Unique Opportunities in IR

THINKING OUTSIDE OF THE BOX TO FIND VALUE

- PRESENTED BY ANNE BAILEY- A-LINE E.D.S.

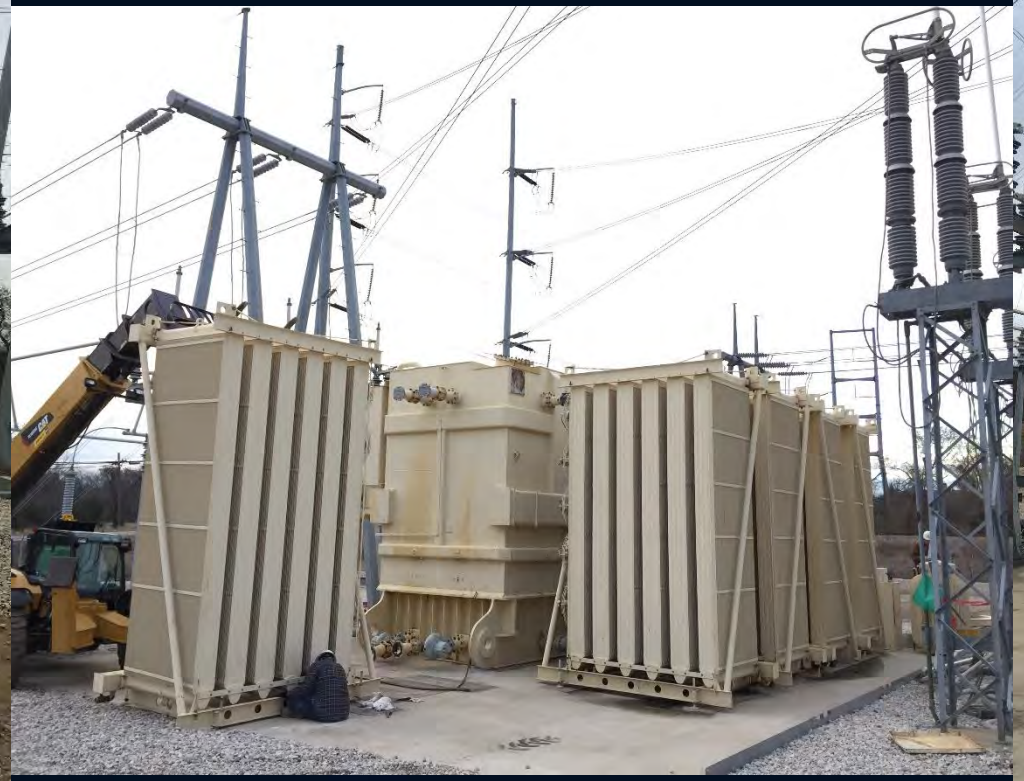
Considerations outside of the traditional bid process:

- Equipment Placement- What expenses are being incurred for the project prior to the investment recovery bid process and are there potential savings?
- Value of what can be learned- transformer forensics and evaluation
- Risk- Cost of safety and environmental problems

Relocation Vs. Transformer Teardown in Place

200 MVA Westinghouse Transformer
Total Weight- 609,000 lbs.

Transformer dismantling was completed on the pad in order to save costly relocation. Total removal took less than 6 days.



Day 1-2- Auxiliary equipment including radiators removed. Tap changer prepped and tank was cut and prepared for removal.

Day 3- Crane was brought in. Tap changer removed and top tank section was removed and set aside for further recycling.

Day 4-5- Removal and load out of all core steel and transformer windings.

Project was completed meeting the outage removal timeframe and saving the customer approximately $50,000 in relocation expenses.

Project Takeaways:

- Original bid assumed completion after relocation
- Option was put to leave in place and complete during the outage.
- Specialized equipment allowed for expedited removal of core steel contributing to the shortened timeframe.

