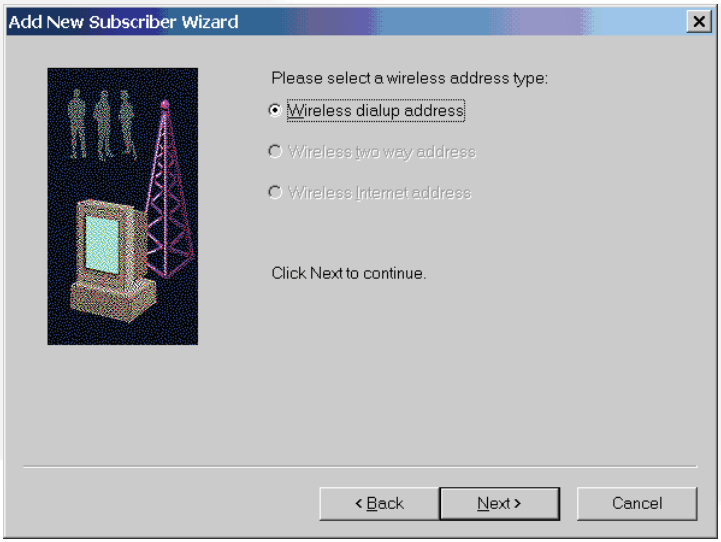

FIGURE 15-19. ADDRESS TYPE

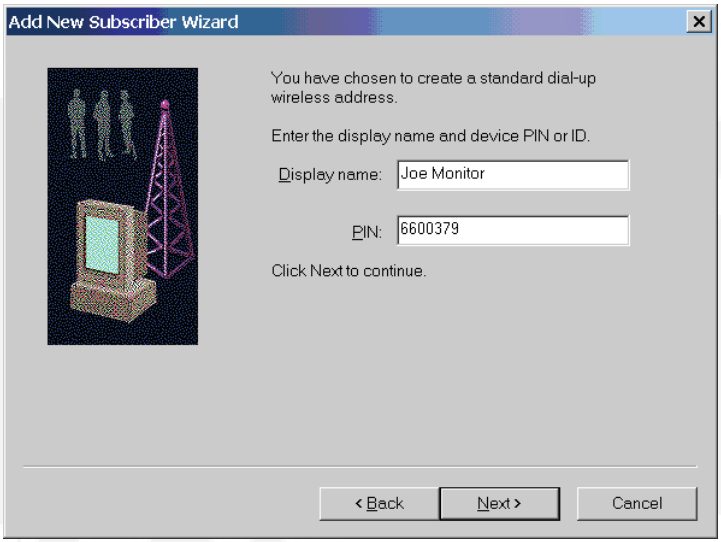

FIGURE 15-20. DISPLAY NAME AND PIN OR PAGER NUMBER

3 Enter the Display name (typically the name of the person receiving the page) up to 30 characters. This name will be used in the personal address book.

4. For toll-free nation wide pagers, enter the PIN (subscriber's personal identification number).
For local pagers, enter the pager number (pager ID). Do not use dashes in this number. Then click on the **Next** button. Figure 15-20.

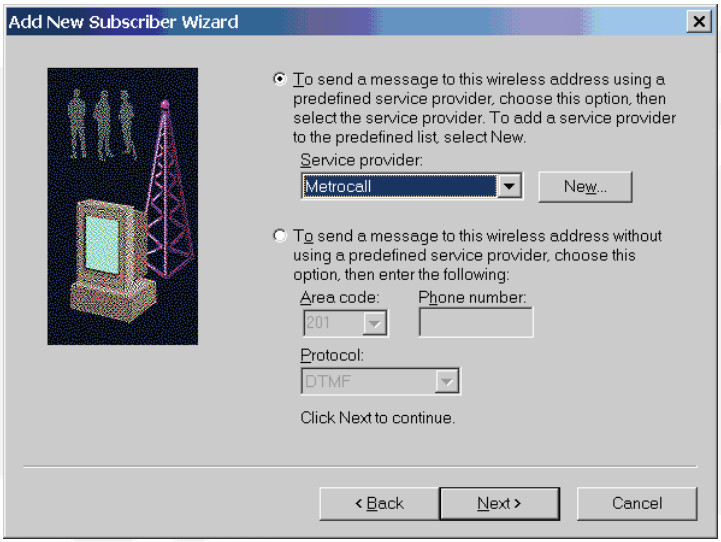

FIGURE 15-21. SERVICE PROVIDER SETUP

5 Select the upper button for sending a message *using a predefined service provider...* Figure 15-21.

6. Select the service provider from the drop-down list (select the service provider that was previously setup). Then click on the **Next** button.

