

Legacy Patented Economizer System - Case Studies

Through our Economizer case study website, customers will have the ability to review real-time field data collection from our BACNET control network. This document will provide additional information on how to understand the data collected from our Case Study system.

Below, a HOME PAGE screenshot of the Legacy Economizer case study site. In order to get access to this site, users must first obtain a username and password from Legacy Engineering Department.

Legacy is adding new case study sites on a regular basis. Each time an new site is added to the site, it will be posted for a period as a "Featured" case study site.



Welcome to Legacy Chillers Economizer Learning Center



<p>Navigation</p> <p>HOME</p> <p>Case Study - Rutland</p>	<p>Featured Economizer Case Study Sites</p>  <p>Site Information: Emergency 911 dispatch center located in Rutland Vermont.</p> <p>Commissioned: 8-15-2008</p> <p>Application: Dispatch center climate control</p> <p>CLICK FOR MORE INFORMATION</p>	 <p>- White Papers -</p> <p>Economizer Introduction</p> <p>Economizer Operation</p> <p>- Economizer Ready -</p> <p>Package Air Cooled (PACT)</p> <p>Split Air Cooled (EST)</p> <p>Package Water Cooled (PWCT)</p> <p>- Design Tools -</p> <p>SystemSyzer - Training</p> <p>SystemSyzer - Get it</p> <p>Slide Chart Tool - Get it</p> <p>- Video Training -</p> <p>Economizer Webinar</p> <p>Open Loop Webinar</p> <p>Closed Loop Webinar</p>
 <p>Case Studies Coming Soon</p> <p>Beacon Power - Boston</p> <p>MRI Center - Toronto</p> <p>Laser Center - BC</p> <p>Laser Center - BC</p>	<p>On November 1st 2008, Legacy Chiller Systems will have the capability to conduct virtual case studies for most U.S. and Canada markets.</p> <p>Using real-time local weather data, customers will be able to accurately project Legacy Economizer energy savings.</p> <p>Companies interested in participating on our case study program should call the toll free number below.</p>	
	<p>For More Information Call:</p> <p>(877) 988-5464 x 101</p>	



Energy Saving Solutions


Legacy Patented Economizer System - Case Studies

Below, is screenshot of a live case from our site. Here is an outline of the key areas of this page:


Real-Time Site Data: Many of our case study sites communicate with our servers via a local wireless provider. The date in this section is current provided that our connection is on-line. During poor local weather conditions some or all of the real-time data may temporarily go off-line. On the following page we provide more detailed information on the data collected.

Project Comments: This section contains site specific information.

Trending Data: This section provides site specific trending graphs that are updated approximately every 60 minutes. Users have the ability to download information in several file formats. On the following pages, more detailed information is provided.




Welcome to Legacy Chillers Economizer Learning Center



Navigation

HOME

[Case Study-Rutland](#)



Case Studies Coming Soon


[Beacon Power - Boston](#)

[MRI Center - Toronto](#)

[Laser Center - BC](#)


[Laser Center - BC](#)

911 Disptach Center - Rutland, VT



Real-Time Site Data

Outside Air Temp F: 42	Operational Mode: NoClg
Cooling call hrs: 338	Econo Threshold F: 41
Econo run hrs: 48	Chiller Leaving F: 47
Mechanical KWH: 1973	Economizer BTUH: 0
Econo Savigs KWH: 260	Net Energy Savings
Carbon Reduction LBS: 338	13 %



Downloads

- **White Papers** -
- Economizer Introduction
- Economizer Operation

- **Economizer Ready** -
- Package Air Cooled (PACT)
- Split Air Cooled (EST)
- Package Water Cooled (PWCT)

- **Design Tools** -
- SystemSyzer - Training
- SystemSyzer - Get it
- Slide Chart Tool - Get it

- **Video Training** -
- Economizer Webinar
- Open Loop Webinar
- Closed Loop Webinar

Project Comments

Rutland, VT 911 center was commissioned on 9-1-08. Legacy Economizer enabled equipment:

- >PACT70S2-T3-2 Package chiller with integrated tanks
- >KVC-021 Economizer (fluid cooler)
- >Legacy integrated Economizer control
- >system with Bacnet networking

Important Note:

Energy savings on the Legacy economizer commonly range from 35 - 50%. Actual savings will vary depending on many variables. Legacy provides several tools to calculate projected savings.

