

PROJECT REPORT

COMBINED CYCLE PLANT – NORTHEAST US Mechanical Draft Cooling Tower Upgrade

OVERVIEW

<i>Technology</i>	Mechanical Draft Cooling Tower
<i>Configuration</i>	Counter Flow
<i>Industry</i>	Power
<i>Fuel</i>	Natural Gas
<i>Location</i>	Northeast US
<i>MW</i>	1578
<i>Units</i>	2
<i>Number of Cells</i>	10 cells each Unit
<i>Material of Construction</i>	Fiberglass
<i>Scope</i>	Replace all fans, gearboxes, and drift eliminators
<i>Fan Diameter</i>	30 ft
<i>Drift Eliminator Type</i>	Cellular PVC, High Efficiency
<i>Year Completed</i>	2014



Description

Research Cottrell Cooling, Inc. (“RCC”) was contracted by a utility in the Northeast that was interested in improving the thermal performance of their two 10-cell counterflow cooling towers to accommodate additional heat load generated by a turbine upgrade. RCC performed a comprehensive inspection and thermal performance test to verify the current operating condition of the tower, and recommended that the original fans and gearboxes be replaced, and that the drift eliminators be upgraded to lower the static pressure drop through the tower. The new gearboxes would be equipped with extended output shafts to raise the fans into the throat of the fan stack to deliver 100% of the calculated airflow.

RCC was contracted to execute the work in early 2014 during planned outages for each Unit, approximately one month each. Union field labor was subcontracted to RCC’s sister company, Hamon Custodis. All work was completed on time, and the cooling towers were then tested to confirm that the new fans provided the increased airflow expected.



RESEARCH COTTRELL COOLING, INC.

CONTACT US

UNITED STATES

Hamon Corporation

58 East Main Street
PO Box 1500
Somerville, New Jersey 08876

(T) 908 333 2000
(F) 908 333 2152
(E) info.hrcus@hamonusa.com

Hamon Custodis, Inc.

58 East Main Street
PO Box 1500
Somerville, New Jersey 08876

(T) 908 333 2000
(F) 908 333 2151
(E) info.hcusus@hamonusa.com

- Chimneys
- Concrete, Steel stacks
- Linings
- Silos
- Emission controls and accessories

Hamon Research-Cottrell, Inc.

58 East Main Street
PO Box 1500
Somerville, New Jersey 08876

(T) 908 333 2000
(F) 908 333 2150
(E) info.hrcsus@hamonusa.com

- Air Quality Systems
- Dust Removal Systems
- Acid Gas Removal systems
- NOx Removal Systems
- Multi-Pollutants

Hamon Deltak, Inc.

13330 12th Avenue North
Plymouth, Minnesota 55441

(T) 763 557 7440
(F) 908 333 2150
(E) info.hd@hamonusa.com

- Heat Recovery Steam Generators
- Waste Heat Boilers
- Combined Heat Process

Research Cottrell Cooling, Inc.

58 East Main Street
PO Box 1500
Somerville, New Jersey 08876

(T) 908 333 2000
(F) 908 333 2151
(E) info@rc-cooling.com

- Cooling Systems
- Field-erected cooling towers
- Natural Draft
- Fan assisted natural draft
- Mechanical draft
- Plume-abated

Thermal Transfer Corporation

50 North Linden Street
Duquesne, PA 15110

(T) 412 460 4004
(F) 412 466 2899
(E) info.ttcus@hamonusa.com

- Custom Design & Fabrication
- Heat Recovery Products
- Electrostatic Precipitator Components

WORLDWIDE

Hamon & Cie S.A.

Axisparc, Rue Emile Francqui, 2
1435 Mont-St-Guibert
Belgium

(T) +32 10 390 400
(E) corporate@hamon.com

Please visit
www.hamonusa.com
for more information.

The Hamon Group has offices in
26 countries across the world.

