CHP Case Studies: Assessing Realized Benefits

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Promoting CHP, District Energy, and Waste Heat Recovery

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CEAC's promote and assist in transforming the market for CHP, waste heat to power, and district energy technologies and concepts throughout the United States.

Key services include:

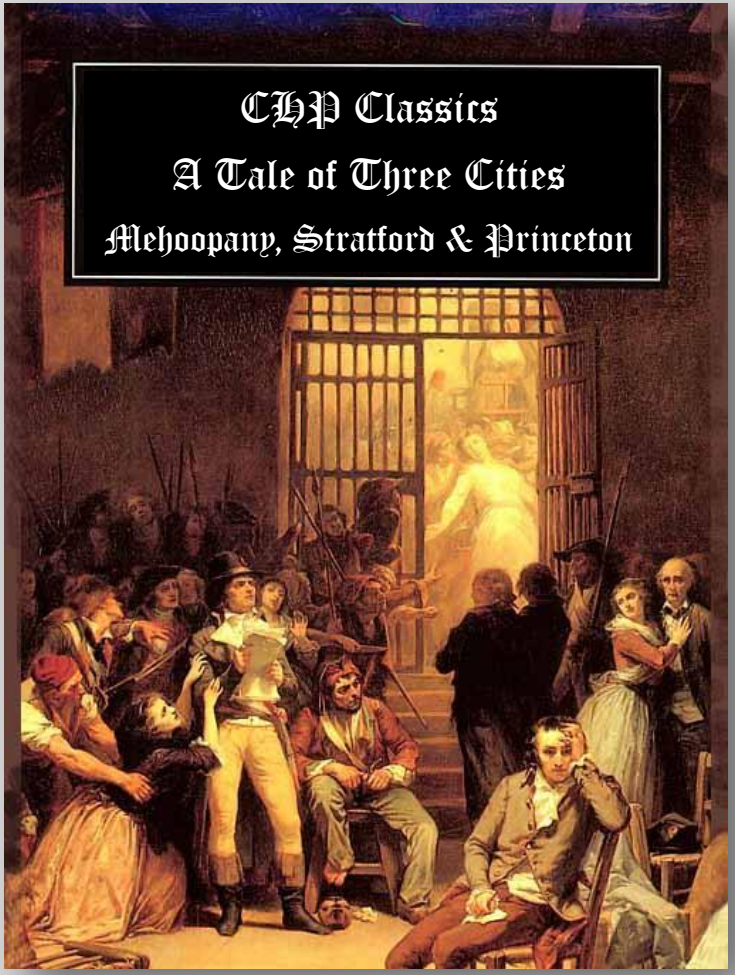
Market Assessments – Supporting analyses of CHP market potential in diverse sectors, such as, health care, industrial sites, hotels, and new commercial and institutional buildings.
Education and Outreach – Providing information on the benefits and applications of CHP to state and local policy makers, regulators, energy end-users, trade associations, and others.
Technical Assistance – Providing technical information to energy end-users and others to help them consider if CHP, waste heat recovery or district energy makes sense for them.