Transformer Forensics and End of Life Studies

A lot of things can be learned from transformer forensics:

- Root cause failure analysis during teardown can provide utilities with invaluable information regarding their maintenance practices or what caused the loss of a power transformer.
- Minimal cost is involved for a detailed forensic teardown.
- Specialized equipment ensures that valuable evidence is not lost as it might be during a traditional transformer demolition process.

Core and Coil Style Forensic

End of Life Studies:

- Routine transformer upgrades allow utilities an opportunity to evaluate their transformer maintenance and testing protocols.
- While oil test reports are valuable, winding samples can provide more accurate information.
- We developed a detailed winding and documentation plan in order to provide our customers with photos and samples of transformer windings during the decommissioning process.
- End of life studies have minimal costs and can often be done by qualified companies without the presence

End of Life Studies

Risk- Environmental and Safety Savings

- Recycling/Disposal facility has proper permits to provide cradle to grave security regardless of PCB level.
- Consider the testing, handling, transportation and disposal costs in segregating PCB material.
- All field crew should have the training, processes and equipment to provide the safest removal option in order to avoid costly accidents.
- Insurance- Make sure the contractor is fully licensed and insured.

Summary:

- Especially in difficult market times it's important to consider where unseen savings can be found.
- Different approaches can require altered methods and specialized equipment.
- The value of information can provide significant savings in reducing future transformer failures.
- Always cover environmental and safety basics to minimize risk.

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Unique Opportunities for Investment Recovery at CenterPoint Energy

