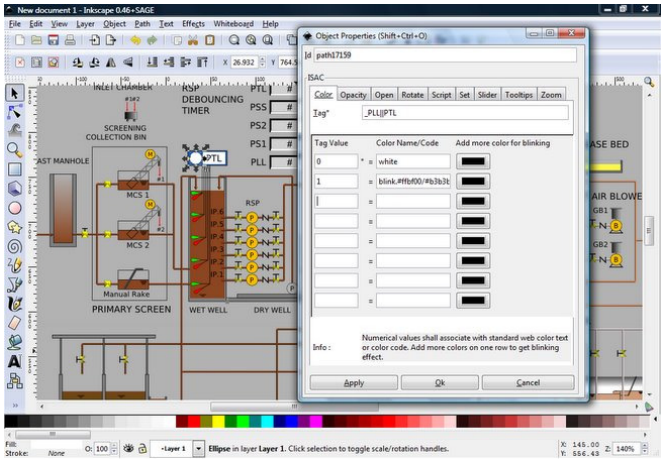
Phenix Group Ventures Corporation

PLANNED SCADA REPORTING SYSTEM

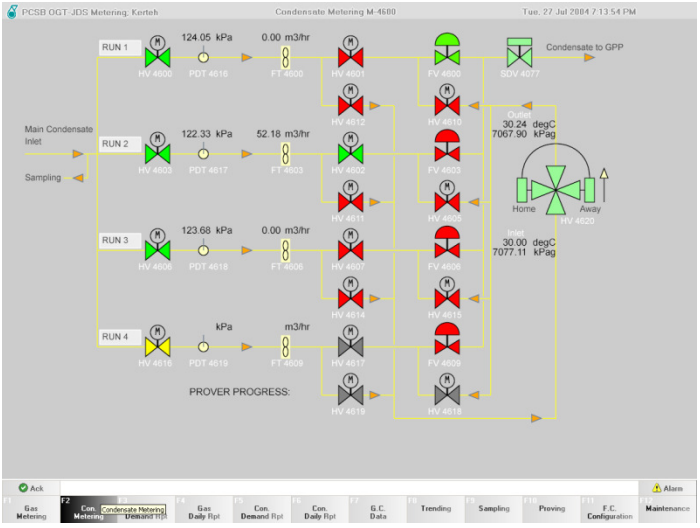
SCADA or Supervisory Control and Data Acquisition, generally refers to industrial control systems. Although there are many companies that manufacture components or complete systems, there is no one absolute definition for the system. In most applications, the SCADA devices are used to provide supervisory oversight. Historically, this meant that the supervisor could review (historically) statistics or indicators that led up to or were leading up to an event. In recent years, DCS or Distributed Control Systems made an effort to supplant SCADA but the underlying capabilities of SCADA supplemented by low latency and greater bandwidth has resulted in a narrowing of the discrepancies between them and now there is little room for argument as to which accomplishes the most.

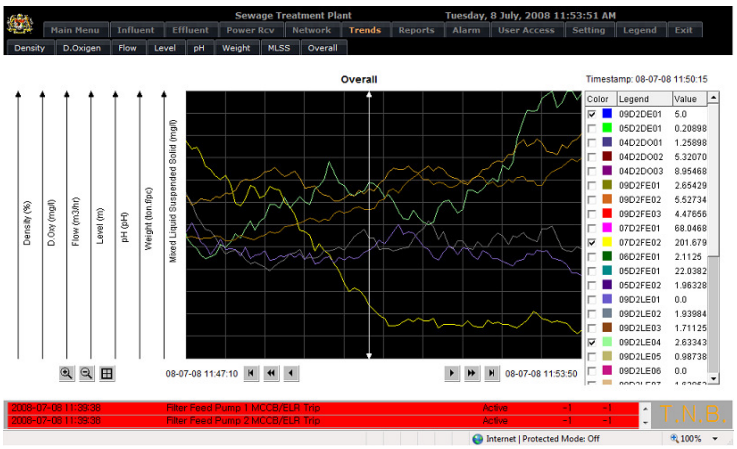


These diagrams on this and the following pages depict a SCADA system that is used to monitor and respond to an error state in a flow control system. The screen shots show iconic representations of valves, relays, switches and sensors. Different colors are used to identify the current status of the given device and a knowledgeable operator can infer certain conditions based on the display state.

For years, SCADA only reported on what had happened and it required a very capable operator to pull all the pieces together to identify trends leading to significant events before they actually occurred.

