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CleanAir Engineering
7936 Conner Road
Powell, TN 37849-3513
800-208-6162
www.cleanair.com

September 29, 2020

Mr. Mark Thoma
Manager, Environmental Service
Otter Tail Power Company
48450 144th Street
Big Stone City, SD
mthoma@otpco.com

Subject: Letter of Introduction for Mr. David Wheeler

Dear Mark,

I am pleased to provide this letter of introduction for Mr. David Wheeler, who serves as the Technical Leader for the Performance Group of CleanAir Engineering in Powell, Tennessee. In this role, Mr. Wheeler has direct technical oversight of all projects conducted by our team.

We take great pride in our work and we are recognized as industry leaders for providing defensible data in challenging situations. Our core competencies include collection of temperature, pressure, sound, power, and flow measurements.

Mr. Wheeler is recognized as an industry expert in a number of fields. He has utilized his extensive experience to lead or actively participate in the development of test codes or industry guidance for a variety of measurements or components, including development of the Cooling Technology Sound Test Code ATC-128 and cooling tower sound certification program which is under development.

The same level of diligence given to test code development is also applied when developing test plans or project-specific tasks in support of client needs.

As the Technical Leader, Mr. Wheeler is responsible for implementing our rigorous data quality requirements and works with our team to ensure that appropriate quality reviews are completed during data collection in the field and later during the analysis and reporting.

We recognize that challenges often occur during field testing due to any number of circumstances beyond our control including weather, instrument failure, or even component or unit operating limitations. Mr. Wheeler works with all of our test engineers to ensure that they are properly trained for troubleshooting data quality problems as they arise during testing.

Additionally, our internal processes are designed to provide any test engineer with immediate assistance from Mr. Wheeler or other senior team members should they be unable to promptly resolve any problems that arise during data collection.

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Our in-house instrumentation personnel routinely work with Mr. Wheeler to ensure that we stay abreast of industry standards and procedures for instrument calibration and maintenance. We also maintain a large inventory instrumentation in order to assure proper maintenance between each project.

I have worked with Mr. Wheeler for almost 30 years and am absolutely confident that Mr. Wheeler's background with application of engineering techniques and principles, hands-on measurement expertise, and familiarity with relevant test codes will allow us to provide OtterTail with accurate and defensible noise testing data.

We appreciate this opportunity to work with you and the rest of the OtterTail team. Please feel free to reach out to me directly if you have any questions or if I may elaborate on Mr. Wheeler's capabilities.

Sincerely,

Mr. Kenneth W. Hennon
Senior Vice President

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David E. Wheeler, P.E.
Technical Leader

Mr. Wheeler has approximately 40 years of experience in performance testing of power plant components His background includes research, technology development, process engineering, and testing. Mr. Wheeler's responsibilities at Clean Air include coordinating and leading complex technical projects involving multi-disciplinary areas and applying engineering principles, techniques and experience to drive projects to successful completion.

Mr. Wheeler has performed hundreds of tests for plant components including pumps, fans, boilers, steam and gas turbines, air cooled condensers, cooling towers, heat exchangers and heat recovery steam generators. Work scope typically addresses capacity, thermal performance, and noise testing per applicable industry test code guidelines.

Throughout his career, Mr. Wheeler has actively participated in the ASME (American Society of Mechanical Engineers) and CTI (Cooling Technology Institute). He has been involved in test code development and revision for both industry organizations and has intermittently chaired active committees.

In addition to the publications detailed later in this resume, Mr. Wheeler has routinely presented material for conference sessions and seminars hosted by EPRI (Electric Power Research Institute), ASME, and CTI.

Project Work
The following component specific lists summarize work Mr. Wheeler has conducted or supervised throughout his career

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Steam Turbine

Site	Scope Description
Zimmer Station, Moscow, OH	Pre & Post Outage LP Steam Turbine Testing
WA Parish Units 5, 6, 7, & 8, Parish, TX	Modified PTC 6 LP Steam Turbine Baseline Performance Testing
Coffeen Power Station, Coffeen, IL	HP/IP Steam Turbine Enthalpy Drop Testing
Cliffside Steam Station, Mooresboro, NC	Post-Outage HP/IP Steam Turbine Testing
Belews Creek Station, Belews Creek, NC	Turbine upgrade acceptance testing to PTC 6
Tula 3 & 4, Mexico	Steam Turbine Upgrade Acceptance Testing
New Castle Station, West Pittsburg, PA	Steam Turbine HP/IP Upgrade Acceptance Testing
Council Bluffs Unit 3, Council Bluffs, IA	Steam Turbine LP Turbine Blade Path Acceptance Testing
SHERCO Station, Becker, MN	Steam Turbine Upgrade Testing
Seward Generating Station	Steam Turbine Testing and Instrument Validation
Keephills Generating Plant, Alberta, Canada	Turbine Test Support
Calk Point Generating Station, Aquasco, MD	HP/IP Steam Turbine Enthalpy Drop Testing
Conemaugh Station, New Florence, PA	Gland Seal Leakage Testing for Steam Turbine Uprate
Nacogdoches Power Biomass Generating Facility	Overall Plant performance testing including boiler and steam turbine
Milner Generating Station. Alberta, Canada	Steam Turbine Testing Support
Neal Station Unit 3	Pre and Post Outage LP Steam Turbine Testing

