

Indy Energy Forum

March 25, 2017



Agenda

- ◆ Information on the New IUC Building
- ◆ Building Tour
- ◆ Updates
 - Decommissioning of Missouri City
 - Community Solar
 - Advanced Metering Infrastructure
 - City's New Billing System
- ◆ Q & A

Independence Utility Center (IUC)



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- ◆ LEED Platinum Facility – Highest Green Building Certification
- ◆ 1 kW Wind Turbine and 30 kW Rooftop Solar PV systems supply 30 % Building's Power Needs
- ◆ State of The Art Energy Efficiency Features (LED lighting, VRF HVAC, EE Windows, etc.) = 60% lower energy use than average, multi-story office building
- ◆ Built with 25% Recycled materials including wood from old Kentucky Horse Barn
- ◆ Water saving sinks & toilets = 40% lower water use for our Building



Independence Utility Center (IUC)



Missouri City Power Plant Decommissioning and Demolition

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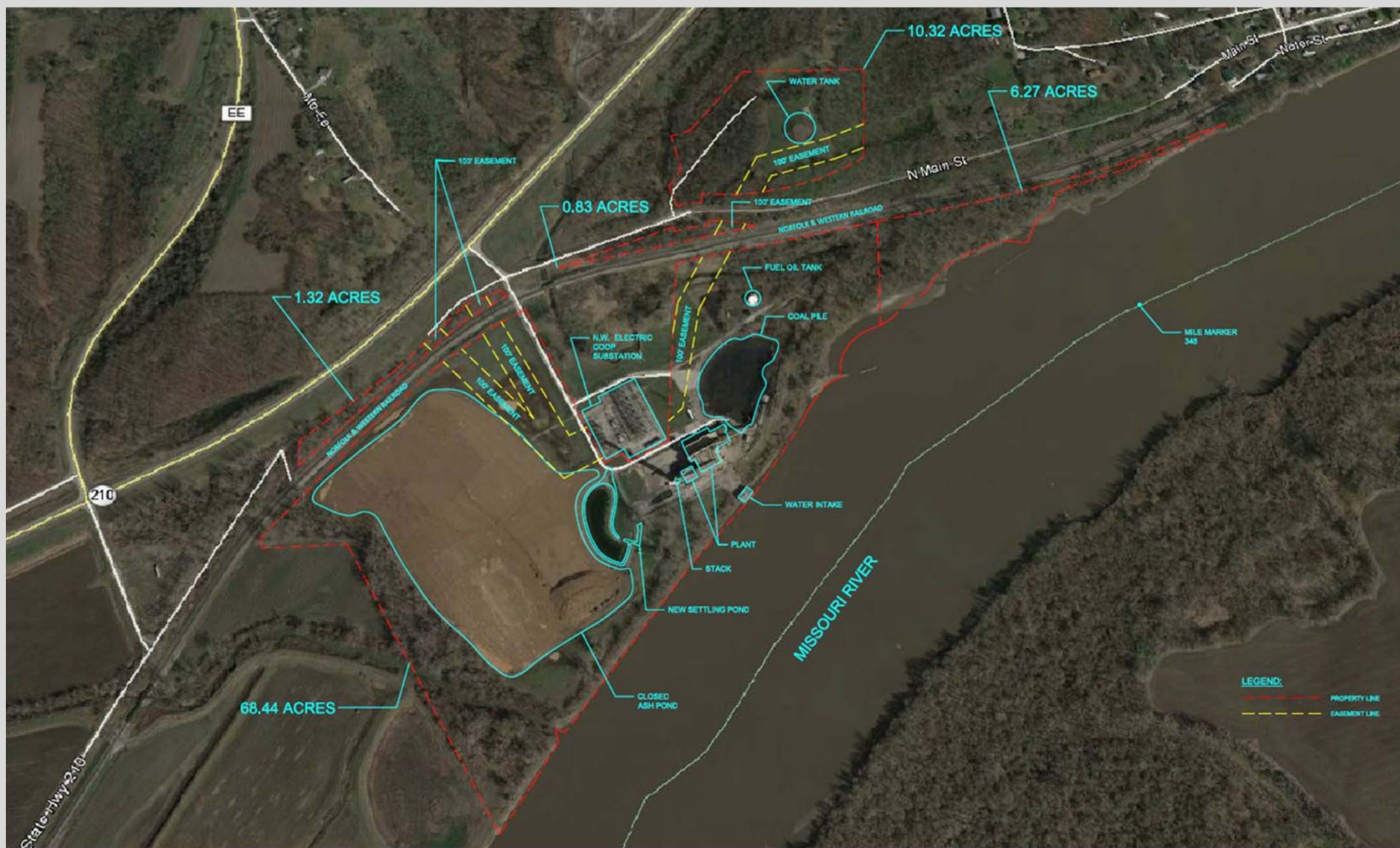


Missouri City Power Plant

- ◆ On July 18th, 2016 City Council directed the City Manager to advertise an RFQ (Request for Qualifications) for the Missouri City Power Plant; specifically decommissioning the power plant and repurposing the property.
- ◆ The RFQ was issued on August 15th, 2016 and the responses were opened on September 16th, 2016.
- ◆ Five companies submitted qualifications. None of the respondents had viable solutions for repurposing the land.
 - This property has very little development value due to the capped ash pond and the NW Substation that covers a substantial amount of the usable property.
- ◆ Two of the respondents offered some type of environmental liability risk transfer including ownership transfer.