Now, high bandwidth, predictive algorithms and highly trained operators allow us to identify trends in the functioning of devices that clearly indicate potential failure or aberrant behavior in the making. By streaming data across high speed internet and processing all “outside the norm” signals, we are able to map out and predict failures well in advance of their actual occurrence. Billions of instances of sensor reporting can be quickly analyzed and non-conforming data segments (error signals) can be grouped and analyzed together to help pinpoint potential abberant behavior thereby reducing or eliminating component failure.

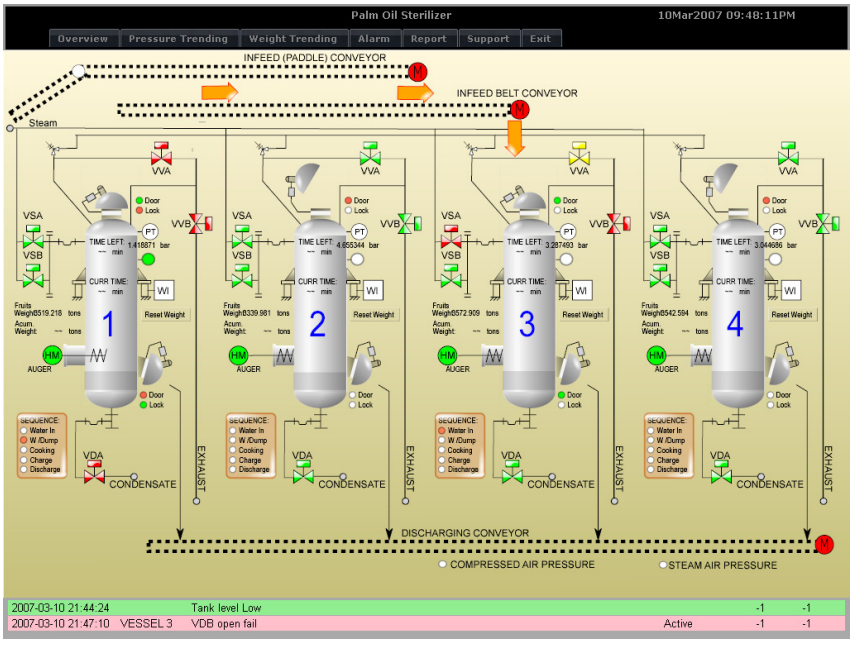




Using technology developed in the late 80s and early 90s called expert systems, we have developed highly accurate predictive models of all the devices used in monitoring the construction and future operation of the pipeline. Expert systems have unique characteristics. First, they duplicate the methodologies used by human experts in their analysis and decision making processes to arrive at a thorough and comprehensive analysis of the incoming data. Second, they learn from the daily, ongoing, process of data analysis. As the system decides what the data means, retrospective review of the data compared with the actual outcome gives more information which permits the system to make better informed decisions with each new opportunity. This allows us to preemptively repair or replace potentially failing components. The key to delivering preemptive response and intervention is dependent on real time delivery of data from all reporting points to the data center and simultaneous sorting of data streams to identify, tag and forward any statistics that fall outside the defined parameters. In addition, some instances may require cascading errors that, on their own, do not constitute potential failure but linked to other within parameter statistics, indicate a problem in the making.

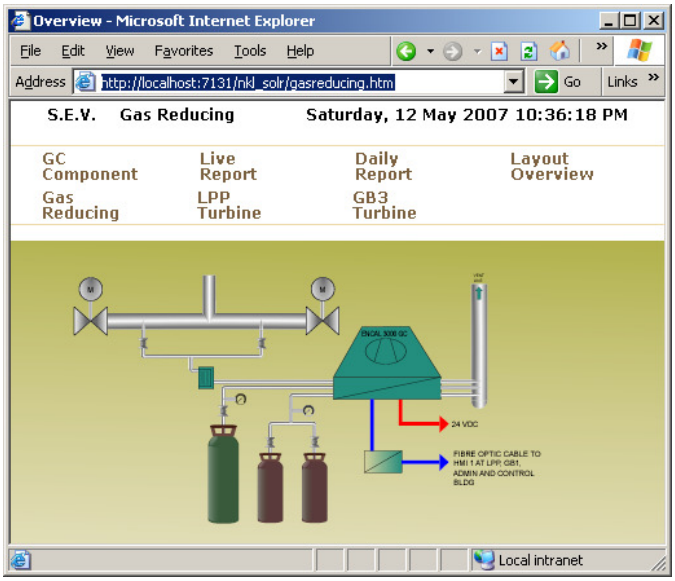
Because computers and software can analyze data at many times the rate that human brains can, we tend to rely on complex sorting algorithms to provide the first acknowledgement layer. At that point, data is simultaneously reviewed by another layer of software analysis and examined by a trained operator. Either can overrule the other in favor of passing the data up to a higher incident level but neither alone can quash the error report.

