

7

transforming said differences into adjustment signals;
 transmitting said adjustment signals to said low-level satellite;
 retransmitting said adjustment signals from said low-level satellite to the remote rectifier;
 transforming said adjustment signals into changes in electrical input, output amperage, output voltage and level of applied cathodic protection provided by said remote rectifier.

13. A method for adjusting the electrical output from a remote rectifier, said method comprising the steps of:

acquiring data on electrical input, output amperage, output voltage and level of applied cathodic protection from the remote rectifier;

transforming said data into a transmittable signal;
 transmitting said signal to a low-level communication satellite;

retransmitting said signal to a management data center;
 comparing said data to a preselected set of measurement standards at said management data center;

determining if any differences exist between said data and said measurement standards;

transforming said differences into adjustment signals;
 transmitting said adjustment signals to said low-level satellite;

retransmitting said adjustment signals from said low-level satellite to the remote rectifier;

transforming said adjustment signals into changes in the electrical input, output amperage, output voltage and level of applied cathodic protection provided by said remote rectifier.

14. A system for adjusting the electrical output of a distributive cathodic protection of a pipeline comprising:

at least one rectifier for electrically polarizing a pipeline;
 means for acquiring electrical information associated with providing cathodic protection to the pipeline;

means for transmitting said electrical information to a low-level communication satellite;

means for retransmitting said electrical information to a management data center;

8

means for determining if said electrical information indicates effective distributive cathodic protection of the pipeline;

transforming said differences into adjustment signals;
 transmitting said adjustment signals to said low-level communication satellite;

retransmitting said adjustment signals from said low-level communication satellite to said rectifier;

transforming said adjustment signals into changes in how said rectifier electrically polarizes the pipeline.

15. A method for adjusting the residual charge in a section of a pipeline having a corrosion protection system including a plurality of rectifiers for supplying a continuous flow of electrical current to the pipe section, said method comprising the steps of:

interrupting the continuous flow of electrical current to a contiguous series of rectifiers covering a pipe section;

measuring the residual charge in said section of a pipeline;
 resuming the continuous flow of electrical current to said contiguous series of rectifiers;

transforming said measurement of said residual charge into a transmittable signal;

transmitting said signal to a low-level communication satellite;

retransmitting said signal to a management data center;
 comparing said measurements to a preselected set of measurement standards;

determining if any differences exist between said measurements and said measurement standards;

transforming said differences into adjustment signals;
 transmitting said adjustment signals to said low-level satellite;

retransmitting said adjustment signals from said low-level satellite to one or more individual rectifiers;

transforming said adjustment signals into changes in the electrical output of said one or more individual rectifiers.

* * * * *