Missouri City Power Plant

- ◆ Based on the results of the RFQ process, City Council has directed the Power & Light Department to proceed with an RFP (Request for Proposal) for complete remediation, decommissioning, demolition, and environmental risk transfer that would indemnify IPL for environmental liabilities and include ownership transfer.
- ◆ The RFP was issued on February 21, 2017 and the responses will be opened on March 31, 2017.
- ◆ The RFP requires that the successful entity follow all environmental remediation guidelines necessary to obtain a Certificate of Completion from the Missouri Department of Natural Resources (MDNR) under the Missouri Brownfields/Voluntary Cleanup Program.



Community Solar

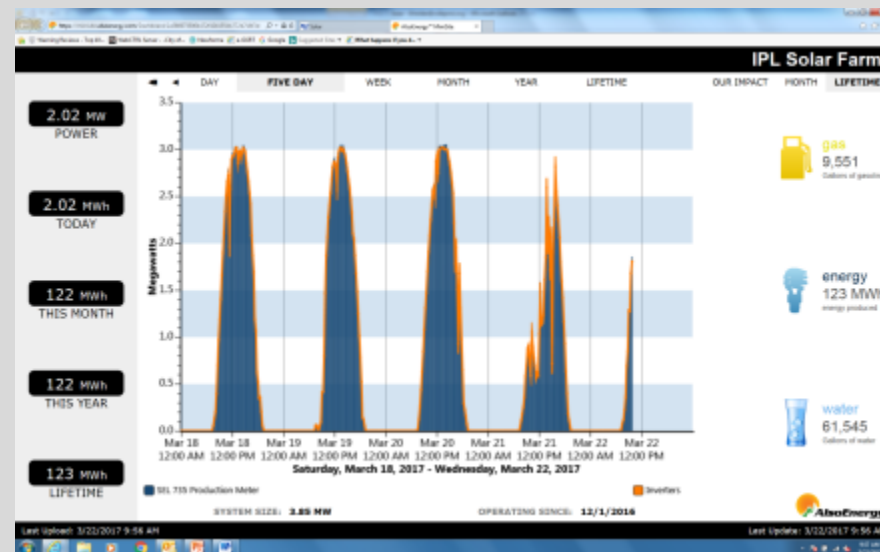


Community Solar

- ◆ 3 MW Farm Located in Independence on Bundschu Road just east of 7 Hwy
- ◆ November 2014 RFP
 - 8 Bids – National and local solar firms
 - Awarded to MC Power – local firm based in Lee's Summit
 - Largest Solar Company in Missouri with six other farms already constructed
- ◆ Signed Power Purchase Agreement (PPA) December 2015
 - Average Market Price for Power = \$25 to \$30 / Mwh
 - Council Directive to IPL : Build Renewables in Independence but must not result in rate increase
 - Community Solar Model : Ask interested Community to subsidize green power, 1kw farm subscription = added monthly cost of \$2.37
 - Contract stipulated that construction could not begin until 25% of farm output was subscribed

Community Solar

- ◆ Construction of the Independence Community Solar Farm (ICSF) Began October 2016
- ◆ 100% subscription level achieved March 2017
- ◆ Testing and Commissioning of the Farm on March 15 – 16
- ◆ Farm has already produced 123 Mwh of green energy
 - 95 tons of CO2 avoided
 - >92,000 pounds of Coal not burned
- ◆ Customer Billing for Subscribers scheduled to begin May 1, 2017



Actual Solar Power output from ICSF thru 3/22/17

- ◆ ICSF Generation Webpage available soon
 - <http://www.mcpower.com/solar.html>

Advanced Metering Infrastructure



Advanced Metering Infrastructure

- ◆ Resolution #6013 passed by City Council June 1, 2015 that called for an AMI feasibility study to be completed.
- ◆ AMI Business Case Study began in August 2015 and the results were shared with City Council on February 8, 2016.
- ◆ The Business Case Analysis indicated a positive return on investment.
- ◆ City Council Recommended that IPL initiate a detailed design process to develop the necessary material for an RFP.
- ◆ The AMI Blueprint Design Phase Began November 1, 2016 and was completed on February 28, 2017.