BENEFITS


MONEY
For Business


For the Grid


We the People
For Society


CHP Classics
A Tale of Three Cities
Mehoopany, Stratford & Princeton

ECONOMICS, LOWER PRODUCTION COST & ECONOMIC DEVELOPMENT

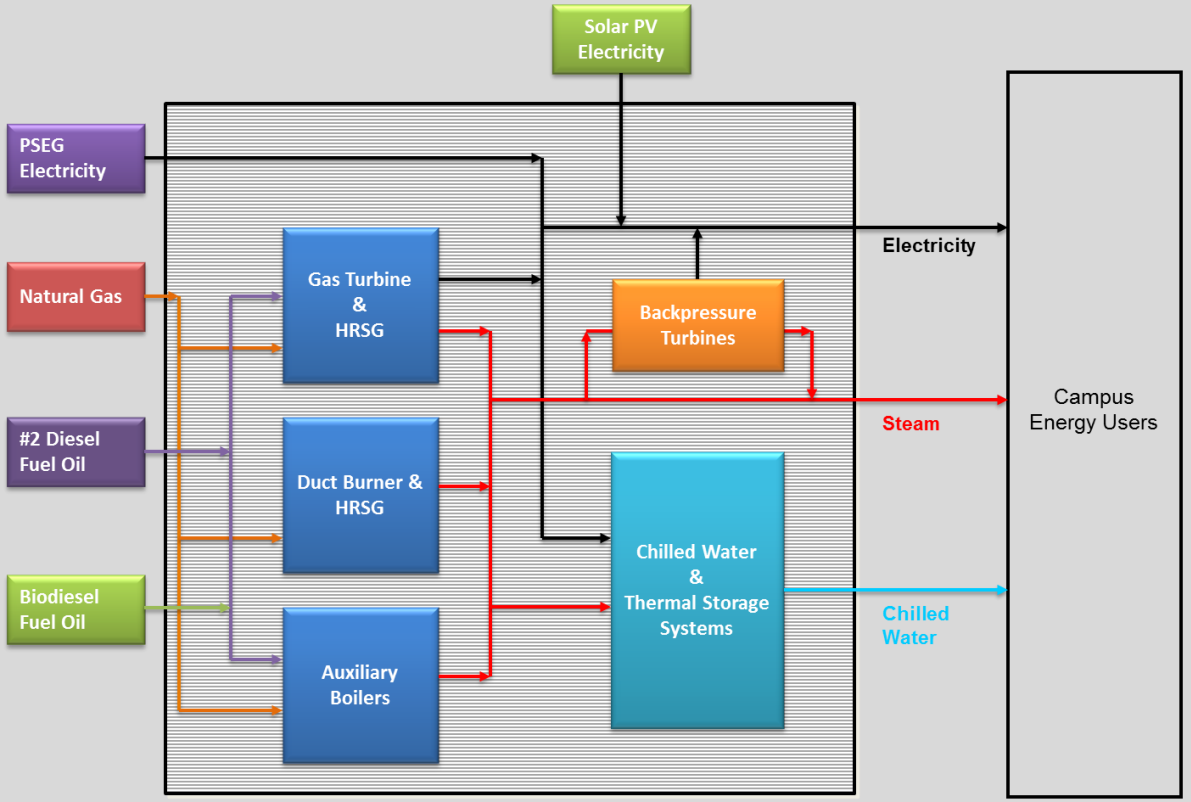
Procter & Gamble, Mehoopany, PA

ECONOMICS AND BUSINESS CONTINUITY

Sikorsky Aircraft Corp. Stratford, CT

ECONOMICS, CARBON REDUCTION, DRIPE AND RESILIENCY

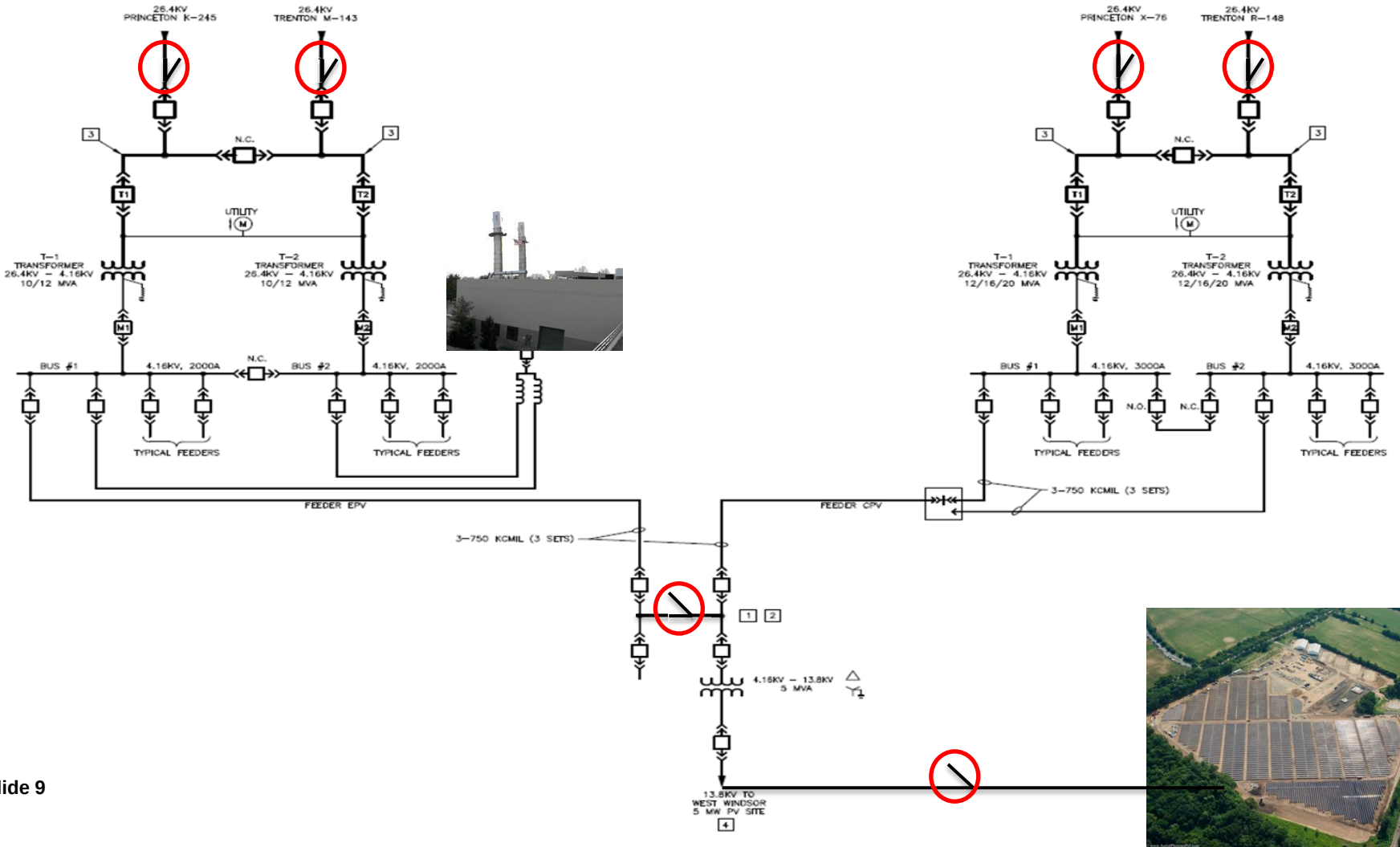
FLEXIBILITY



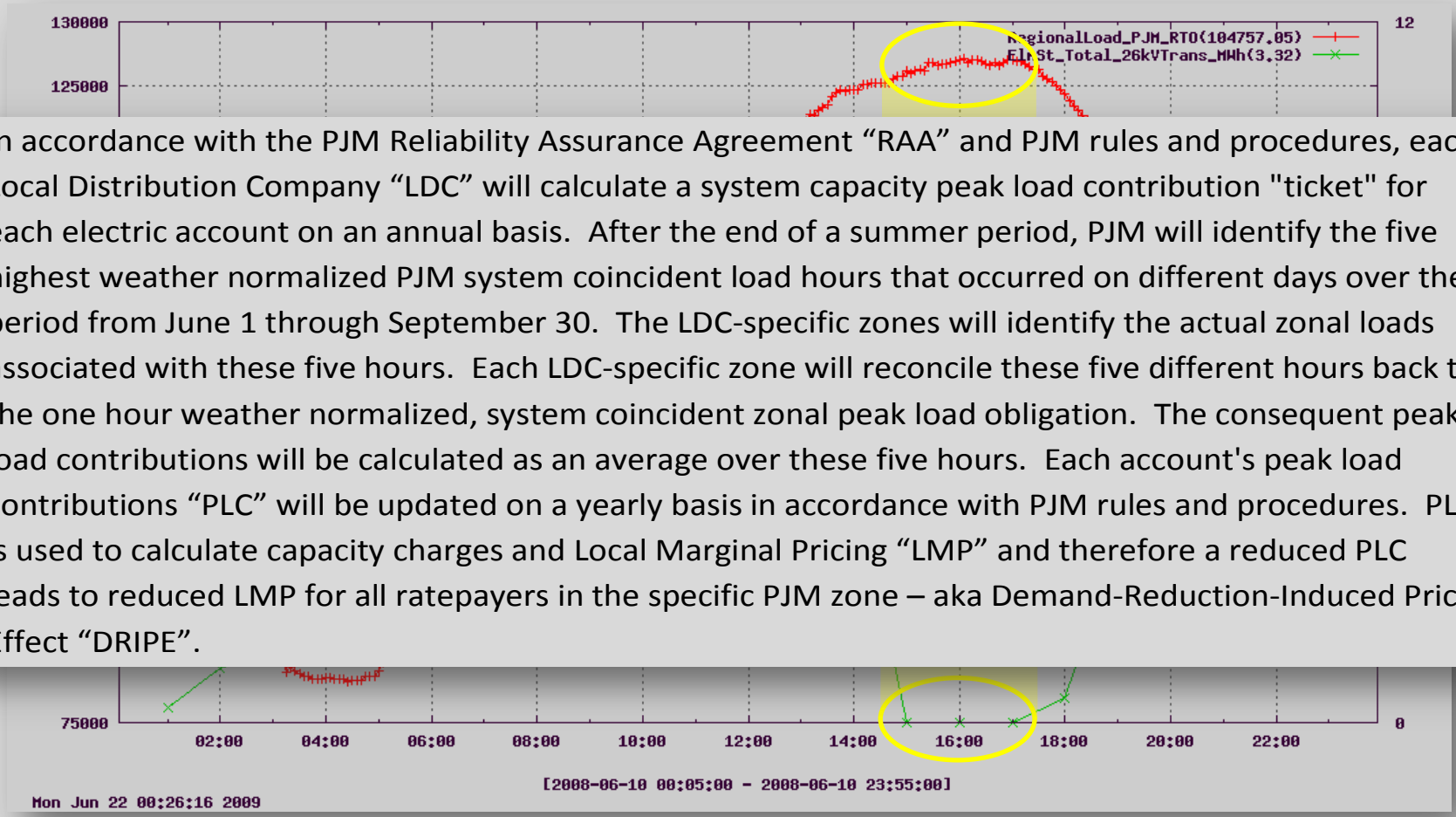
SUPERSTORM SANDY

Elm Drive Substation

Carlton Street Substation



DEMAND-REDUCTION-INDUCED PRICE EFFECT OR "DRIPE"



In accordance with the PJM Reliability Assurance Agreement "RAA" and PJM rules and procedures, each Local Distribution Company "LDC" will calculate a system capacity peak load contribution "ticket" for each electric account on an annual basis. After the end of a summer period, PJM will identify the