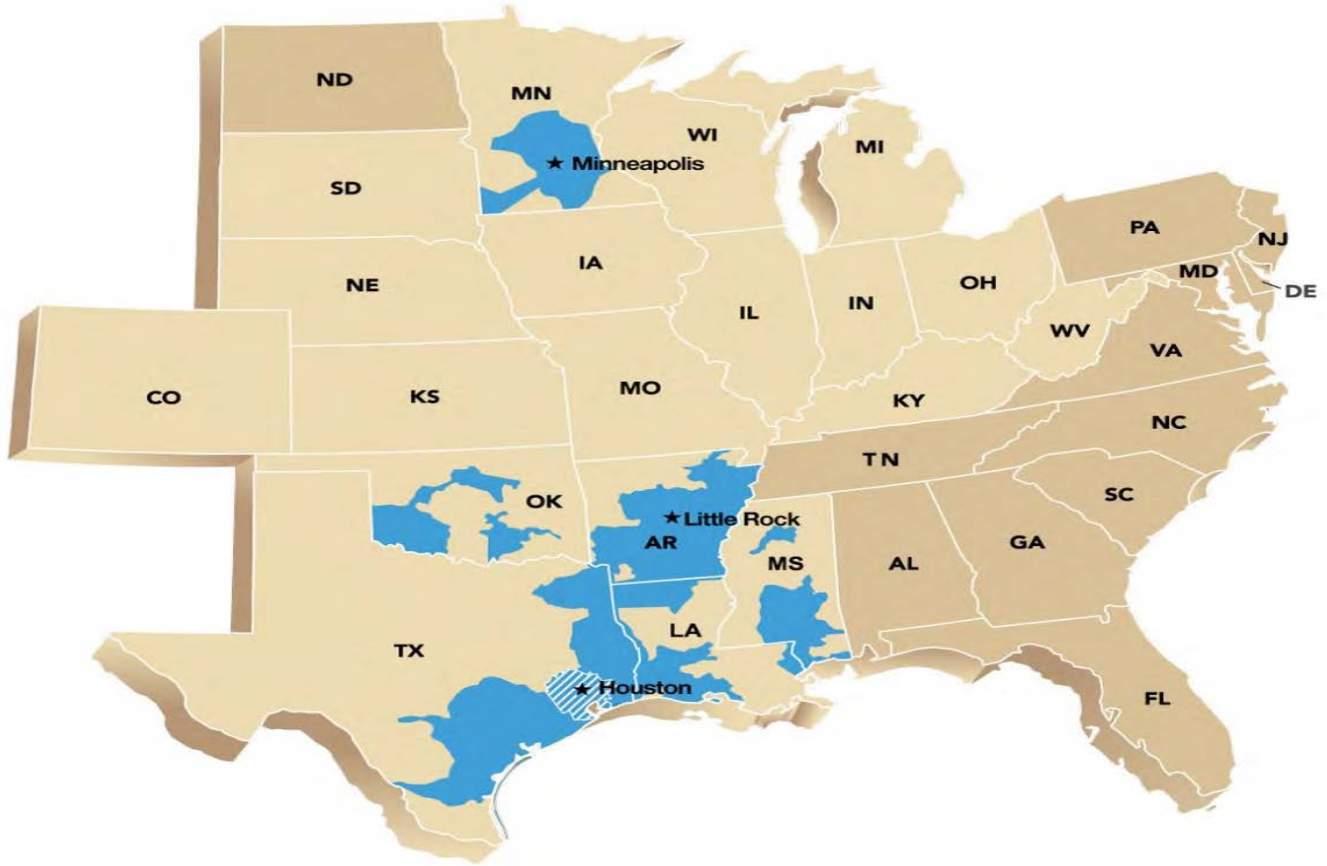
Diane Englet

Sr. Director Corporate Community Relations

March 8, 2016

CenterPoint Energy, Inc. (NYSE: CNP)

Regulated Electric and Natural Gas Utility Serving more than 5.5 Million Customers



Electric Transmission & Distribution

Natural Gas Distribution

Energy Services

Electric Transmission & Distribution:

- Electric utility operation with ~2.3 million metered customers
- ~5,000 square mile service territory in and around Houston
- 18th largest U.S. investor-owned electric utility by customer base[1]
- Over 81,000,000 MWh delivered in 2014

Gas Operations

- 10 gas distribution jurisdictions in six states with ~3.4 million customers
- 5th largest U.S. gas distribution company by customer base[1]
- Recently ranked 1st among the largest Midwest Region natural gas utilities in the U.S. for operational satisfaction in a 2014 Cogent energy study
- Gas distribution company and Energy Services company delivered ~1.1 Tcf of natural gas in 2014

1. As of Dec. 31, 2013 per AGA and EEI

Committed to Community Service

- 200,000+ volunteer hours from employees, retirees, family and friends (Valued at more than $4.7 million at $23.07/hour)
- Contributed $71,900 in 182 GIVE grants (includes United Way and Volunteer Award grants)
- $1.5 million in corporate/employee contributions to over 90 United Way agencies across the nation with 73% employee participation
- $4,742 units of blood donated to the Regional Blood Centers across our footprint

Walking (and Riding) for Good Causes:
Money raised by employees in company-sponsored events

Year	United Negro College Fund	March of Dimes	MS-150	Junior Achievement	United Way	TOTAL
2015	$22,518	$143,838	$82,271	$44,560	$1.5 million	**$1,793,187**
2014	$33,000	$225,954	$88,020	$45,000	$1.45 million	**$1,841,974**
2013	$35,029	$299,934	$60,863	$39,952	$1.68 million	**$2,115,778**
2012	$28,261	$160,767	$89,900	$40,100	$1.74 million	**$2,059,028**

Community Relations and Investment Recovery continually work together to build CenterPoint Energy's reputation as a good corporate citizen, not only in Texas, but throughout the company footprint.

We do that through…..

- Donations
- Recycling
- Reporting Sustainability Results

Items We Donate ……

- Computers
- Vehicles
- Forklifts
- Office supplies and furniture

Interfaith Ministries …….

Furniture Donation …….

Computer Donation

Computers being put to good use !

Recycling

To Name a Few:

- Metals
- Oil
- Streetlights
- Wood Products

Tornado Damage

We make every effort not to bother the residents……..

Reporting Sustainability Results

INVESTMENT RECOVERY
AND
SUSTAINABILITY PILLARS

Environmental

Social

Financial

ANY QUESTIONS ?