Gas Turbine

Site	Scope Description
Hobbs Generating Station, Hobbs, NM	Combined Cycle Performance Testing
Shady Hills Power Station, Spring Hill, FL	Annual Capacity Testing for Simple Cycle Gas Turbine
MCRD CHP Plant, Parris Island, SC	Gas Turbine, Boiler, HRSG and Noise Testing

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Site	Scope Description
Malaga Peaking Plant, Fresno, CA	Annual Heat Rate and Capacity Test – conducted 5 years in a row
Fox Energy, Kaukauna, WI	Annual Heat Rate and Capacity Test- conducted 3 years in a row
Ghorashal Power Station, Bangladesh	Simple Cycle Gas Turbine Performance and Noise Testing
Entergy Hinds, Jackson, MS	Heat Rate and Capacity Test Support
Entergy Hot Springs, LLC, Malvern, AR	Heat Rate and Capacity Test Support
Kearny Generating Station, Kearny, NJ	Gas Turbine Performance Testing
Dell Power Plant, Dell, AZ	Combined Cycle Performance Test
PPC Power Plant, Soroni Rhodes, Greece	Gas Turbine Performance and Noise Testing
Milford in Milford, CT and Lake Rd in Danville, CT	Combined cycle data collection support at both power plants
Nevada Sun Peak, LP	Simple Cycle Gas Turbine Performance Testing
Highwood Station, Great Falls, MT	Gas Turbine Performance Testing
Effingham Power, Rincon, GA	Combined Cycle Performance Testing
Harry Allen CC Plant, Las Vegas, NV	Overall Plant Performance and Noise Testing
Hot Springs Malvern, AR	Performance Test Audit and Review
Sandersville Station, Warthen, GA	Simple Cycle Gas Turbine Performance Testing
J. Lamar Stall Plant, Shreveport, LA	Plant Performance Test Support
Zeeland Station, Jacksonville, FL	Simple Cycle Gas Turbine Performance Testing
Clark Station Peaking Units, Las Vegas, NV	Simple Cycle Gas Turbine Performance Testing
Washington County, Sandersville, GA	Gas Turbine Performance Test
Monroe Power, Monroe, GA	Gas Turbine Net Capacity Test
Tracy Combined Cycle Plant, Tracy NV	Plant Performance Acceptance Testing
Nigeria	Simple Cycle Gas Turbine Acceptance Testing
Chilca, Peru	Simple Cycle Gas Turbine Acceptance Testing
Cal-Peak Border, San Diego, CA	Simple Cycle Gas Turbine Performance Testing
Cal-Peak El Cajon, El Cajon, CA	Simple Cycle Gas Turbine Performance Testing
Call-Peak Enterprise, Escondido, CA	Simple Cycle Gas Turbine Performance Testing
Riyadh PP7, Saudi Arabia	Combined Cycle Plant Performance Testing

Boiler Testing

Site	Scope Description
Joppa Power Plant	Air in-leakage testing
Iatan Generation Station Unit 2, Weston Missouri	Fan and Noise testing
Sandow Unit 4, Rockdale, TX	Boiler air in-leakage testing
Trimble County Generating Station,	Boiler air flow testing Pulverizer hot air flow calibrations
Garden City School District (various), NY	Boiler efficiency testing
Walter Reed Medical Center, Bethesda, MD	Boiler efficiency testing
Deepwater Generating Station, Pennsville, NJ	Pulverizer and coal fineness testing
Comanche Station Unit 3, Pueblo, Co	Overall Plant Boiler Test, Turbine, ACC, FW Heater
Spurlock Unit 4, Maysville, KY	Boiler testing support/ammonia slip testing
Javelina, Corpus Christi, TX	Boiler efficiency testing
Lafayette South Plant , Lafayette, IN	Boiler performance testing
Merom Units 1 & 2, Sullivan, IN	Post SCR Installation air in-leakage diagnostic test
Portland Generating Station, Mt. Bethel, PA	Boiler LOI and oxygen in-leakage testing
Castle Peak, Hong Kong	CFB boiler test
SMEPA- Multiple Stations	Heat rate testing
Bear Valley Electric Service, Big Bear Lake, CA	Boiler performance testing - heat rate investigation

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Site	Scope Description
Tolk and Harrington Stations, Amarillo, TX	Heat rate testing and consulting services