7. At the last New Subscriber window, click on the **Finish** button. Figure 15-22.

8. When the Subscriber added successfully popup message appears, click on the **OK** button, to complete the new subscriber setup.

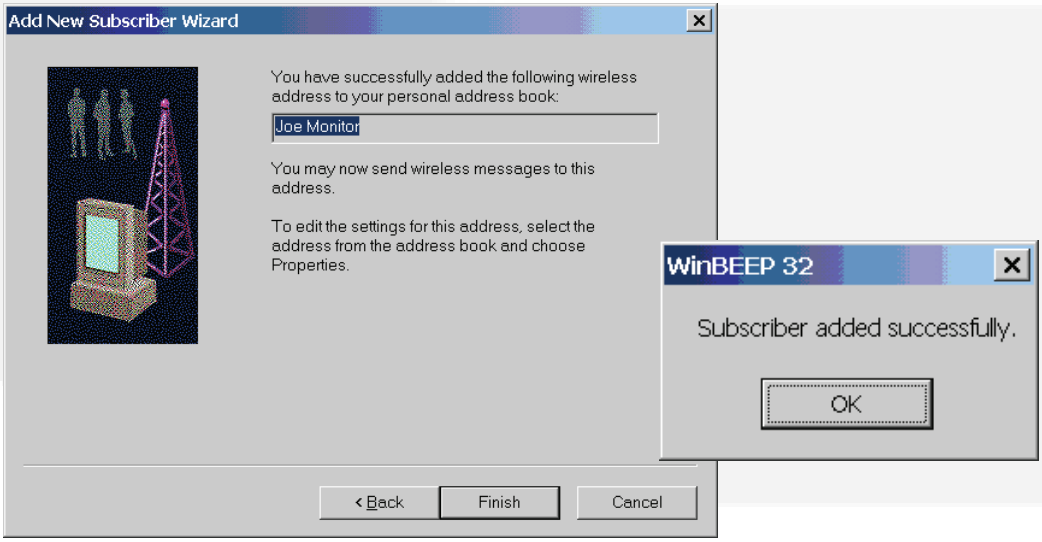

FIGURE 15-22. CUSTOM JOURNAL REPORT

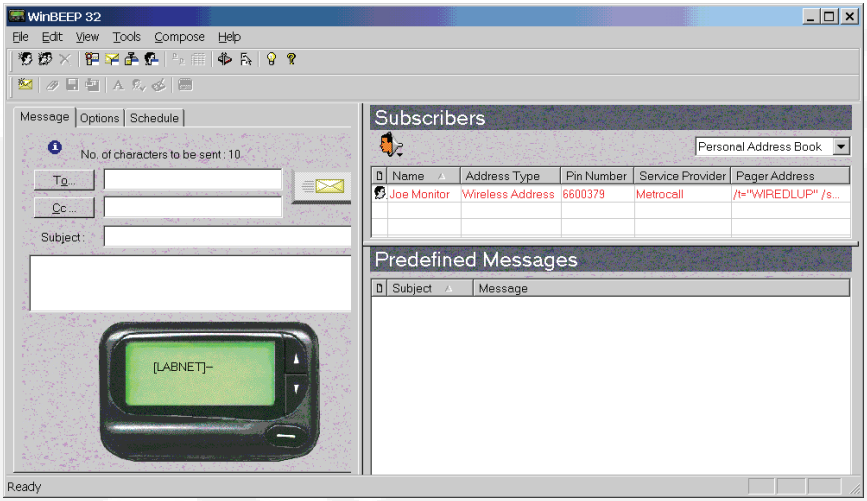

FIGURE 15-23. SUBSCRIBER VIEW

When the subscriber has been added successfully, the new subscriber will appear in the main window. Figure 15-23. If you do not see the Subscribers list, select **Subscribers** from the **View** menu.

Phone and Modem Options

The phone and modem options are configured using the Windows Control Panel feature. Click on the **Start** menu, and then click on **Settings – Control Panel**.

1. Double click on the **Phone and Modem Options** feature.
2. With the **Dialing Rules** tab selected, click on the **NEW** button to name and configure the location that you will send the pages from. Figure 15-24.