Processing Utility Cable

An overview of maximizing reclamation value from salvage cable material

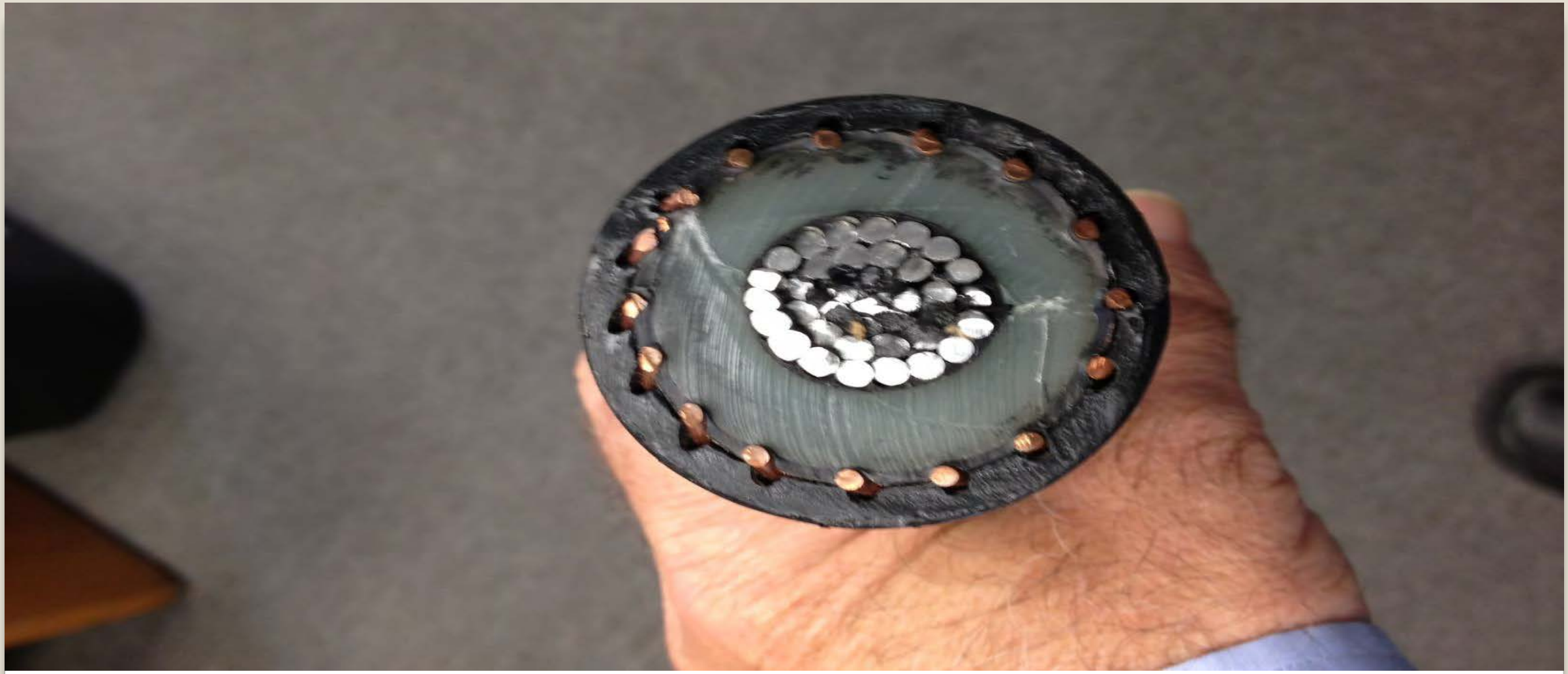
Mixed cable from across the service region collected at the recycling yard to be sorted and processed

Three classes of cable are used in the field: Transmission (ACSR), Service (jacketed and non-jacketed) and Underground (URD)

Processing underground cable (URD)

URD jacket and insulator are sliced apart to expose aluminum/copper core material and copper grounding leads

