



## 2019 RAPID CONFERENCE NSCSL CONFERENCE

### Entergy Decom Update

- Plant Operations
- Decommissioning
- WIL

May 2019  
Pat McKenney



# Section 1: Plant Operations

## Entergy Nuclear EWC (Unregulated) Focus Areas

- **Plant Operations**
- **Decom - Shutdown, Transact EWC Plants**
- **WIL (Warehouse Inventory & Logistics)**

# Plant Operations



PILGRIM



IPEC



PALISADES

VY 2018

PNP 2019

IP2 2020

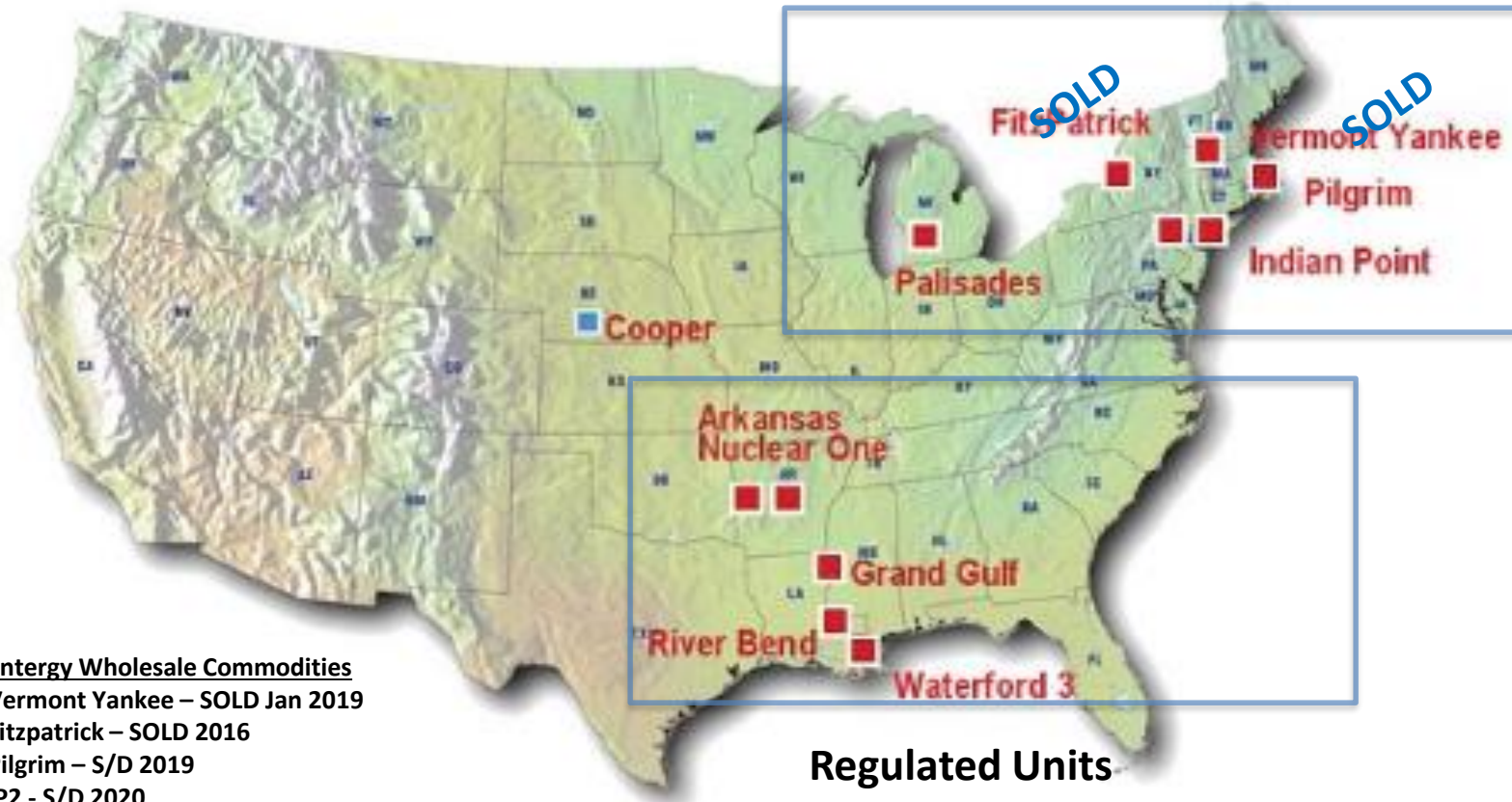
IP3 2021

PLP 2022

WE POWER LIFE<sup>SM</sup>

# Entergy Nuclear Units - Transformation

## Merchant Units (EWC)



Entergy Wholesale Commodities  
Vermont Yankee – SOLD Jan 2019  
Fitzpatrick – SOLD 2016  
Pilgrim – S/D 2019  
IP2 - S/D 2020  
IP3 – S/D 2021  
Palisades – S/D 2022

■ Entergy owns and operates  
■ Entergy provides support and management services



# Nuclear Supply Chain Org Restructure



**Patrick McKenney**  
Sr Mgr, Sply Chn Op &...  
Position - S32118

Phone 802-451-3044  
Mobile 802-380-2238  
Email pmcken1@entergy.com

10 Directs / 116 Total

- Made changes to adjust for new workload
- 2019 thru 2022+

## Southern Sites - Regulated

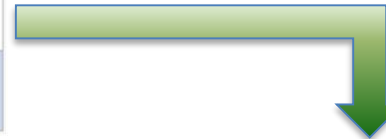
