BONIN GENERATION REDEVELOPMENT Jeffrey Stewart LUS Director



LAFAYETTE UTILITIES SYSTEM

BACKGROUND

How did we get here?

We have done our due diligence...



Evaluations have concluded redevelopment of Bonin is the best option.

Detailed cost estimate (Demolition) Detailed cost estimate (Power Plant) Cost of Service & Rate Study

> **Power Supplies Alternatives Evaluation**

2023

Public meetings



LUS POWER SUPPLY PATH FORWARD

- 1. Working with co-owners to retire RPS2 in 2027 timeframe
- 2. Currently negotiating solar power purchase agreement
 - a. Second round of RFP in 2023 for 300MW
- Redevelop the Bonin facility with a new, natural gas-fired power plant 3.
 - a. What is the Bonin SCGT redevelopment project?
 - Existing boilers would be demolished and new power plant rebuilt i.
 - The new simple cycle power plant using natural gas for fuel İİ.
 - iii. The site would include a new administrative building, warehouse, and maintenance shop
 - iv. ~220 to 240 MW (for reference, RPS2 is ~250MW)
 - v. Starts operating in Spring 2028 (estimated)





WHY IS THIS THE BEST PROJECT FOR LAFAYETTE?

Reliability

- Provides reliable capacity to LUS and its customers
- Provides a backup source of electricity when renewables are not able to produce \bullet (i.e. allows the overall electric system to incorporate more renewables over time)
- Local power plant supporting the community \bullet

Cost-effective

Lowest cost option available to LUS and its customers





WHY IS THIS THE BEST PROJECT FOR LAFAYETTE?

Environmentally friendly

• Reduces CO2 generated by LUS by transitioning away from coal





EXISTING SITE RENDERING



11.

NEW SITE RENDERING

FEF. BARRIE

561

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G

11.

HEBERT RD

WILLOW ST

MONARCH DR

TOTAL COSTS

- Recent studies estimated the cost of demolition and new power plant
- MISO interconnection studies will determine costs for transmission (first cost estimate expected in March 2024 from MISO)
- This project is the lowest power supply alternative for LUS and its customers

Category

Demolition

New Power Plant

MISO Transmission Cos

Financing Fees / Interes

Total

- Preliminary Allowance MISO study results will determine ۲ costs
- Includes contingency

	(\$	Cost Millions)
	\$	12
	\$	300
sts	\$	50
st	\$	38
	\$	400

IMPACTS TO RATES – BONIN 4

Electric:

+3.5% base rate increase per year in FY 26, 27 & 28

Existing LUS debt matures in 2029, new debt for power plant will likely require a modest rate increase, but utility financial forecast is robust

*Electric fuel charge held constant at \$0.04300 for analysis

POWER SUPPLY ALTERNATIVES EVALUATION Met Cost of Capacity Comparison

Market alternative's proposal was significantly higher in cost compared to Bonin redevelopment

- 62% more than Bonin 4 option
- Approximately \$172M increase (NPV)

IMPACTS TO RATES – MARKET ALT.

Equivalent +5.67% base rate increase per year in FY 26, 27 & 28

*Electric fuel charge held constant at \$0.04300 for analysis

ELECTRIC BILL COMPARISON

PROJECT TASKS COMPLETED

- Interconnection Study initiation (September 2022)
 - Initial fee of \$1.3M
- MISO Milestone M3 Payment of \$5M (March 2024)
 - City Council Ordinance CO-089-2023 (July 11, 2023)
- Public Meetings
 - July 24, 2023 Main Library
 - July 26, 2023 South Regional Library
- Professional Engineering Agreement for demolition of existing plant and construction of Bonin 4
 - December 2023
- Final version of electric Cost of Service study

UPCOMING TASKS

FY2024

- MISO Milestone M4 Payment (July 2024)
- Additional MISO payments
- Demolition of existing site
- Equipment down payments
- Other misc. development costs