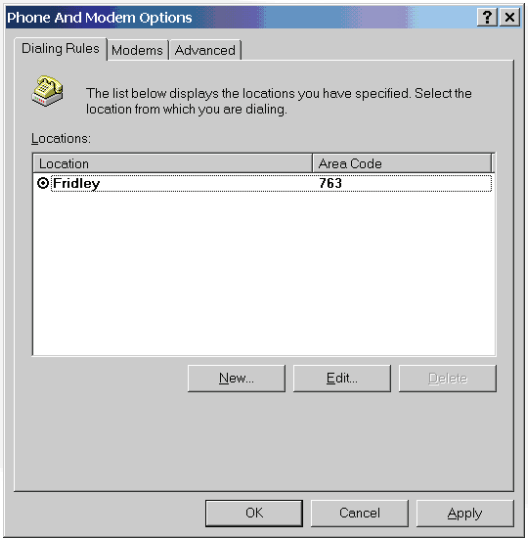

FIGURE 15-24. PHONE AND MODEM OPTIONS – LOCATION

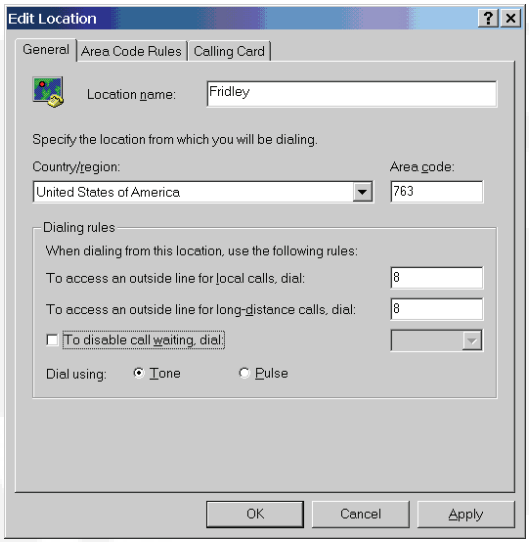

FIGURE 15-25. EDIT LOCATION

3. Enter the Location name, Country/region, Area Code and any necessary prefixes, if needed to access an outside line. Select the dial type, then click on the **Apply** button. Figure 15-25.

4. Click on the **Area Code Rules** tab and then click on the **NEW** button. Figure 15-26.

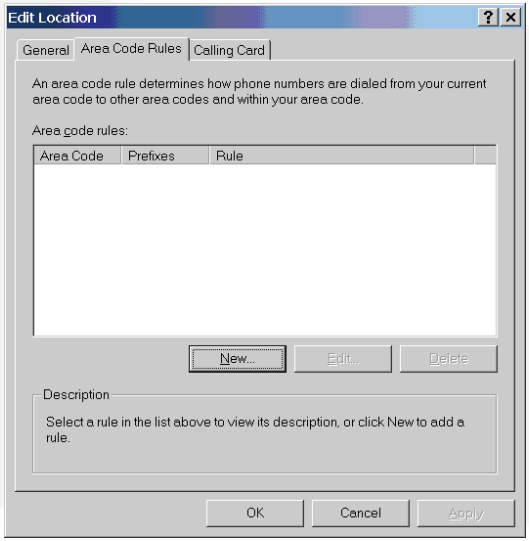

FIGURE 15-26. CUSTOM JOURNAL REPORT

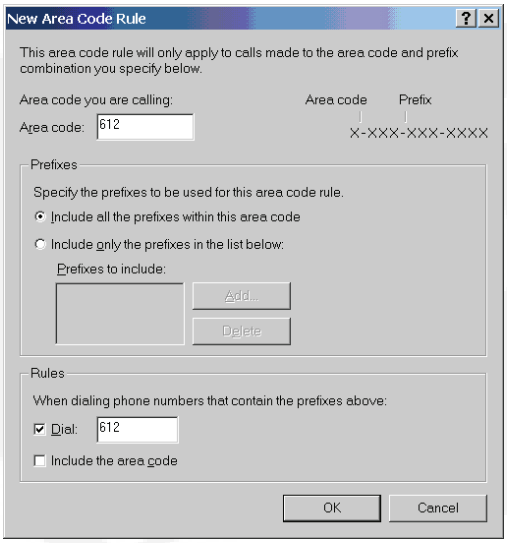

FIGURE 15-27. AREA CODE RULE

5. Enter the area code for the number you are sending the page to (subscriber). Figure 15-27.
6. You can also specify the prefixes to be used within the area code or click on the *Include all...* button.
7. Click on the **OK** button. The area codes selected will be displayed. Use the **Edit** button to make any necessary changes. Figure 15-28.