five highest weather normalized PJM system coincident load hours that occurred on different days over the period from June 1 through September 30. The LDC-specific zones will identify the actual zonal loads associated with these five hours. Each LDC-specific zone will reconcile these five different hours back to the one hour weather normalized, system coincident zonal peak load obligation. The consequent peak load contributions will be calculated as an average over these five hours. Each account's peak load contributions "PLC" will be updated on a yearly basis in accordance with PJM rules and procedures. PLC is used to calculate capacity charges and Local Marginal Pricing "LMP" and therefore a reduced PLC leads to reduced LMP for all ratepayers in the specific PJM zone – aka Demand-Reduction-Induced Price Effect "DRIPE".

CHP BENEFITS

For Businesses

- **Reduces energy costs for the user**
- **Reduces risk of electric grid disruptions and enhances energy reliability**
- **Provides stability in the face of uncertain electricity prices.**

For the Electric System

- **Offers a low-cost approach to new electricity generation capacity**
- **Lessens the need for new transmission and distribution (T&D) infrastructure and enhances power grid security.**

To Society

- **Improves U.S. manufacturing competitiveness through increased efficiencies and reduced energy costs**
- **Offers a low-cost approach to new electricity generation capacity**
- **Provides an immediate path to lower greenhouse gas (GHG) emissions, in many cases through increased energy efficiency**
- **Uses abundant, clean, domestic energy sources**
- **Uses highly skilled American labor and American technology.**
- **A place of refuge**
- **A place to work**
- **Economic continuity**

QUESTIONS

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