Trending Data

View Site Multi-Tends

Trend Log Support Information

Prior to reviewing trending data please the links below:

- > Legacy Economizer reporting - PDF
- > Legacy Economizer reporting - Video

For More Information Call:
(877) 988-5464 x 101



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Legacy Patented Economizer System - Case Studies

Below, detailed screenshot of the **Real-Time Site Data** section that is found on each case study page.

Real-Time Site Data			
Outside Air TempF:	42	Operational Mode:	NoClg
Cooling call hrs:	338	Econo Threshold F:	41
Econo run hrs:	48	Chiller Leaving F:	47
Mechanical KWH:	1973	Economizer BTUH:0	
Econo Savigs KWH:	260	Net Energy Savings	
Carbon Reduction LBS:	338		13 %

Outside Air TempF: Air Temperature in F. Variable is rounded to the nearest whole number.

Cooling call hrs: Variable represents the total number of hours the chillers cooling system has been requested to run. Variable is rounded to the nearest whole number.

Econo run hrs: Variable represents the total number of hours the Economizer has been deployed.

Mechanical KWH: Variable represents total Kilo Watt Hours (KWH) consumed by the chillers mechanical cooling system.

Econo Savings KWH: Variable represents total Kilo Watt Hours (KWH) saved by deployment of the chillers Economizer system.

Carbon Reduction LBS: Variable represents total estimated amount of carbon that was NOT released into the environment by deployment of the chillers Economizer system.

Operational Mode: Variable represents current mode of operation. This variable has four states:

NoClg: Chiller is currently not calling for cooling

Mech: Chiller is calling for cooling however current conditions for Economizer deployment do not exist.

ECME: Chiller is calling for cooling and is partially deploying Economizer.

Econ: Chiller is calling for cooling and fully deploying Economizer.

Econo Threshold F: Variable represents temperature Economizer will begin deployment

Chiller Leaving F: Variable represents current fluid temp leaving the chiller tank to process.

Economizer BTUH: Variable represents Economizer cooling output. Variable will indicate ZERO when the Economizer is off-line.