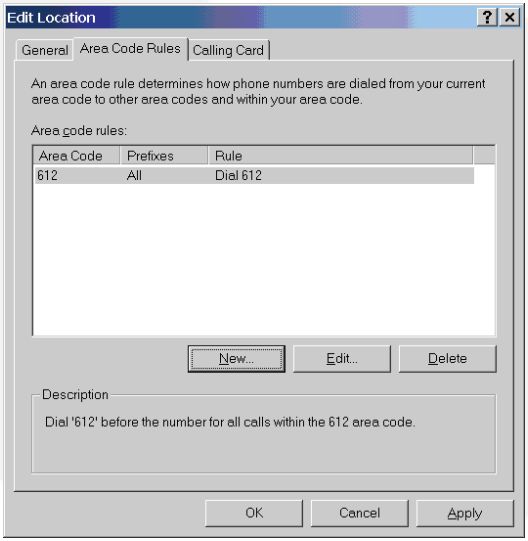

FIGURE 15-28. CUSTOM JOURNAL REPORT

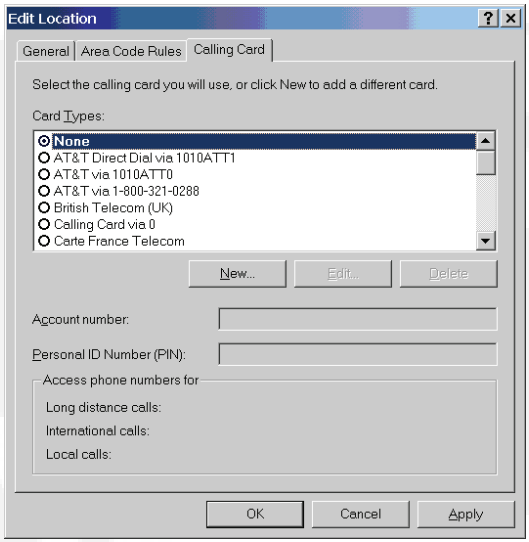

FIGURE 15-29. CALLING CARD

8. Click on the **Calling Card** tab. This feature is used if a calling card will be used for the phone service. In most applications this will be **None** (default). Click on **OK** if your are using none or configure the calling card information as needed.

Return to the WinBEEP program to complete the next phase of the setup.

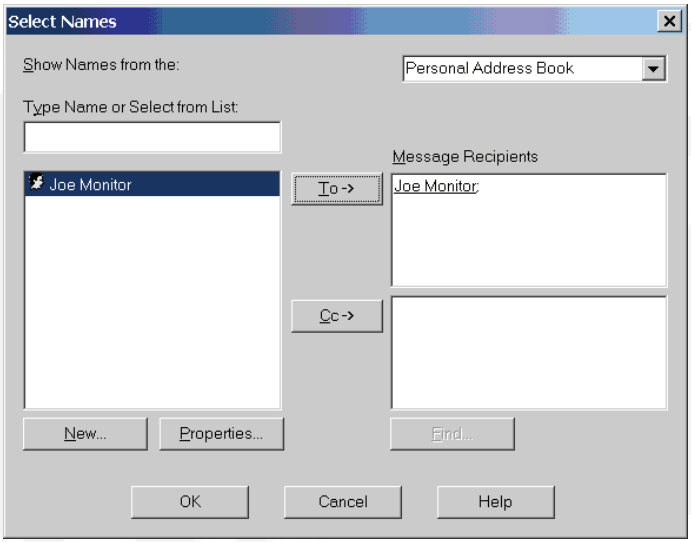

FIGURE 15-30. PERSONAL ADDRESS BOOK

Addressing Message

The last step with WinBEEP is to address the message to the subscriber.

1. From the main WinBEEP window, click on the **To** button, shown under Message, on the left side (Figure 15-3). This will launch the Select Names dialog. Figure 15-30.
2. Click on the name of the person you want to send the message to. Then click on the **To** button, to add them to the Message Recipients list.
3. Click on the **OK** button when you are finished addressing your messages. To save the changes, click on the **File** menu in the WinBEEP window, then click on **Save**.

Network Applications

A copy of the network database is required, this should be provided by the network installer. Follow the instructions provided in Section 3, for *Importing The Network Site Database*. Then follow the next set of instructions in Section 3, *Prepare the Network Site Database File for PCWII*.

When the network site database has been imported and registered, proceed to the following section on *PCW Site Setup for Paging*.

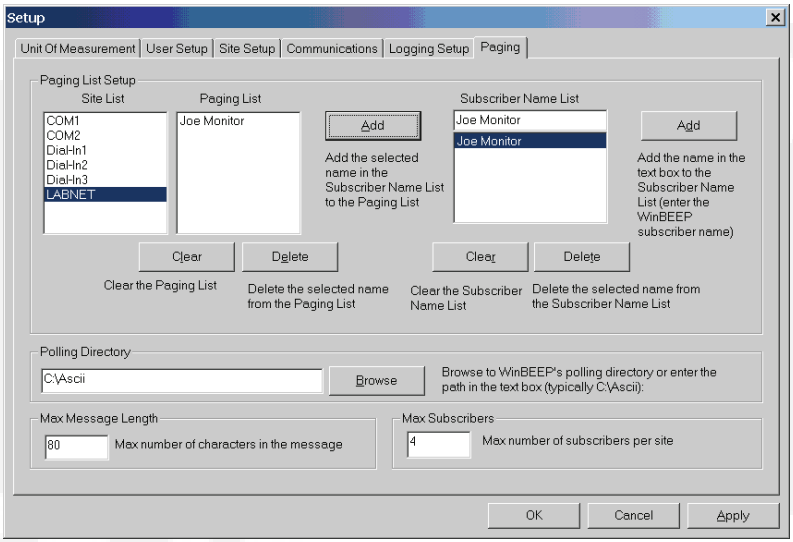

FIGURE 15-31. PAGING SETUP

PCW Site Setup for Paging

Use the Setup features in PCW to create the site and configure the communications. Follow the instructions in Section 2 for non-network sites, and Section 3 for network sites.

