Workshop H

Best Practices & Case Study: Cleveland Indians/FirstEnergy Solutions … Extracting Maximum Value from Your Electric Supplier

Tuesday, February 21, 2017
1:45 p.m. to 3 p.m.
Biographical Information

Tom Schmuhl, Director, Sales
FirstEnergy Solutions
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Tom Schmuhl is the Director of Sales, FirstEnergy Solutions headquartered in Akron, Ohio. Primarily responsible for Business Development by leading a team of energy professionals located throughout the PJM and MISO markets. Mr. Schmuhl has helped FirstEnergy Solutions become one of the largest retail suppliers behind PJM. FES holds lead share positions in several markets promoting innovative product offerings to a vast number of commercial and industrial customers throughout the Midwest and mid-Atlantic regions.

Tom Schmuhl was previously the Product Manager for Electric Commodity, FirstEnergy Solutions with responsibilities for Product Development and Product Deployment. Mr. Schmuhl has worked in various capacities in the Sales and Marketing areas at FirstEnergy Solutions throughout his twenty year career in the energy field.

Tom Schmuhl has been a lead presenter in FirstEnergy Solutions Energy Summit Series providing insights on energy purchasing, market fundamentals and customer product trends. During the ten year history of the Energy Summit Series, FirstEnergy Solutions has provided content to thousands of energy decision makers. During the years prior to electric deregulation Mr. Schmuhl worked in various selling capacities including the energy management arena working with large multi-state firms with energy spends in excess of $10M.

Prior to joining FirstEnergy Solutions Mr. Schmuhl was the Vice President of Sales & Marketing for a national firm serving the mortgage industry. Mr. Schmuhl resides in Norwalk, Oh.

Rich Dorffer, Senior, Director, Planning, Analysis & Reporting
Cleveland Indians
216-420-4366 rdorffer@indians.com

Rich Dorffer is in his 17th season with the Cleveland Indians and his fourth year as the Senior Director, Planning, Analysis & Reporting. Rich began his career with the Indians in May, 1999 as the Manager of Corporate Reporting, Development & External Reporting.

Rich is primarily responsible for the short-term financial forecasts and long-term strategic financial plans for the Cleveland Indians. He is also responsible for the external reporting to Major League Baseball including Debt Service Rule compliance and Deferred Compensation Funding compliance, Revenue Sharing reporting including all financial transaction analysis associated with optimizing revenue sharing rules and detailed financial analyses related to a myriad of unique business transactions, forecasting and projections. Rich is also responsible for workers’ compensation for the organization and the coordination with Major League Baseball on certain risk management matters in addition to working on special projects for ownership.

Prior to joining the Indians, Rich was employed in the audit and assurance services group of PricewaterhouseCoopers, LLP from 1994 – 1999. A lifelong resident of Northeast Ohio, he graduated from Dalton High School in 1990 and earned his Bachelor of Science in Business Administration in Accountancy from John Carroll University in 1994. Rich resides in Green, Ohio with his family.
Peak Load Management
Taking a Proactive Approach to Managing Your Energy Spend

Workshop H
Rich Dorffer
Senior Director of Planning, Analysis and Reporting, Cleveland Indians

Thomas Schmuhl
Director, C&I Sales, FirstEnergy Solutions

Ohio Energy Management Conference
February 21, 2017
Workshop Topics

- Multimillion $ renovation announcement – Aug 2014
- Renovation phased in during three off seasons
- 100% green power contract
- Energy Profile of a MLB Ballpark – Progressive Field
- Curtailing for peaks at Progressive Field
Multimillion Dollar Renovation Announced

2014
2014/2015 Off Season Changes – Phase 1

- **Right Field District introduced**
  - Added two story Corner Bar
  - Reconfigured seating by removing 5,500 seats
  - Reposition of bullpen areas
  - Five local food service offerings

- **Center Field Plaza changes**
  - Expanded heritage Park
  - Remaking of Gate C

- **Expanded Kids Clubhouse to two stories**
  - Interactive play land with indoor/outdoor seating
2015/2016 Off Season Changes – Phase 2

- **New Club behind home plate**
  - Added season ticket holder club
  - Indoor and outdoor luxury seating
  - Removed 2,000 seats

- **Expansion of new concessions to entire park**
  - Seven new concession partners
  - Built on success of phase 1

- **Lighting upgrades**
  - $500,000 investment, ROI averaged 8 yrs
  - 15 projects ranging from batting cages, concourse lighting and underground service areas

- **New Sound System**
  - Replaced 22 year old system
2015/2016 Off Season Changes (Continued)

Old Video Display – 5,400 sq feet/ 9,200 sq feet – 100 watt per sq foot
New Video Display – 13,000 sq ft / 23,000 sq ft – 28 watts per foot.
Largest video display in the MLB 2.5 X display size, 32% more efficient
NEW LED Field Lights Installed

- Replace existing 674 metal halide lights using 1,500 watts with 456 LED light fixtures use only 1,000 watts
- The LED lights are 20-30 percent brighter while using a minimum of 55% fewer watts operating at 100% or 64% when driven at 80%
- The more efficient LED lights will reduce power usage by 700,000 kWh each season, saving more than $50,000 in energy costs alone
NEW LED Field Lights Installed (Continued)

- Because LED lights which carry a 20 year warranty, last longer, there are also savings in maintenance costs over the life of the fixtures.