 Alicia Freeman Mgr, Supply Chain Position - ER5034 2 Directs	 John Robert Burnett Mgr, Supply Chain Position - ER0415	 Tracy Askew Mgr, Supply Chain Position - H81900 2 Directs	 Kristopher Patin Mgr, Supply Chain Position - S20883 2 Directs	 Dianne Fletcher Mgr, Supply Chain Position - TM0449
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## Northern Sites - Merchant

 Michael Catino Mgr, Supply Chain Position - P10230 9 Directs	 Kristi Mitchell Mgr, Supply Chain Position - K05110 2 Directs	 John Kasishke Mgr, Supply Chain Position - K80334 9 Directs	 Mark Osborne Project Procurement Position - S24374	 Michelle Trask Tech Bus Analyst... Position - S24022
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• New South Sr Manager



Marlon Merritt  
1940 - Dir, Capital...  
Position - S31328  
6 Directs

- EWC SC Organization part of Capital Projects and Decommissioning Group

**Patrick McKenney**  
1732 - Sr Mgr, Supply C...  
Position - S32118

Phone 802-251-8520  
Mobile 802-380-2238  
Email pmcken1@entergy.com

4 Directs / 47 Total

 John Kasishke 1206 - Mgr, Supply... Position - K80334 2 Directs	 Mark Osborne 1199 - Project Pro... Position - S24374	 Melissa Merz 1206 - Mgr, Supply... Position - K05110 2 Directs	 Michael Catino 1206 - Mgr, Supply... Position - P10230 2 Directs
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# EWC SC Org (Typ Staff IPEC – dual unit)