Condenser Testing

Site	Scope Description
Haynes Power Plant, Long Beach, CA	Air Cooled Condenser Thermal Performance Testing
Sewaren Generating Station, Sewaren, NJ	Air Cooled Condenser Thermal Performance and Noise Testing
Tzafit Generating Station, Tel Aviv, Israel	Air Cooled Condenser Performance Test Consulting
Hobbs Generating Station, Hobbs, NM	Air Cooled Condenser Performance Testing
Limestone Power Plant, Jewitt, TX	Condenser Performance Testing
Seward Station, New Florence, PA	Condenser Performance Testing
Hobbs Station, Hobbs, NM	Air Cooled Condenser Performance Testing
Hope Creek Station, Hancocks Bridge, NJ	Condenser, Pump & Cooling Tower Testing
Hatfield Ferry Station, Masontown, PA	Condenser, Pump & Cooling Tower Testing
E.W. Brown Generating Station, Harrodsburg, KY	Condenser-Diagnostic Air Flow Testing
Colver Power Station, Colver, PA	Condenser and Cooling Tower Testing
Turkey Point, Homestead, FL	Support for U3 Condenser Parameter Evaluation Test Data
Cairo, Egypt	Condenser Testing
Yates Station,	Condenser Testing

Cooling Tower Testing

Site	Scope Description
Harris County Courthouse, Houston, TX	Fan power and sound level measurements
Cardinal Power Plant, Brilliant, OH	Thermal Performance Testing w/ Dye Dilution Flow Rate
Trimble County Generating Station, Bedford, KY	Thermal Performance and Sound Testing
National Institute of Health, Bethesda, MD	Thermal Performance Testing
University of Wisconsin, Madison, WI	Thermal Performance, Sound and Vibration Testing
Parajitos Power Plant, Caderyta, MX	Thermal Performance Testing
SAMREF, Yanbu, Saudi Arabia	Thermal Performance Test Consulting
SandRidge Century Plant, Ft. Stockton, TX	Thermal Performance Testing
Massachusetts Institute of Technology, Cambridge, MA	Thermal Performance, Drift Emissions and Sound Testing
Caterpillar Facility, Mossville, IL	Thermal Performance and Sound Testing
Honeywell, Hopewell, VA	Thermal Performance Testing
Channelview Lyondell, Channelview, TX	Thermal Performance Testing
JWS Steel, Bellary, Karnataka, India	Thermal Performance Testing
SandRidge Century Plant, Ft. Stockton, TX	Thermal Performance Testing
UNC North East Chiller Plant	Thermal Performance and Sound Testing
Springfield Unit 2, Springfield, MO	Thermal Performance, Drift Emissions, and Sound Testing
Saudi Kayan Petrochemical Co., Jubail, Saudi Arabia	Thermal Performance and Drift Emissions Testing
UVA, Charlottesville, VA	Thermal Performance, Sound, and Vibration Testing
Hatch Electric Generating Plant, Baxley, GA	Cooling Tower Air Flow Measurements

Publications

1. Heat Rejection Cycle Analysis: A Means to Recover Lost Megawatts and Reduce Greenhouse Gas Emissions, Hennon, K. W. and Wheeler, D. E., EPRI Heat Rate Improvement Conference, 2009.

2. Meteorological Considerations in the Design of Plume Abated Cooling Towers, Wheeler, D. E. and Hennon, K. W., Cooling Technology Institute Annual Conference, 2009.

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3. Field Sound Measurements from Cooling Towers, Hennon, K. W. and Wheeler, D. E., Cooling Tower Technology Seminar and Conference, 2007.

4. Quantification of PM-10 Emissions from Cooling Towers, Hennon, K. W. and Wheeler, D. E., EPRI Cooling Tower Technology Seminar and Conference, 2003.

5. Cooling Tower Emissions Quantification using the Cooling Technology Institute Test Code ATC-140, Hennon, K. W. and Wheeler, D. E., Cooling Technology Institute Annual Conference, 2003.

6. Characterization of Drift Rates and Drift Droplet Distribution for Mechanical Draft Cooling Towers, Missimer, J. R. and Wheeler, D. E., Cooling Tower Institute Annual Conference, February 1997.

7. Uncertainty Analysis of Cooling Tower Performance, Hennon, K. W. and Wheeler, D. E., American Power Conference, 1996.

8. Interim Report of an Investigation of Pitot Tube Water Flow Rate Measurement in Large Pipes, Moore, R. D., Wheeler, D. E., and Wilber, K. R. for Electric Power Research Institute, February, 1980.

9. Uncertainty Analysis of Cooling Tower Performance Paper, presented at the 1996 American Power Conference detailing procedure for the analysis of the uncertainty associated with a standard cooling tower thermal performance test.

Registration
Registered Professional Engineer in the State of Tennessee. Registration Number 016335

Education
M.S., Environmental Engineering, University of Tennessee, 1977.
B. S., Chemical Engineering, University of Tennessee, 1973.