- Sun light registers 100 on the Color Rendering Index. Metal halide fixtures register 63, and LED lights are at 80, making for dramatic improvements in visibility for players on the field, fans in the stands and those watching at home on TV.
Progressive Field
Home of the Cleveland Indians

Where Energy Is Used
On A Typical Game Day

- Baseload 45%
- Offices 15%
- Field Lights 10%
- Food Service 10%
- Suites 10%
- Scoreboard 10%

August 12, 2016
Indians 14 - Angels 3
Attendance 27,000

- Office opens
- Teams arrive
- Service staff arrives
- Suites prepared, batting practice
- Lights On/Gates open
- First Pitch
- Last Pitch
- Lights off from 14-4 Win vs Angels

Hourly temp
MW

MW
4.53
4.36
4.61
4.52
5.52
5.52
5.49
5.33
5.52
5.52
Power Up Your Green Game

The only professional sports facility in the U.S. to be run entirely on wind energy
Win-Win

- As the home of the Cleveland Indians, Progressive Field becomes the only professional sports facility in the U.S. to be run entirely on wind energy
  - FirstEnergy Solutions advertising campaign to promote this achievement

- Contracted wind energy is an ideal way to support renewable energy sources

- “Using sustainable technologies is not only good for the community, but good for baseball”

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Indians
SUSTAINABILITY
OUR TRIBE IS GREEN
Managing Capacity Peaks

- Best efforts approach to lower PLC and next years capacity cost
  - Game day plan
    - Minimize pre-cooling, limit energy use in offices, delay “lights on” until after batting practice
  - Non-game day plan
    - Limit energy use in offices
Indians PJM System Peaks during 2016

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July 25, 2016 PJM Peak Day
Indians have off day

July 27, 2016 PJM Peak Day
Indians Day game (12:10 start) versus Washington

August 10, 2016 PJM Peak Day
Indians on the road at Washington

August 11, 2016 PJM Peak Day
Indians night game versus LAA

August 12, 2016 PJM Peak Day
Indians night game versus LAA
Managing Transmission Peaks – NMB pilot

- **Available to large customers in FirstEnergy Ohio who opt-in to the program**
  - Objective: Customers with curtailment capabilities may be able to lessen their Transmission PLS
  - Results: By lowering Transmission PLS the pilot would result in lower overall transmission cost

- **Complexity in managing**
  - Transmission Peaks are measured at the zone and will not necessarily coincide with RTO-wide Capacity Peaks
  - Not as much at stake (“small piece of the pie”)

- **Tools**
  - Peak day forecast from electricity supplier
  - Reduction of power consumption in 5 out of 5 peak days
Cleveland Indians had some success when comparing operational peaks to CEI’s transmission peaks.
Non-market Based Pilot Analysis

Based on our calculated NSPL, the Indians will see some benefit from NMB pilot.
Thank You
Forward-Looking Statements

This presentation includes forward-looking statements based on information currently available to management. Such statements are subject to certain risks and uncertainties. These statements include declarations regarding management’s intents, beliefs and current expectations. These statements typically contain, but are not limited to, the terms “anticipate,” “potential,” “expect,” “forecast,” “target,” “will,” “intend,” “believe,” “project,” “estimate,” “plan” and similar words. Forward-looking statements involve estimates, assumptions, known and unknown risks, uncertainties and other factors that may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements, which may include the following:

- the speed and nature of increased competition in the electric utility industry, in general, and the retail sales market in particular; the ability to experience growth in the Regulated Distribution and Regulated Transmission segments and to successfully implement our revised sales strategy for the Competitive Energy Services segment;
- the accomplishment of our regulatory and operational goals in connection with our transmission investment plan, including but not limited to, our pending transmission rate case, the proposed transmission asset transfer, and the effectiveness of our repositioning strategy to reflect a more regulated business profile; changes in assumptions regarding economic conditions within our territories, assessment of the reliability of our transmission system, or the availability of capital or other resources supporting identified transmission investment opportunities; the impact of the regulatory process on the pending matters at the federal level and in the various states in which we do business including, but not limited to, matters related to rates and the Electric Security Plan IV in Ohio; the impact of the federal regulatory process on the Federal Energy Regulatory Commission (FERC)-regulated entities and transactions, in particular FERC regulation of wholesale energy and capacity markets, including PJM Interconnection, L.L.C. (PJM) markets and FERC-jurisdictional wholesale transactions; FERC regulation of cost-of-service rates, including FERC Opinion No. 531’s revised Return on Equity methodology for FERC-jurisdictional wholesale generation and transmission utility service; and FERC’s compliance and enforcement activity, including compliance and enforcement activity related to North American Electric Reliability Corporation’s mandatory reliability standards; the uncertainties of various cost recovery and cost allocation issues resulting from American Transmission Systems, Incorporated’s realignment into PJM, economic or weather conditions affecting future sales and margins such as a polar vortex or other significant weather events, and all associated regulatory events or actions; changing energy, capacity and commodity market prices including, but not limited to, coal, natural gas and oil, and their availability and impact on margins and asset valuations; the continued ability of our regulated utilities to recover their costs; costs being higher than anticipated and the success of our policies to control costs and to mitigate low energy, capacity and market prices; other legislative and regulatory changes, and revised environmental requirements, including, but not limited to, the effects of the United States Environmental Protection Agency’s Clean Power Plan, coal combustion residuals regulations, Cross-State Air Pollution Rule and Mercury and Air Toxics Standards programs, including our estimated costs of compliance, Clean Water Act waste water effluent limitations for power plants, and Clean Water Act 316(b) water intake regulation; the uncertainty of the timing and amounts of the capital expenditures that may arise in connection with any litigation, including New Source Review litigation, or potential regulatory initiatives or rulemakings (including that such initiatives or rulemakings could result in our decision to deactivate or idle certain generating units); the uncertainties associated with the deactivation of certain older regulated and competitive fossil units, including the impact on vendor commitments, and as they relate to the reliability of the transmission grid, the timing thereof; the impact of other future changes to the operational status or availability of our generating units and any capacity performance charges associated with unit unavailability; adverse regulatory or legal decisions and outcomes with respect to our nuclear operations (including, but not limited to, the revocation or non-renewal of necessary licenses, approvals or operating permits by the Nuclear Regulatory Commission or as a result of the incident at Japan’s Fukushima Daiichi Nuclear Plant); issues arising from the indications of cracking in the shield building at Davis-Besse; the risks and uncertainties associated with litigation, arbitration, mediation and like proceedings, including, but not limited to, any such proceedings related to vendor commitments; the impact of labor disruptions by our unionized workforce; replacement power costs being higher than anticipated or not fully hedged; the ability to comply with applicable state and federal reliability standards and energy efficiency and peak demand reduction mandates; changes in customers’ demand for power, including, but not limited to, changes resulting from the implementation of state and federal energy efficiency and peak demand reduction mandates; the ability to accomplish or realize anticipated benefits from strategic and financial goals, including, but not limited to, the ability to continue to reduce costs and to successfully execute our financial plans designed to improve our credit metrics and strengthen our balance sheet through, among other actions, our previously-implemented dividend reduction, our cash flow improvement plan and our other proposed capital raising initiatives; our ability to improve electric commodity margins and the impact of, among other factors, the increased cost of fuel and fuel transportation on such margins; changing market conditions that could affect the measurement of certain liabilities and the value of assets held in our Nuclear Decommissioning Trusts, pension trusts and other trust funds, and cause us and/or our subsidiaries to make additional contributions sooner, or in amounts that are larger than currently anticipated; the impact of changes to material accounting policies; the ability to access the public securities and other capital and credit markets in accordance with our financial plans, the cost of such capital and overall condition of the capital and credit markets affecting us and our subsidiaries; actions that may be taken by credit rating agencies that could negatively affect us and/or our subsidiaries’ access to financing, increase the costs thereof, and increase requirements to post additional collateral to support outstanding commodity positions, letters of credit and other financial guarantees; changes in national and regional economic conditions affecting us, our subsidiaries and/or our major industrial and commercial customers, and other counterparties with which we do business, including fuel suppliers; the impact of any changes in tax laws or regulations or adverse tax audit results or rulings; issues concerning the stability of domestic and foreign financial institutions and counterparties with which we do business; the risks associated with cyber-attacks on our electronic data centers that could compromise the information stored on our networks, including proprietary information and customer data; and the risks and other factors discussed from time to time in our United States Securities and Exchange Commission filings, and other similar factors. The foregoing review of factors should not be construed as exhaustive. New factors emerge from time to time, and it is not possible for management to predict all such factors, nor assess the impact of any such factor on FirstEnergy’s business or the extent to which any factor, or combination of factors, may cause results to differ materially from those contained in any forward-looking statements. FirstEnergy expressly disclaims any current intention to update, except as required by law, any forward-looking statements contained herein as a result of new information, future events or otherwise.