**Melissa Merz**  
1206 - Mgr. Supply...  
Position - K05110  
2 Directs



**Robert Stack**  
E4196 - Supv, Procure...  
Position - K05181

Phone 914-254-7167  
Mobile 845-234-7482  
Email rstack@entergy.com




3 Directs / 3 Total



**Christopher Woodruff**  
7786 - Supv, Materials  
Position - H85243

Phone 914-254-7278  
Mobile 845-527-2302  
Email cwoodru@entergy.com

14 Directs / 14 Total

 <p><b>Christopher Thomas</b> 8219NU - Procure... Position - K00214</p>	 <p><b>Debra Costello</b> 9666NU - Procure... Position - C02014</p>	 <p><b>Hemalika Gupta</b> 9665NU - Procure... Position - K05038</p>
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 <p><b>Christine Bilyou</b> 00010K - Material I... Position - K20280</p>	 <p><b>Christopher Howe</b> 00010K - Material I... Position - S60204</p>	 <p><b>Dale Palmer</b> 00010K - Material I... Position - K20068</p>	 <p><b>David Kuran</b> 00010K - Material I... Position - K04526</p>
 <p><b>David Sajdak</b> 00010K - Material I... Position - K02353</p>	 <p><b>Frank Digiano</b> 00010K - Material I... Position - K02352</p>	 <p><b>James DeRonda</b> 00010K - Material I... Position - K02348</p>	 <p><b>James Derosia</b> 00010K - Material I... Position - S22674</p>