After the site has been created (or registered and created for network sites), click on the **Paging** tab. Figure 15-31. Setup the paging feature as follows:

1. Enter the subscriber name in the **Subscriber Name List** dialog box. Use the WinBEEP subscriber name. Click on the **Add** button, located on the right side of the Paging window, to add the name to the Subscriber Name list.
2. Select the site that you want to send messages from, in the Site List.
3. Select the subscriber name, added in step 1, then click on the center **Add** button. Messages from the selected site will be forwarded to the subscribed listed in the Paging List.
4. Enter, or browse to and select the polling directory created earlier in this section, under Agents.
5. Accept the default values for the Max. Message Length and Max. Subscribers (recommended) or adjust the values as needed.
6. Click on the **Apply** button, to save these settings. Then click on the **OK** button to close the setup program.
7. For network applications, follow the instructions in Section 3 for Gateway installation, setup and alarm settings.

This completes the steps needed to enable the monitoring PC to send messages to a pager.

Using the Pager Feature

To check the pager feature, launch PCW and connect to the site. Create a fault (in remote applications, use a fault that is known to be configured to dialout). Refer to Section 6, Alarms, for information on receiving alarms.

When the message is received by PCW, the message should be routed to subscriber's pager.

If the message is not sent, check the polling directory (ASCII folder) to see if the message was recorded. If the message was recorded, check the pager, the WinBEEP settings, and

the PCW setup. In network applications, check the network connection, using LinkManager and check the gateway and alarm settings described in Section 3, Network Applications.

If the message was not recorded, check the polling directory path WinBEEP Agent settings and PCW Paging setup.

16. Help

Use the **Help** menu to find information about using PowerCommand for Windows, to find Service and Support information, and to find out about the installed product type and software version.

HOW TO USE HELP

The **Help - How to Use Help** feature displays the standard **Windows Help Topics** dialog. Use this feature to find answers to basic Windows operation questions. Access this information by clicking on the the **Help** menu, and then click on **How to Use Help.**

HELP CONTENTS

The **Help Contents** feature provides access to the list of subjects in the PowerCommand help file (standard Windows Help format). Access this information by clicking on the the **Help** menu and then clicking on **Contents.**

SEARCH FOR HELP ON...

The **Help - Search for Help On...** feature allows searching for help on a specific topic or keyword (standard Windows Help format). Access this feature by clicking on the **Help** menu, then click on **Search for Help On...** .

ABOUT DEVICE EXPLORER

The **Help - About...** feature initiates the **About Device Explorer** box (Figure 16-1). This box displays the product type and software version. To view this information, click on the **Help** menu, then click on **About Device Explorer.**

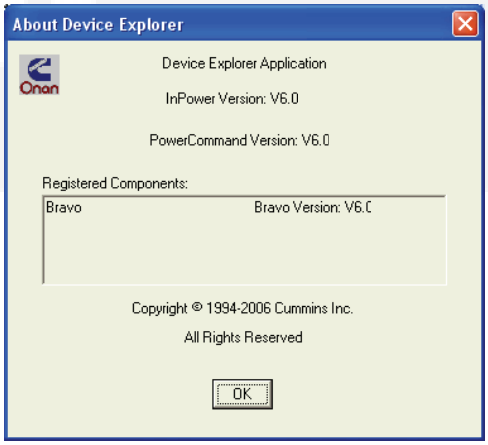

FIGURE 16-1. HELP – ABOUT

NOTES

A. PCW Legacy Software Removal

This appendix describes the uninstall procedures for removing PCW versions 2.0, 2.5, 4.0, 4.5, 5.0, or 5.5.

When installing PCW 6.0 on a PC that currently has an older PCW version installed, the following procedures must be followed.

Earlier versions of PCW MUST be uninstalled using the PCW version 6.0 installation program. Removal of legacy PCW programs by other means can prevent PCW 6.0 from installing.

LEGACY PCW REMOVAL

Failure to log on to the PC with the system security feature enabled will prevent PCW from installing properly. If your PC system security is enabled and you selected **Cancel** during the start up **Logon**, you ***must*** restart your PC and enter the required logon information.