URD cable ready to be processed



Cross-section of underground cable illustrating the aluminum core, insulator, jacket and copper grounds

URD cable is fed through a slitting machine with knives set to penetrate jacket and insulator and expose the core wire

Aluminum cores are containerized, sold as high grade aluminum on the metals bidding market

Outer jacket with copper grounds still imbedded

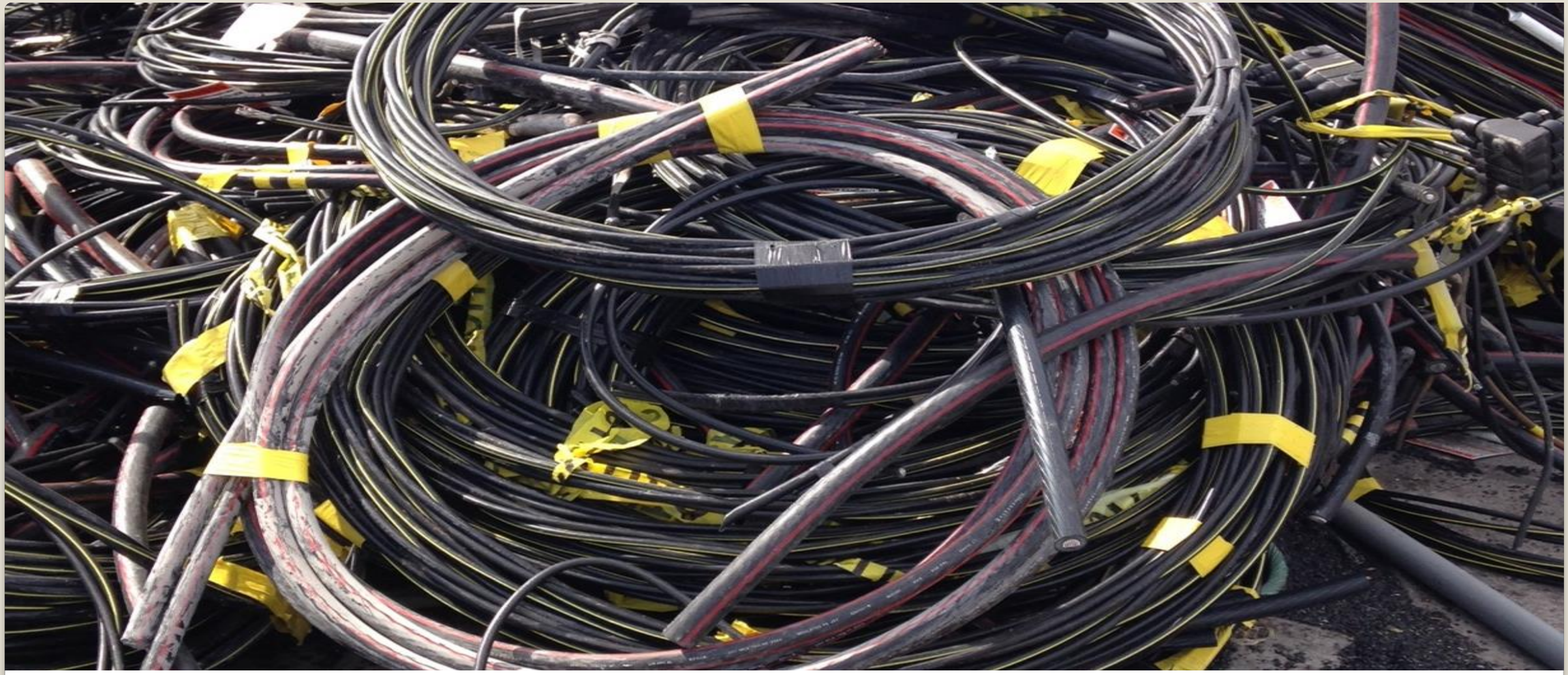
Custom developed process and machine designed to extract copper from jackets

Copper grounding wires containerized then compressed into bales, sold as “Bare Bright” high-grade copper product