 <p><b>Jay Rodia</b> 00010K - Material I... Position - K04525</p>	 <p><b>Jayson Luft</b> 1250 - Receipt Ins... Position - C00363</p>	 <p><b>Joseph D'Annibale</b> 1250 - Receipt Ins... Position - K00281</p>	 <p><b>Mary Vaughan</b> 00010K - Material I... Position - K02346</p>
 <p><b>Richard Ryan</b> 00010K - Material I... Position - H82051</p>	 <p><b>Robert Quinn</b> 00010K - Material I... Position - K02347</p>		

## Staff

- Manager
- Procurement Supv
- WH Supv
- WH Staff – Union (12 or 7)
- QC Receipt Inspection (2)

# Section 2: Plant S/D and Decom



Holtec International Storage Module



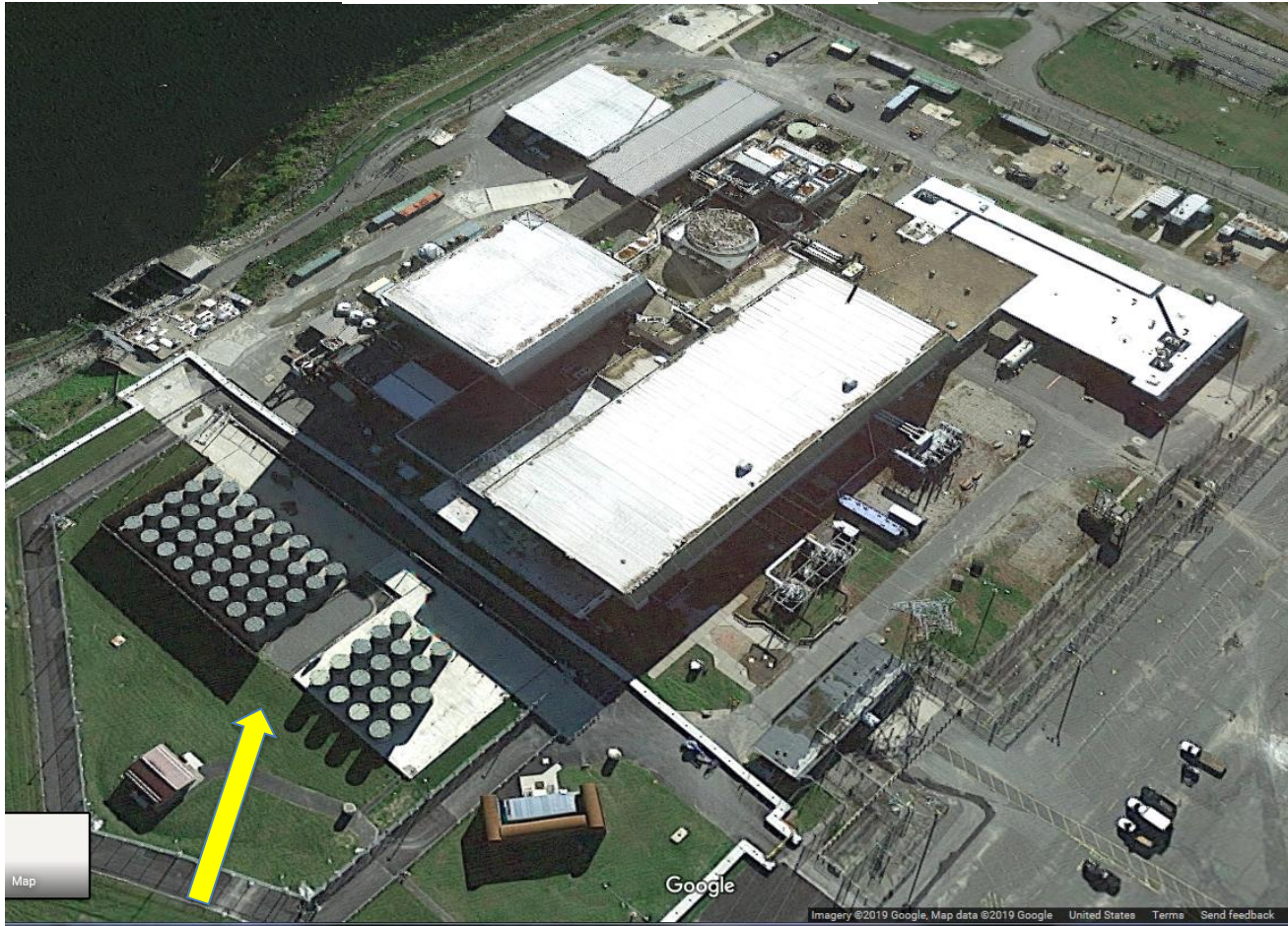
Site	Pilgrim Nuclear Power Station	Indian Point Energy Center	Palisades Power Plant
Max capacity	688 MW (one unit)	2,069 MW (1,028 unit 2; 1,041 unit 3)	811 MW (one unit)
Reactor type	BWR	PWR (both units)	PWR
Reactor manufacturer	General Electric	Westinghouse (both units)	Combustion Engineering
Turbine manufacturer	General Electric	GE (unit 2); Westinghouse (unit 3)	Westinghouse
Warehouse value (approx.)	~\$50M	~\$150M	~\$50M
Location	Plymouth, MA	Westchester, NY	South Haven, MI