Close all other programs, including the Microsoft Office shortcut bar. Close any programs that have been docked to the taskbar.

During installation, popup messages may be displayed behind an open window. If the install program is not responding, check the taskbar, or press the Alt–Tab keys to display hidden windows. Review and close any popup messages.

To remove legacy PCW software versions:

6. Insert the PCW 6.0 CD into the PC.
7. After a short delay the program will begin and launch the *Install Shield Wizard*.
   (If the program does not autostart, select **Run** from the taskbar **Start** menu. At the prompt, type **D:\Setup** [substitute the drive letter of the CD drive being used, in place of D] and then click on the **OK** button.)
8. Click on the **Start Installation** button to begin. Figure A-1.

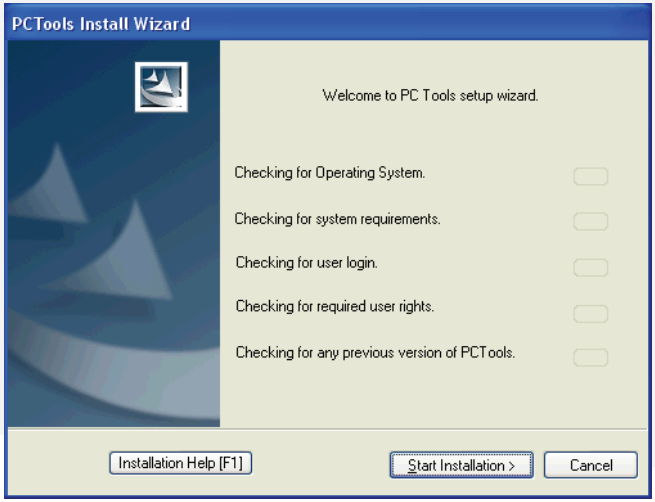

FIGURE A-1. START INSTALLATION

FIGURE A-2. REMOVE PREVIOUS VERSIONS

9. The program will begin and go through a series of checks and preparation for the installation.

   The message in Figure A-2 is displayed when the install program detects an earlier version of PCW. Click on the **Yes** button to begin to uninstall the previous version of PCW.
   Note: You must use this PCW version 6.0 install program to remove older PCW versions from powerswept PCs.

10. To uninstall PCW version 2.5 proceed to step 6. To uninstall PCW version 2.0 proceed to step 10.

PCW Version 2.5 Removal

11. When the *CPG PC Tools Installer* window is displayed, select PowerCommand the *Products* list, and then click on the **Uninstall** button. Figure A-3.

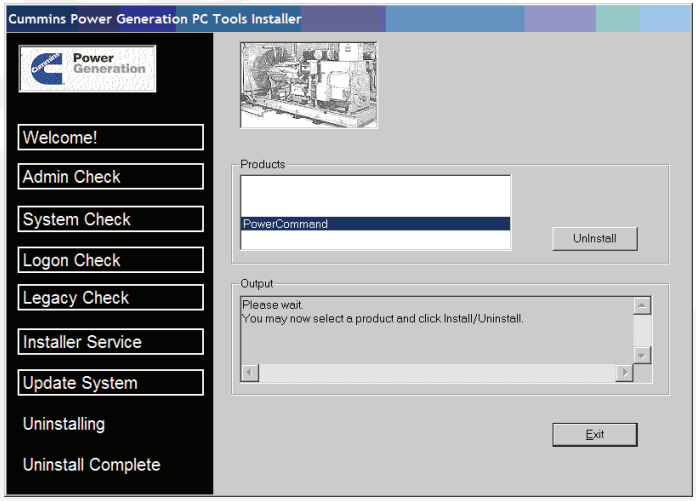

FIGURE A-3. CPG GROUP UNINSTALLER

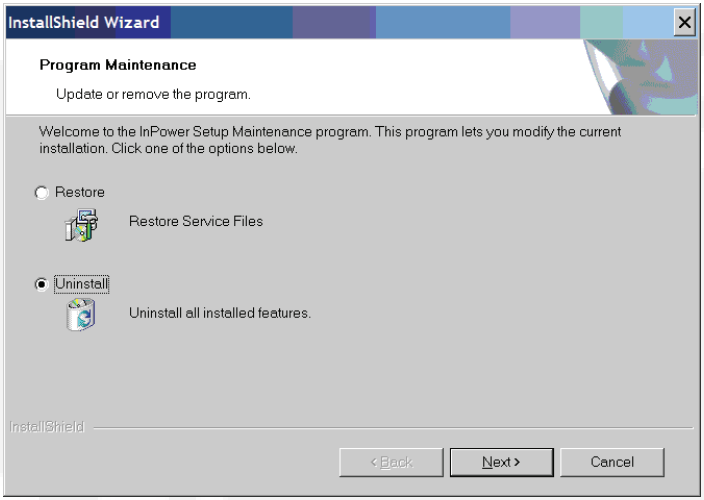

FIGURE A-4. UNINSTALL – ALL FEATURES

12. When the *Program Maintenance* window is displayed, confirm that the **Uninstall all installed features** button is selected, then click on the **Next** button. Figure A-4. (The Restore Service Files feature is not used with Uninstall.)