~\$5M TBD ~\$12M ~\$10M ~\$2 to 4M

NEAR-TERM ACTIONS

For City of Lafayette and LUS Teams

- Engage City Council members (January/February) ${\color{black}\bullet}$
- Request introductory action from City Council (February)
 - Electric base rate increase
 - Project CIP budget amendment
 - Permission to go to State Bond Commission
- Public Meetings (February)
- Preliminary engineering and procurement for long-lead items (large transformer) (February)
- Request final approval from City Council (March)
- Decision/impact of MISO transmission results (March)
- State Bond Commission (April)
- Develop financing strategy with financial advisor (April)
- Bond issue (July)

SUPPLEMENTAL TECHNICAL INFORMATION

BONIN REDEVELOPMENT MILESTONE SCHEDULE

		20)22			20	23			20)24			20)25			20	26		
Phase	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q
Action Plan			\star																		
Generation Interconnection							*	\star		★											
Project Definition / Air Permit						\star					ζ.										
Major Equipment Procurement									\star												
Demolition																					
SCGT Execution																					

- Go/No-go Decision Point No. 1 Submit Generation Interconnection Application
- Go/No-go Decision Point No. 2 Network / Transmission Line Upgrades (numerous sub-points)
- Go/No-go Decision Point No. 3 Total Project Capital Cost
- Go/No-go Decision Point No. 4 Major Equipment Ordered (GSU)
- Go/No-go Decision Point No. 5 Air Permit Received

Note: Decision points are approximate – Subject to change

PROJECT ESTIMATED COST - DEMOLITION

Decommissioning & Demolition Estimate Net Cost - \$12,000,000

ITEM	DESCRIPTION	Cost
1	General Conditions	\$ 839
2	Environmental	\$ 2,780
3	Demolition	\$ 4,550
4	Site Work	\$ 858
	TOTAL DIRECT COSTS	\$ 9,027
5	Indirect Costs (Bonds)	\$ 1,314
5	Contingency (30% of Direct & Indirect Costs)	\$ 2,708
	TOTAL INDIRECT COSTS	\$ 4,022
	TOTAL DIRECT AND INDIRECT COSTS	\$ 13,049
6	Scrap & Equipment Sales	\$ (2,193
	TOTAL NET COSTS (2023)	\$ 10,850
7	Inflation [through Mid-Point of Demolition (4% per year)]	\$ 886
	TOTAL NET COSTS PLUS INFLATION	\$ 11,742

INITIAL PROJECT ESTIMATED COST -CONSTRUCTION

- Engineering, procurement, and construction estimate - \$255 million, includes:
 - Direct construction costs
 - Indirect costs
 - Contingencies
 - Inflation costs

Engineered Equi	pment
Civil, Structural &	& Architectural
Mechanical	
Electrical & I&C	
Specialty	
Total Direct Co	st
Total Direct Co	st
Total Direct Co Engineering, CM	st I, Start-up, Commercial
Total Direct Co Engineering, CM Sales Tax	st I, Start-up, Commercial
Total Direct Co Engineering, CM Sales Tax Inflation	st I, Start-up, Commercial
Total Direct Co Engineering, CM Sales Tax Inflation Contingency / Fe	st I, Start-up, Commercial ee
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Total Direct Co Engineering, CM Sales Tax Inflation Contingency / Fe Total Indirect C	st I, Start-up, Commercial ee Cost
Total Direct Co Engineering, CM Sales Tax Inflation Contingency / Fe Total Indirect C	st I, Start-up, Commercial ee Cost
Total Direct Co Engineering, CM Sales Tax Inflation Contingency / Fe Total Indirect C Total Project C	st I, Start-up, Commercial ee Cost

Total Cost

\$85,631,796 \$26,171,340 \$4,636,885 \$16,469,282 \$1,384,788

\$134,294,091

\$53,037,799 \$1,808,928 \$24,463,502 \$21,360,432

\$100,670,661

\$234,964,752

\$19,893,431

\$254,858,183

TOTAL CAPITAL COSTS

Category	(\$ N	Cost (\$ Millions)					
Demolition	\$	12					
New Power Plant	\$	300					
MISO Transmission Costs*	\$	50					
Financing Fees / Interest	\$	38					
Total	\$	400					

- Preliminary Allowance MISO study results will determine costs
- Includes contingency

According to the Economic Development Group, a project of this magnitude is anticipated to generate approximately 1,500 direct and 350 indirect jobs, with wages that would be close to \$100M (direct) and \$20M (indirect).

THANK YOU