# Plant S/D and Decom – Vermont Yankee



58 Casks – 22 Years of Ops  
Reduce PA - FOPP

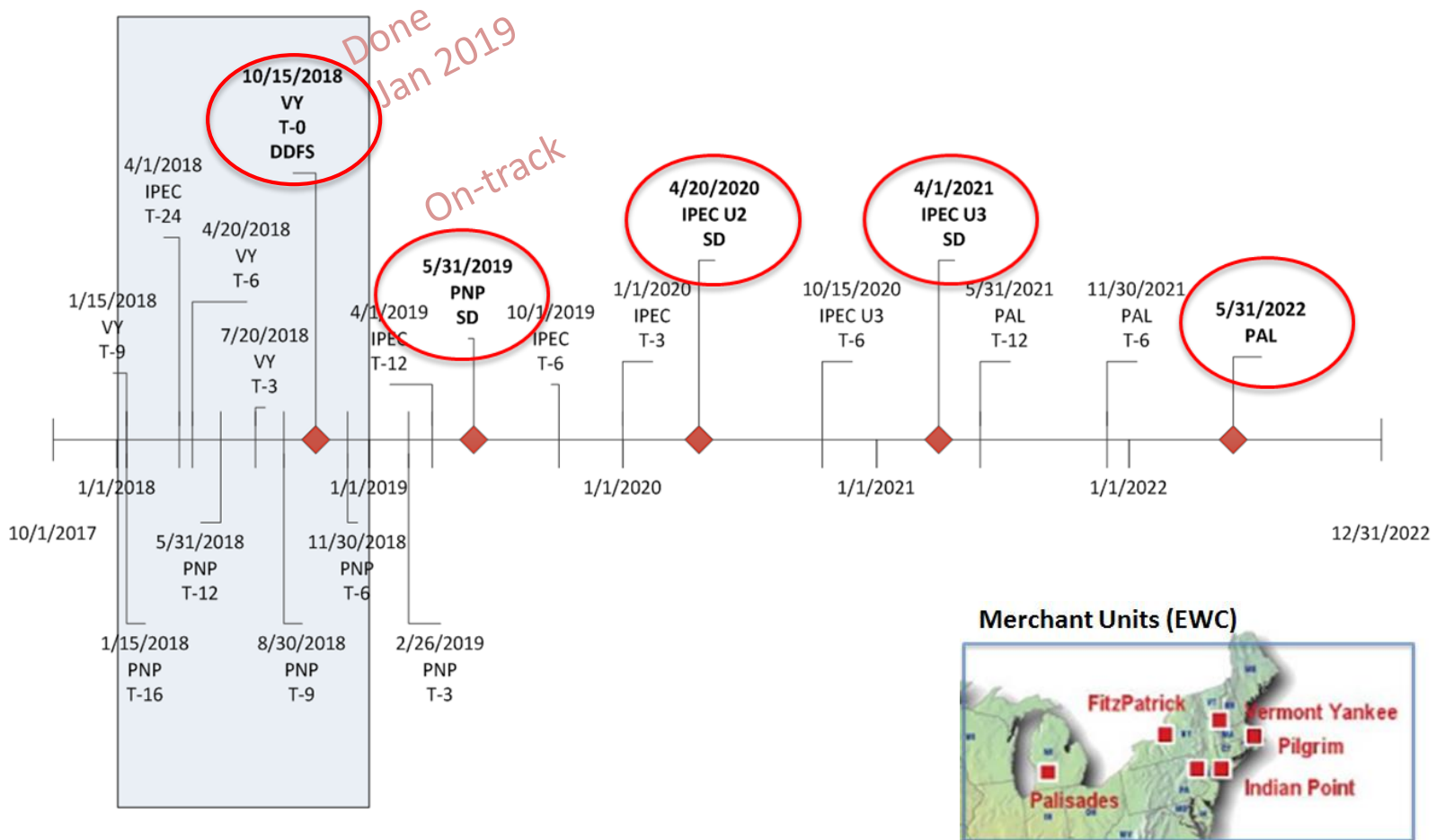


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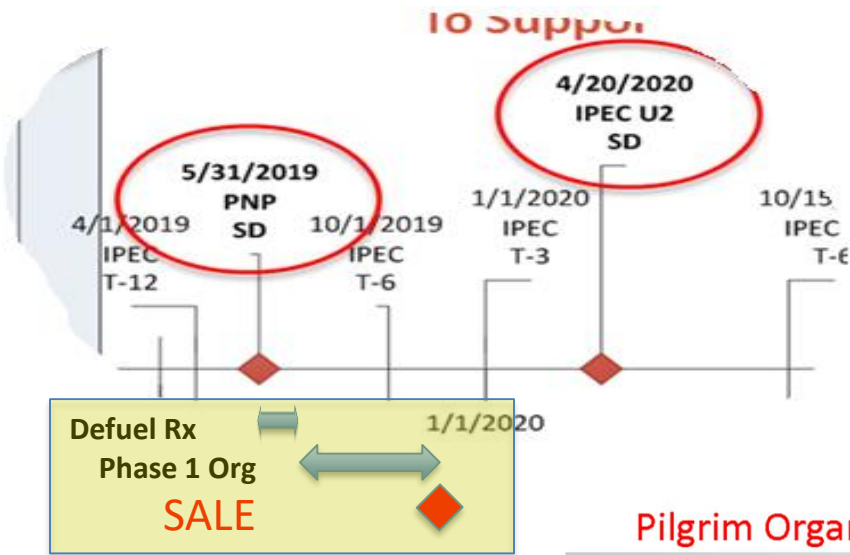