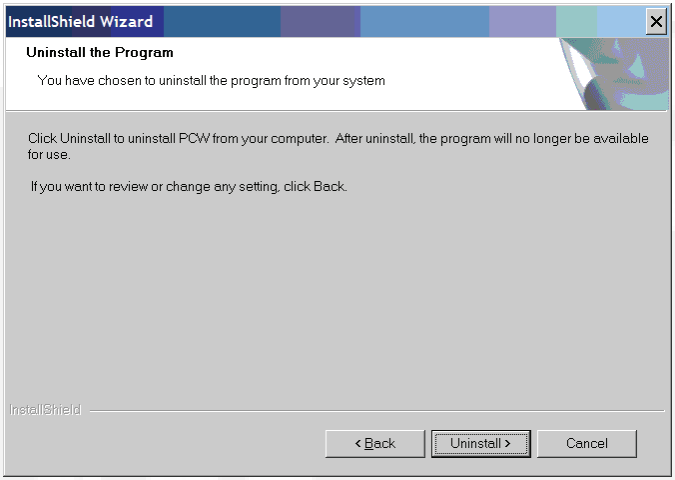

FIGURE A-5. UNINSTALL CONFIRMATION

13. At the *Uninstall the Program* window, click on the **Uninstall** button to continue with the uninstall. Figure A-5.
    The **Back** button is used to review your choice in step 7.

14. Monitor the text in the *Output* box, when the text reads *uninstalled successfully*, click on the **Exit** button. Figure A-6.
    Proceed to step 15.

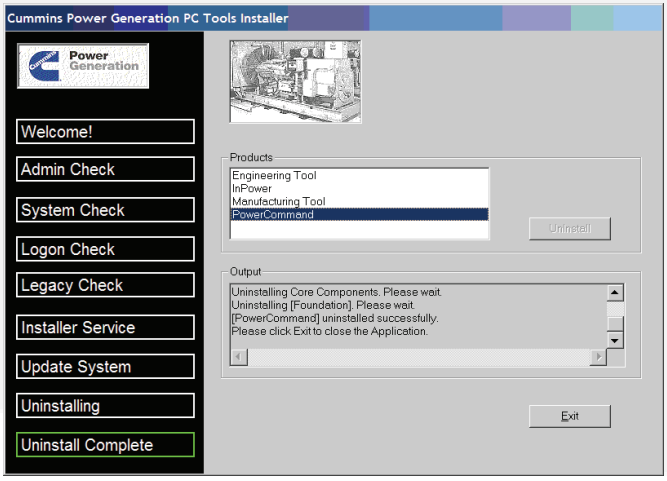

FIGURE A-6. UNINSTALL COMPLETE

PCW Version 2.0 Removal

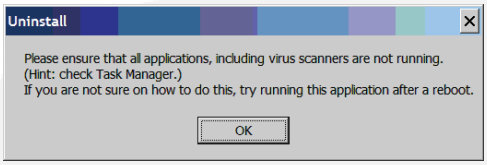

FIGURE A-7. UNINSTALL REMINDER

15. When the *Unistall* window is displayed reminding the user to make sure that other applications are not running, click on the **OK** button. Figure A-7.
    Close all other applications before proceeding.
16. When the *CPG Uninstaller* window is displayed, select PowerCommand from the *Products* list, and then click on the **Uninstall** button. Figure A-8.