In the distant past, data was gathered during a physical visit to the capture location and hand delivered to the analysis center. With remote telephony and then later satellite pulse transmission, the delay was significantly reduced. In many remote areas, these are still the only available options. It is because of the inherent delays in gathering and analyzing the information that SCADA has earned its reputation as an oversight mechanism and not a preemptive one. Our system combines the latest in sensor devices gathering data in real time and sending it over fiber optic cable to the twin data centers, one at each end of the pipeline. Upon arrival at the data centers, each center performs an independent analysis of the information and determines whether it requires any further examination. Each data center uses a different set of algorithyms to determine if there is a problem with the system. This allows us to examine the errors from differing viewpoints and reduces the likelihood that a serioux situation can slip through the net. Data that is fully within the optimal parameters is archived along with streaming video and audio as well as



surveillance and seismographic reporting. Any data that falls outside the programmed tolerances is immediately compared with the same data analyzed by the other data center. If there is no agreement then another sampling is taken to determine if the error was an anomaly or if it portended a trend that required further analysis.

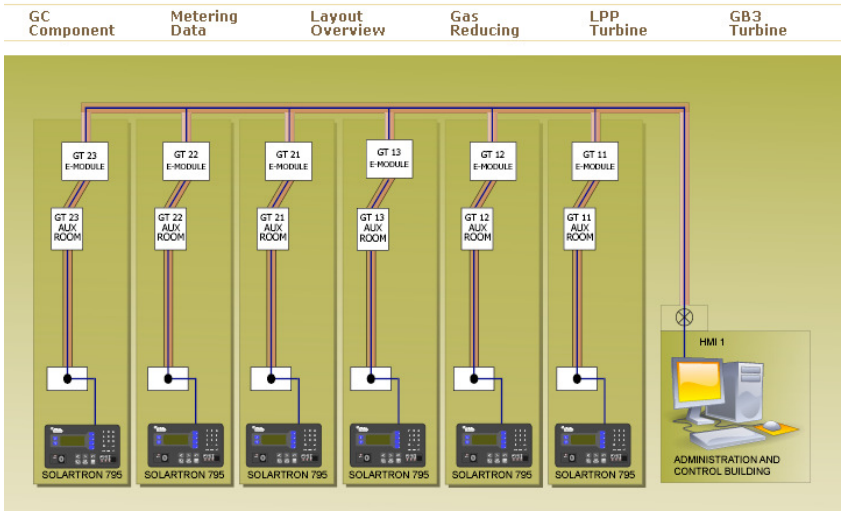
Any escalation is noted and surrounding data is examined to determine if there is cause for intervention. Significant error triggers a series of events including shutting down of pumps, closing of valves, dispatching of drone aircraft, dispatching of service crew by ground vehicle or helicopter. At the same time, the incident is reported along with the supporting data and analysis to the management office in West Coast Florida. There, follow-up decisions are made to assess the ramifications of the error condition and the level of threat that could exist.



Everything from a failed sensor to a full scale military attack can be identified and reacted to in a matter of minutes of the detection of any error. The purpose is to avert environmental accidents, military or insurgent attacks, routine maintenance failures and sabotage.

Operating in parallel are other services that will further facilitate prompt reporting and response. The entire pipeline route will be serviced by a proprietary Wi-Fi network that will permit computer access to the Phenix Grupo data network as well as VOIP communications using specially designed cell phones.

A singularly important aspect of this system is that the entire process from Caribbean Sea Deepwater Port across the coastal plain, the mountain backbone, the Pacific coast and the Pacific Ocean Deepwater port can be managed remotely by a very small crew of operators from their consoles in Florida. This minimalist approach permits Phenix Grupo to operate very economically which is reflected in the low cost to the oil producing companies as well as the oil consuming companies.



Further, it benefits Phenix Grupo by reducing its cost of operation on an ongoing basis while providing the highest level of response and service available in the oil pipeline business today.

Phenix Grupo and Phenix Group Ventures Corp are dedicated to delivering the highest level of customer service available in the industry while maintaining strict security, highest level of environmental protection, responsiveness and support for both the local communities and for the host country.

For further information about the technical capabilities of Phenix Group Ventures Corp, contact us through our website at www.phenixgrp.com.