# Transformation Level 1 Timeline

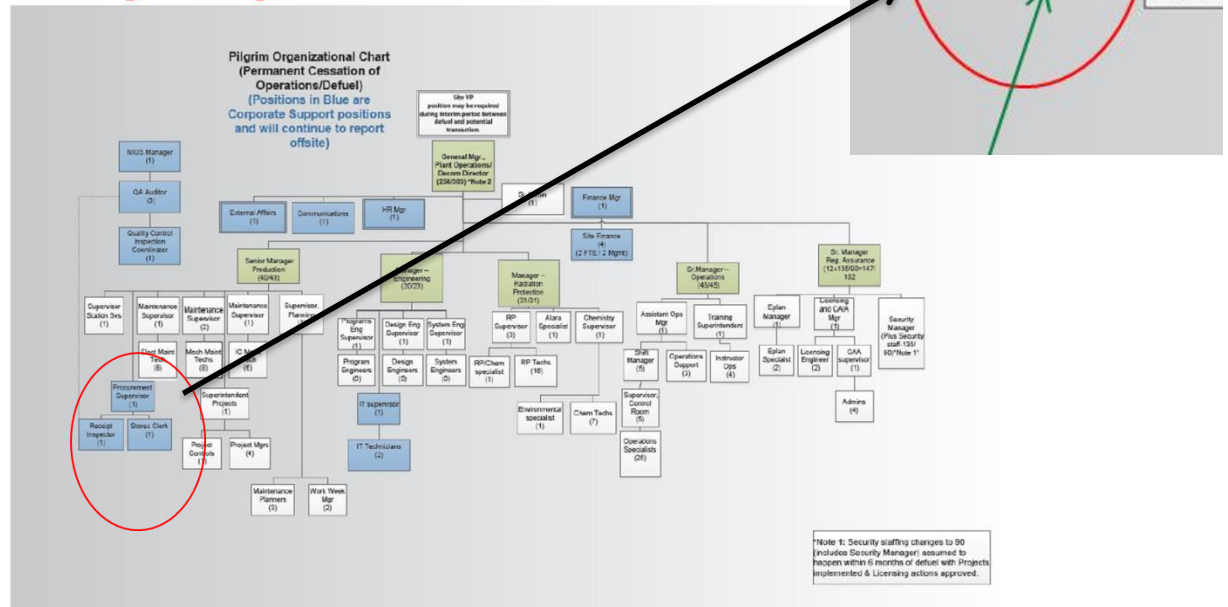
## Integrated Program Timeline



# Shutdown to Transaction (Sale) Timeline typ



Pilgrim Organizational Chart Phase 1



# SC Organization – Pilgrim & Beyond

## Governance

ESS Governance Board

Decommissioning Steering Committee

CSO & Major Proj Dir

## Oversight

Pat McKenney  
Sr Manager SC

## Execution

Melissa Merz  
IPEC SC Mgr

John Kasishke  
Palisades SC Mgr

Mark Osborne  
Program Manager

Michael Catino  
SC Project Mgr

David Bauer  
Decom PM

Justin McCabe  
IRS Manager

WIL Support

Site Decom  
Proc Staff

Proc Spec  
Support (2)

Wyatt Davis  
Investment Rec

Core Supply Decom Team

### Contract Management

- Legal Interface
- Holtec Contract Administration
- Contract Transfer, Termination, Closeout
- Purchase Orders
- Leases and Rentals

### Staffing Management

- Contract Transfer, Termination, Closeout
- Purchase Orders
- Finance Interface
- Staffing Planning
- Separation/Pipeline Support
- WIL Asset Recovery

### Logistics Support

- WIL Asset Recovery Team
- Asset Disposition
- Cat Id HC Fleet Transfers
- Procedure Changes
- Transition Coordination
- Change Mgmt Plan
- Fleet Lessons Learned

### Asset Recovery

- WIL
- DOS Management
- Disposition Channels
- Logistics

## Support

Supply Chain Corp Sourcing

Decommissioning Leadership Team

Legal Support

# TPP Process – Workstream Execution - Tools

Decommission/Transaction Project Plan  
Supply Chain

## Pilgrim Nuclear Plant Entergy / CDI

### Transition Planning Phase 1 & Buyer Transaction

### Work Stream Supply Chain

TPP-062

Revision – (Working Draft 16)

