

Connected Energy (CNRG) System Description



Definition Of The System. The Connected Energy (CNRG) system consists of software and services used to provide Smart Grid solutions for utilities. The users of the system are utility employees (Distribution Engineers, Managers, Analysts, and Field Support), utility customers (Farmers, Growers, Residents, Businesses, etc.) and BPL Global support staff (Field Services, Customer Service Reps and IT Support Staff).

Software. The primary software platform is CNRG, which includes the Utility Portal and the Utility Customer Views. In addition, there are head end systems that are provided to interact with utility hardware (controllers, sensors, etc.).

Infrastructure. The CNRG infrastructure is hosted on the secure cloud or utility premises.

People. The CNRG system users are utility employees, utility customers, and BPL Global support staff.

Utility Employees:

- Distribution Engineer - The Distribution Engineer has access to the CNRG Utility Portal. The main use is managing device placement in the smart grid, viewing metrics, initiating events, and basic reporting.
- Distribution Manager/Analyst - The Distribution Manager/Analyst can view the same information as the Distribution Engineer, minus the ability to create, edit or delete information.

Utility Customers:

- Customer Portal User - A user of the CNRG Customer portal is able to view, and optionally control, their particular piece of the Smart Grid. In addition, they can set up event notifications and see history utility initiated events.

BPLG Support:

- Field Services/Customer Support - Field services and customer support representatives use the CNRG Utility Employee and Utility Customer portals. They set up accounts, assign equipment, and provide phone and e-mail support for users of the system.
- IT Support - IT support does the installation and Level 3 support of the system. They have secure access to the cloud to perform maintenance and release new versions of the software. They also have access to the system and application logs and have responsibility for system uptime and deep system triage.

Procedures: The CNRG systems has the following procedures in place:

- Security Policy Administration - The CNRG system security policy falls under the broader BPLG security policy that governed and reviewed by the BPLG Security Committee. Physical and Logical security measures are implemented and monitored.
- Risk Assessment Communication - A formal Risk Assessment is performed annually. Gaps are identified and remediation plans are initiated and tracked.
- Logical Access - Logical access to the CNRG system is based on roles. Only IT Support staff have access to the infrastructure system. Users only have access to the parts of the system necessary for their function.
- Change Management: Software - The CNRG software release process is managed using an Agile process which includes feature planning, issue tracking and release management.
- Change Management: Infrastructure - The CNRG hardware provisioning process is governed by the BPL Global Security Policy. Hardware goes through a hardening process before being commissioned.
- Human Resources - The BPLG HR department manages the hiring process.
- Monitoring - The CNRG system is continuously monitored for security access, capacity and functionality.
- Backup and Restore - The BPL Global Business Continuity Plan includes procedures for backup and restoration of the CNRG service.

Data: The CNRG system stores the following data:

- Device information (metrics, latitude, longitude)
- Event information (aggregate metrics, devices affected)