The Generation Attribute Tracking System (GATS) is an independent, centralized generation registry and tracking service for both emissions data and renewable energy credits. The system enables states to implement energy policies requiring renewable energy or setting emission-reporting requirements and provides a framework for a growing market for electricity from renewable sources.

Owned by a PJM Interconnection subsidiary, the GATS is a paid subscription service that creates and tracks a generator-specific electronic certificate for every megawatt-hour of electricity produced by a generator. The system tracks the environmental and emissions attributes of generation, along with the ownership of credits as they are traded or used to meet governmental renewable-energy standards.

As each megawatt-hour of electricity is generated, the system collects data on the generation source and links it to data on that source’s owner, location, fuel source, air emissions rate, eligibility for state environmental programs and other information. From this data, the system creates an electronic certificate with a unique serial number for each MWh generated.

The system maintains a database of all the certificates. Each certificate, with the environmental attributes it represents, can be bought, sold or transferred by electricity market participants and other parties, such as environmental groups. The system tracks the transfer of each renewable energy credit from owner to owner, from the time the credit is created until its retirement by the final purchaser.

Originally, the GATS tracked certificates to meet the renewable portfolio standards for New Jersey and Maryland. Pennsylvania, the District of Columbia, Delaware, Illinois, Ohio and Virginia also are using GATS to demonstrate utility compliance with renewable portfolio standards.

GATS’ capabilities make it possible, for example, for an electricity provider to substantiate its environmental portfolio by trading or using additional credits to meet its state’s environmental or disclosure requirements.

To small renewable generation owners, like homeowners with solar photovoltaic and solar thermal systems, the tracking system enables the homeowner to report generation data and collect renewable energy credits that can be sold.

For electric distribution companies and generation suppliers, the GATS collects the generation data needed to meet the various information disclosure requirements of state agencies or to demonstrate renewable energy compliance.

The GATS provides a single, integrated regional system for state regulatory agencies and market participants that supports the emissions-disclosure requirements and renewable portfolio standards of the states in the PJM region. It not only ensures accurate accounting and reporting of generation attributes but, through the use of renewable energy credits, provides the basis for a robust market for electricity from renewable sources.