January 17, 2019

Prepared by: Dave Bauer/Richard Neale Date: \_\_\_\_\_

Plan Owner/Lead: Pat McKenney/Alex Whittle Date: \_\_\_\_\_

Decommission/Transaction Project Plan  
Supply Chain

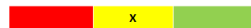
### 2.0. KEY DATES AND MILESTONES

Act ID	Milestone [If Announcement (2) for Joint, (5) for Separate]	Date	Status	EA/Com M Lead(s)	Decommission Transaction Activity?
2.01	Unbundle Pilgrim from multi-site agreements and, for such contracted services that will continue post Transaction closing, issue Pilgrim contracts.	5/1/19		Osborne	Transaction
2.02	Identify MRP System	11/19/18	Complete	Neale	Transaction
2.03	Inform Entergy which multi-site contracts CDI does not want.	11/1/18		Neale	Transaction
2.03.01	Develop interim SC Procedures	4/1/19		Bauer	Transaction
2.04	Develop CDI SC procedures	5/1/19		Neale	Transaction
2.05	Complete transfer of AS data to CDI's system.	5/1/19		IT/Catino/Neale	Transaction
2.06	Transfer procurement/quality documents to CDI.	5/1/19		IT/Catino	Transaction
2.07	Identify usable inventory to the fleet.	10/15/18	Complete	Catino/Bauer	Transaction
2.08	Resolve issues with vendors for transferring contracts that require approval for changes in Parent Control	3/1/19	3:1:19		
	<b>Changes in Parent Provide notification: change in parent change in control</b> <b>(E-Termination-Notice or Notice of Transition/Invocing-Instruction)</b> <b>and address request to disclose provisions in existing contracts – Legal to identify these contracts</b> <b>Delete – (Steps included in 3.2.37 – 39)</b>	3/1/19		Osborne	Transaction
2.09	Provide List of Contracts to CDI	10/1/18	Complete	Osborne	Transaction

### Pilgrim Transaction Planning Supply Chain 01/19/19

Pat McKenney  
Rich Neale

Significant Risk    Some Risk    On Track



#### Major Actions / Milestones Completed

- Completed site meetings to review investment recovery initiatives, rolls and responsibilities for material liquidation (potential warehouse removal, rolling stock, shop equipment, donations)
- Established template letter with Legal for vendor notifications (termination/transfer/invoicing)
- Completed review of contract to identify those requiring advance termination notice.
- Implemented site staffing changes to retain and promote employees within the Entergy system.
- Resolved issues/questions associated with MRP system proposal.

#### Risk Items – Update

- Sale is delayed or does not occur (R-1)
- Contract review identifies new termination cost exposure (R-2 & 3)
- Selected Supply Chain Workers do not transfer to CDI (knowledge gap) (R-4)
- Selection of MRP system may impact system data and records transfer. There may be impacts on other interfaces/Data Bases (Finance/CDI/Holtec, R-5)
- Supply Chain documents (eg: QA inspection reports, material certifications, issue records, etc.) may not be maintained in systems retained at the site. (R-6)
- Multi-site contract unbundling may result in increased costs or unfavorable terms. (R7)

#### Key Decisions

- 1/31/19: Identify MRP system to be used by CDI
- 1/31/19 – Identify procurement documents required to be transferred.
- 2/15/19 – Fill new vacancy for CDI Supply Chain Manager

Key Work In Progress / Upcoming Milestones	Owner	Due Date
Purchase MRP System	Neale	1/31/19
Begin segregating/transferring inventory for other sites	Bauer	2/1/19
Establish Interim Supply Chain procedures	Bauer	4/1/19
Obtain "Consent to Disclose" for Contracts I'd by Legal	Osborne	4/1/19

Confidential and Proprietary Information Subject to Mutual Nondisclosure Agreements

