




A Touchstone Energy® Cooperative 

Holy Cross Energy

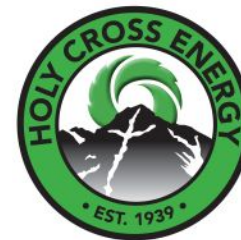
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Del Worley



Presented By:

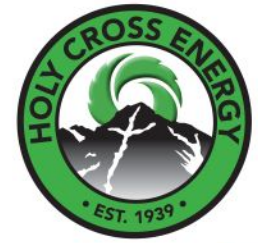
A Few Facts



A Touchstone Energy® Cooperative 

- Hybrid distribution cooperative
 - 55,000+ meters
 - Consumers favor renewable and energy efficiency programs
 - Owns 60 MW of generation
 - Remainder purchased,
 - Public Service Company of Colorado (Xcel Energy)
 - Western Area Power Administration (federal hydro)
 - Local Renewables

Holy Cross Distributed Renewable Generation



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- 11.5 MWs woody biomass plant
- 1 MW of solar under power purchase agreement
- 3 MWs of community solar gardens
- 8 small hydro systems, 241 kW
- 6 MWs - net metered (1 MW pending)
 - 818 consumers - PV, wind & hydro
- RFP out for another 5 MWs of solar
- 3 MW methane plant (vented coal mine methane) wheeled from neighboring utility

Holy Cross

History of Coal Mine Methane



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- Worked with Randy Udall in 2006ish time frame on another project – project died but learned about the technology
- A few years later – Randy Udall and Tom Vessels met with Holy Cross
- Signed a Power Purchase Agreement in June 2011
- Negotiated wheeling arrangements
- Began receiving power in the fall of 2012

Coal Mine Methane



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- Methane exhausted from coal mine
- Concentrated & burned in 3 x 1 MW reciprocating engines
- Wheeling: DMEA, Tri-State, WAPA, Xcel
- Provides carbon offsets to Holy Cross
- Backed up by WAPA




3MW LLC (Methane) Wheeling



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