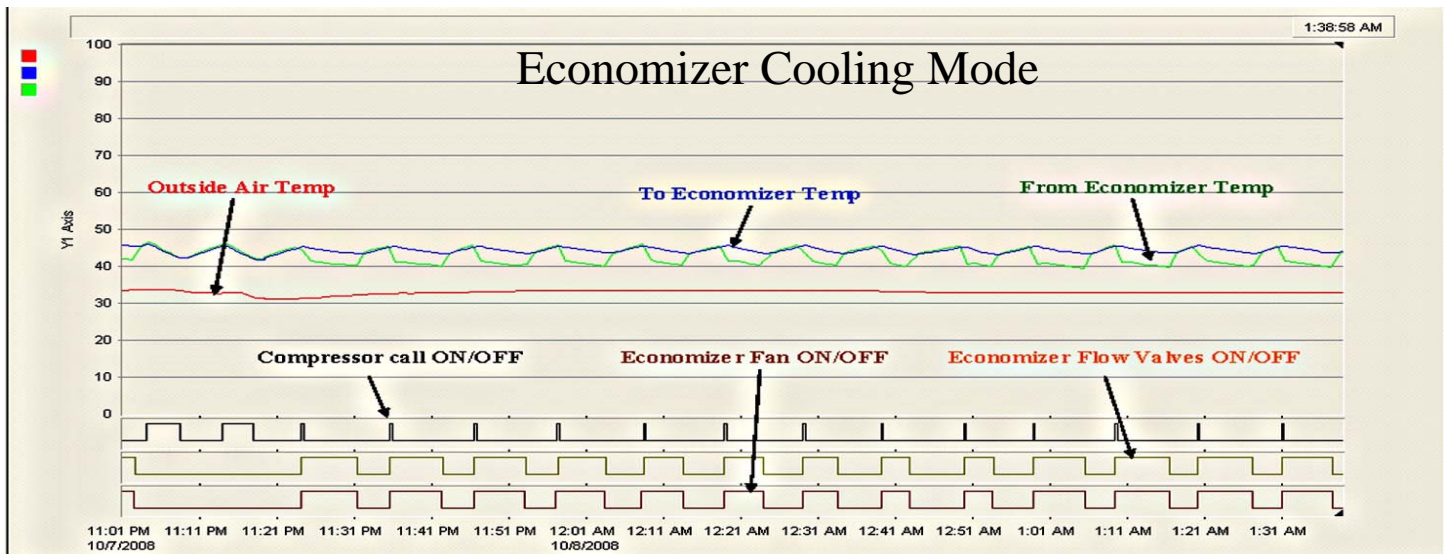
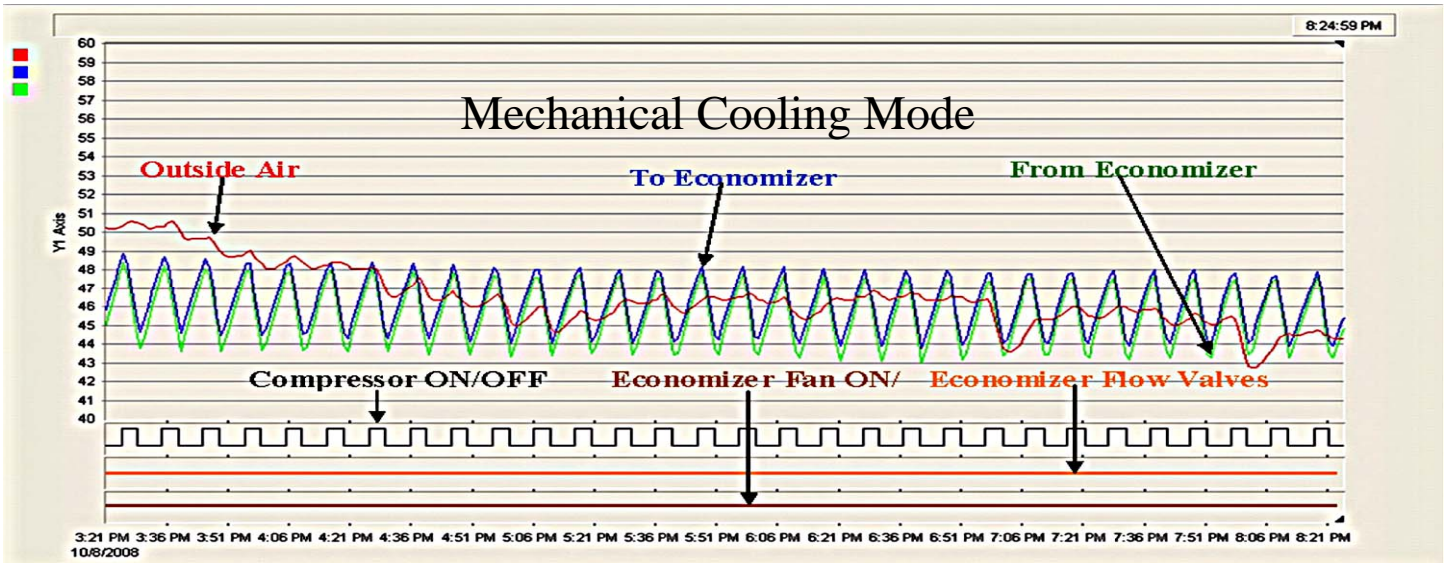
Net Energy Savings: Variable represents Economizer payback.



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Legacy Patented Economizer System - Case Studies

Below, detailed screenshot of what you will see when the View Site Multi-Trends from any case study page. The top screen shot illustrates an Economizer equipped system running in the Mechanical cooling mode. The bottom shot illustrates the same system running in Economizer mode. For a live presentation on how the Legacy Economizer system works, contact our Engineering department at **877-988-5464** or stop into our on-line Knowledgebase system to download a video presentation.



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Legacy Patented Economizer System - Operation

Additional Resources:

To learn more about the Legacy Patented Economizer System visit our on-line Knowledgebase at: <http://www.legacychillers.com/kb/default.asp>. Enter the keyword "Economizer" in the search system to find articles, training videos and access to software tools for all Economizer related topics.

Comments & Questions:

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