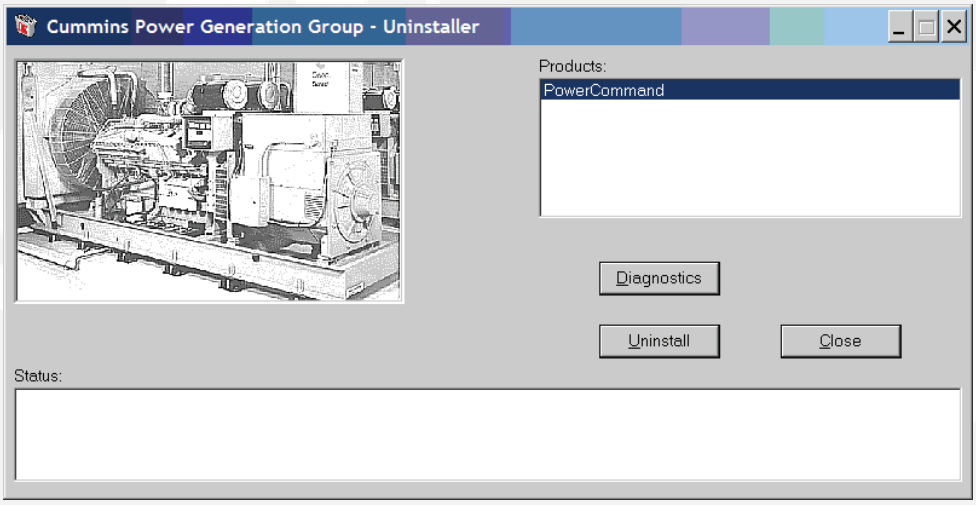

FIGURE A-8. CPG GROUP UNINSTALLER

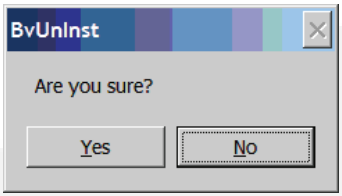

FIGURE A-9. ARE YOU SURE

17. When prompted with the message *Are you sure*, click on the **Yes** button to continue removal of PCW version 2.0. Figure A-9.
18. Monitor the text in the *Output* box, when the text reads *Done. Nothing to Uninstall*, click on the **Close** button. Figure A-10.

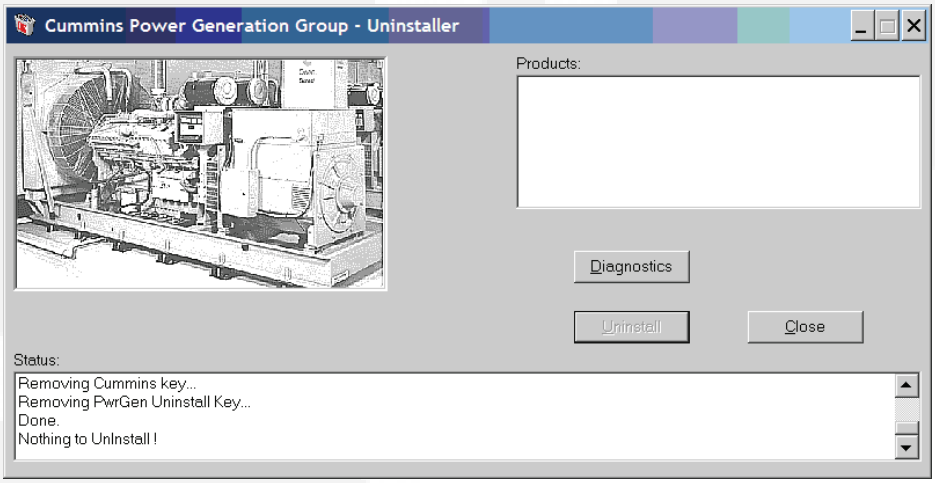

FIGURE A-10. UNINSTALL CONFIRMATION

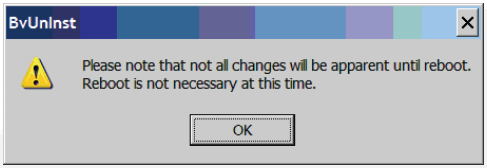

FIGURE A-11. REBOOT MESSAGE

19. When prompted with the R*eboot is not necessary* message, click on the **OK** button to continue removal of PCW version 2.0. Figure A-11.

20. To continue with the PCW 6.0 installation, return to PCW Installation in Section 2, step 5.
To discontinue the install program click on the **Cancel** button. Figure B–12.

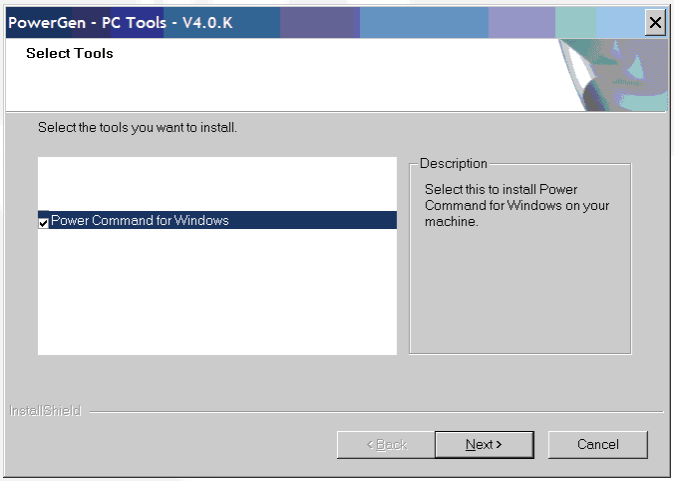

FIGURE A-12. INSTALL PCW

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