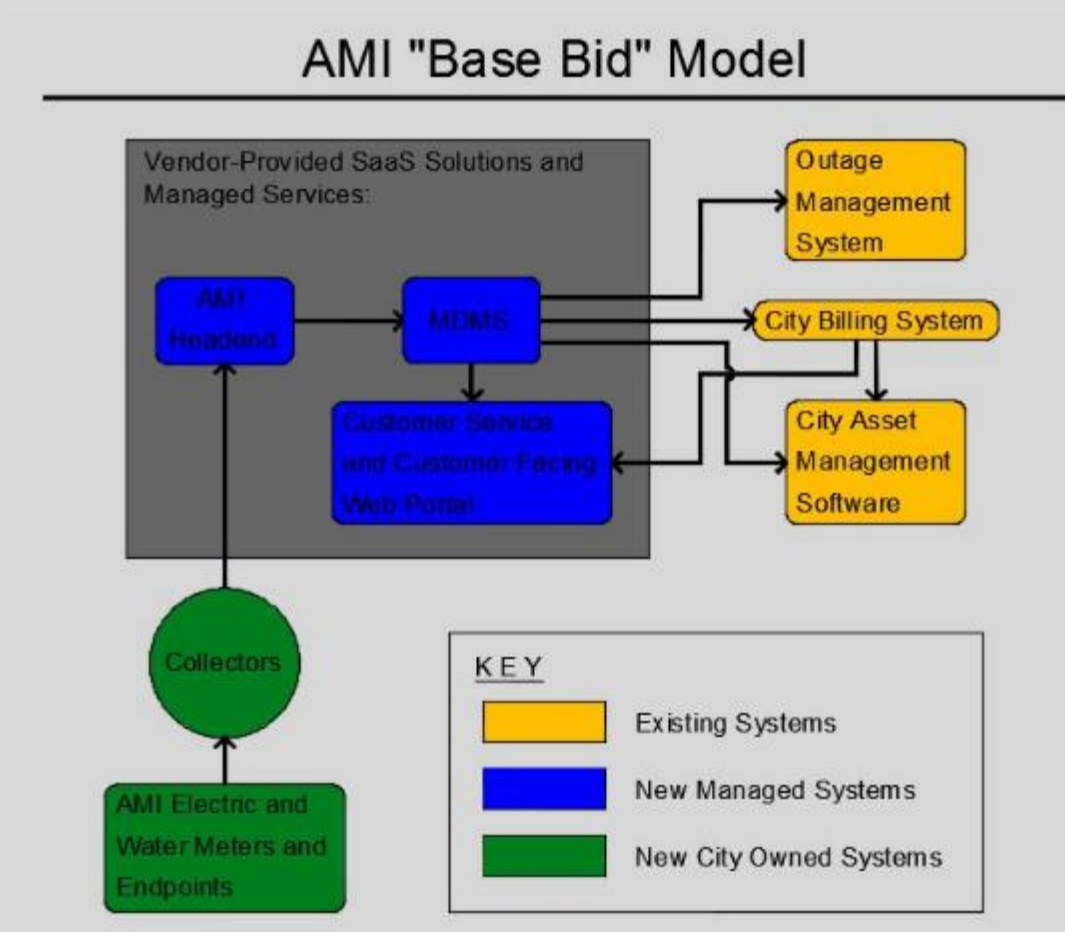
AMI Blueprint Design

- ◆ The Consultant conducted various workshops with the City Utilities and Technology Services to understand AMI System requirements and detailed use cases.
- ◆ The Consultant collected system integration requirements from Vendors now working with the City Software, including the Utility Billing System, Work Management and Outage Management Software.
- ◆ The Consultant and City Staff developed cost estimates, collected data, and gathered documents required for the development of an RFP.
- ◆ The AMI Blueprint recommended an implementation strategy that will utilize a mix of:
 - City-owned infrastructure
 - Vendor supplied Software as a Service (SaaS)
 - Managed Service components

Recommended AMI Implementation Strategy

- ◆ Meters and telecommunication infrastructure to be owned by the City
- ◆ SaaS applications would be built with cloud hosting in mind for all meter data
- ◆ The Managed Service Provider (MSP)
 - Maintain hardware
 - Software updates
 - Apply patches
 - Data backup and recovery
 - System monitoring and management
 - Providing important security audits and updates

Proposed Network Diagram



Advanced Metering Infrastructure

- ◆ Projected RFP Bid Schedule:
 - Bid Timeframe: April-May, 2017
 - Bid Evaluation: June-August, 2017
 - Contract Award (contingent on City Council authority):
September 2017

City's New Billing System



Update by Tom Heinkel – Customer Service Manager