Jacket and insulator are bundled and sold

Processing service cable

Small diameter, jacketed and non-jacketed cable is granulated through a process to separate the granulated jacket from the aluminum



Sorted service wire ready for the processing line

Cross-section of service wire

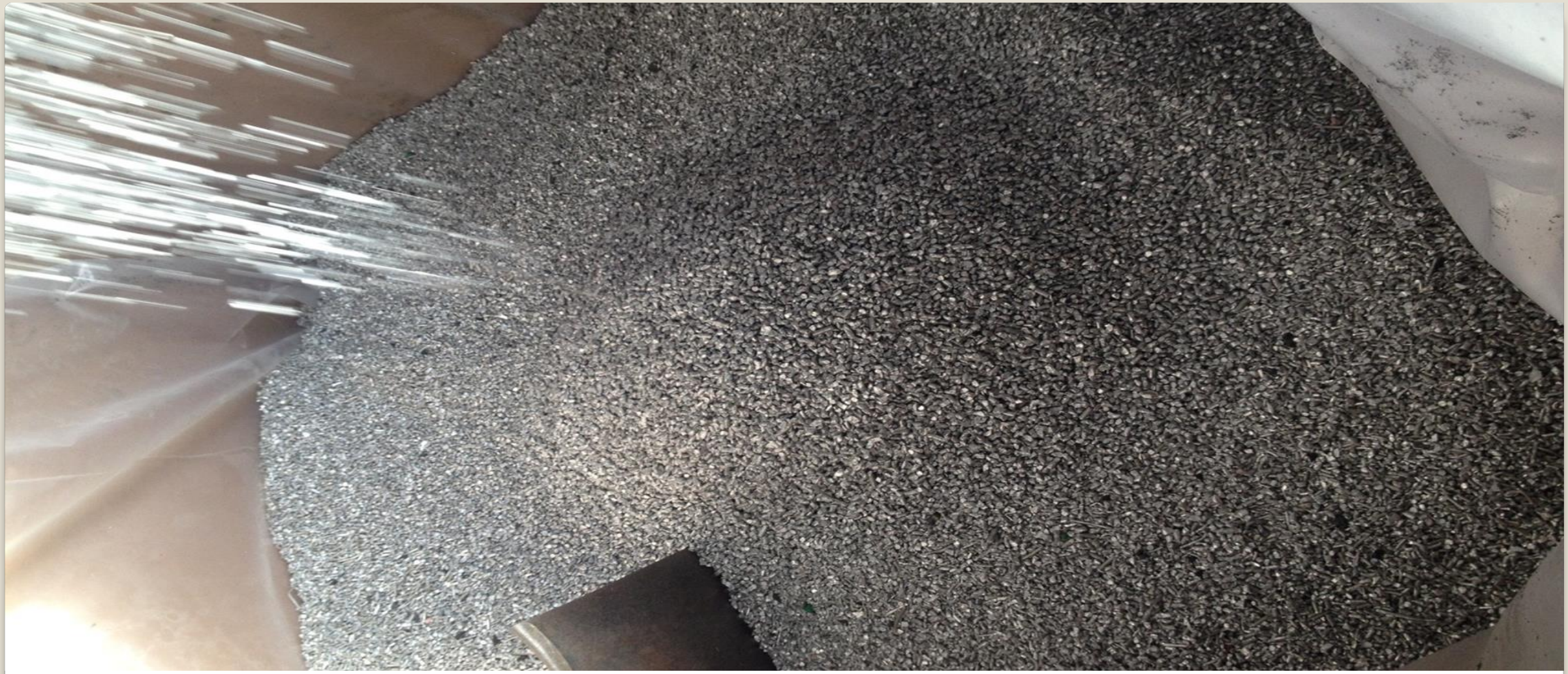
Hopper and shredder

Fragmented wire and jacket after passing through shredder

Shredded material being conveyed to granulator

Granulator where material is further reduced and separated into aluminum and plastic jacket materials

Aluminum material from the separation process



Granulated aluminum containerized for sale on the metals market

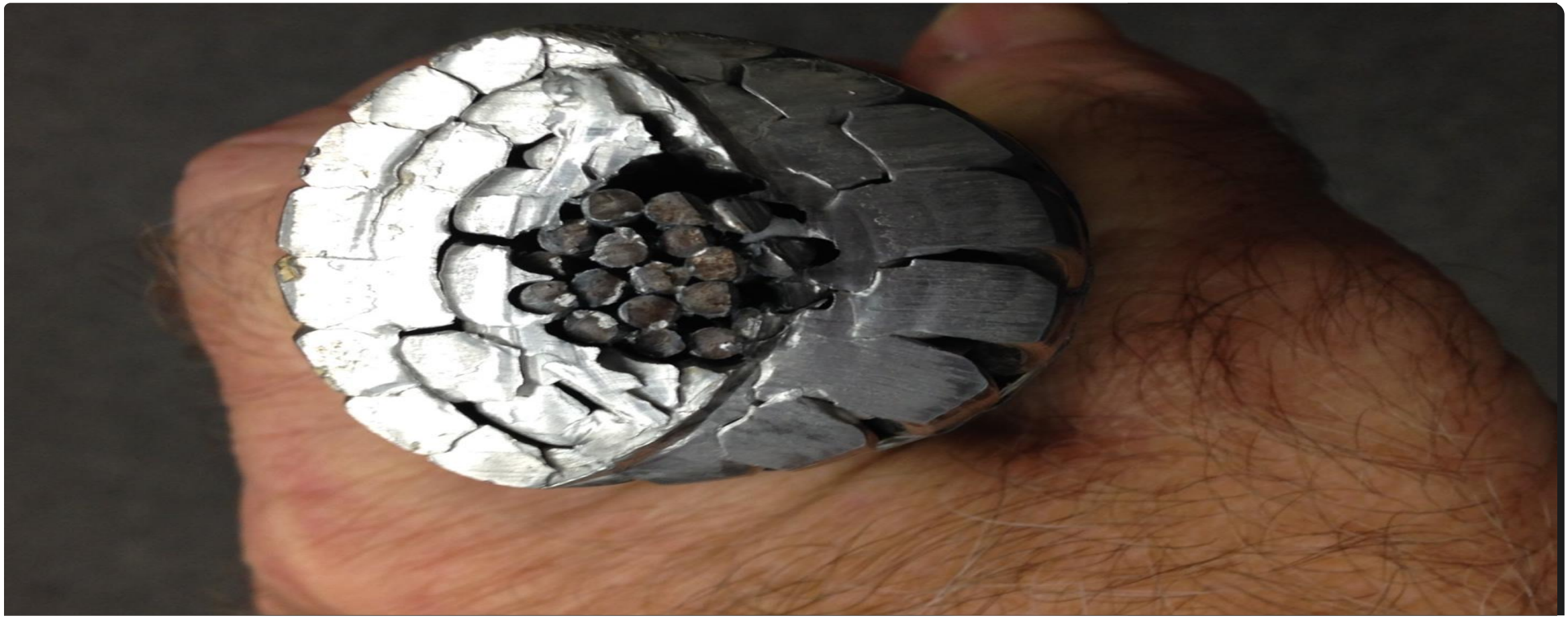
Plastic jacket material from the separation process

Granulated plastic containerized for sale on the plastic market

Processing transmission cable (ACSR)

Bare conductor intertwined with steel strands is chopped and electro-magnetic process induced to separate the steel media from aluminum

Transmission cable (ACSR) staged for processing into steel and aluminum straws



Cross section of transmission cable (ACSR)

Chopping cable into 2” lengths allows strands to separate because no jacket bonds pieces together

Magnet separates steel from aluminum in the process

Chopped aluminum containerized for sale on the metals market as straws

Steel straws are deposited in steel collection containers along with other steel recycled components