UP/LIX/HE/1004U	Post Close: He-assess property plans for excluded (HSA) properties. Work w/ lax input.	131d	01-JUL-19*	30-Dec-19	Hyan	Connolly	Lauber					
<b>Supply Chain</b>												
<b>PIL-TRAN-PROD. Pilgrim Nuclear - Entergy - CDI Transaction (TPP) Schedule</b>												
<b>PIL-TRAN-PROD. TRAN 18.00 Transaction</b>												
<b>PIL-TRAN-PROD. TRAN Execute Site Trans 21.0 TRAN-Execute Site Transaction</b>												
<b>PIL-TRAN-PROD. TRAN Execute Site Trans SC 21.10 TRAN-Supply Chain</b>												
0PILTXSC10130	Conduct periodic meetings with plant staff to maintain awareness of decommissioning/sale activities.	527d	01-Jan-18A	15-Jan-20	Neale		Catino					
0PILTXSC10300	Provide periodic briefings to other SC managers on Pilgrim Transaction	462d	01-Mar-18A	13-Dec-19	Neale		McKenny					
0PILTXSC10110	Complete PNP Investment Recovery Activities to Move or Stage Usable Surplus for Fleet Transfer	215d	01-Aug-18A	31-May-19	Neale		McCabe					
0PILTXSC10400	Determine if any leases/liens exist on Contracts/PO's for PNP. Ensure disposition is included in planning process.	191d	03-Aug-18A	01-May-19	Neale		Osborne					
0PILTXSC10270	Institute routine meetings with SC counterparties to review transaction issues	193d	03-Aug-18A	03-May-19	Neale		McKenny/P					
0PILTXSC10150	Establish pipeline opportunities for displaced employees to other parts of Entergy	214d	03-Aug-18A	03-Jun-19	Neale		McKenny/J					
0PILTXSC10070	PNP-Decomm Planning: Supply prepare Decommission Plan (Assets, Warehouse, Process) for PNP Shutdown	130d	10-Sep-18A	12-Mar-19	Neale							

■ Remaining Level of Effort    ■ Remaining Work    ◆ Milestone  
■ Actual Work    ■ Critical Remaining Work    ◀ Summary

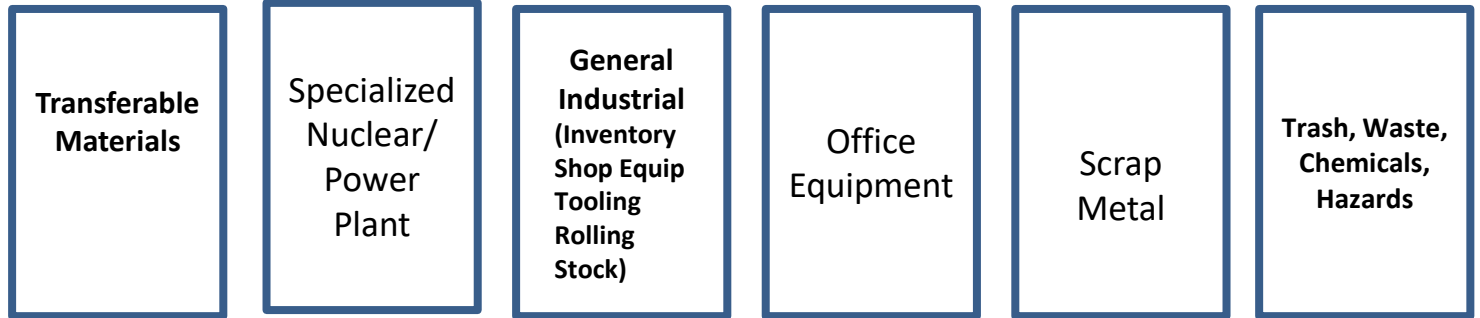
### CDI-Entergy Pilgrim Transaction Remaining Activities to Close

**CONFIDENTIAL WORKING DRAFT  
SUBJECT TO NON-DISCLOSURE**

# Section 3: WIL Focus



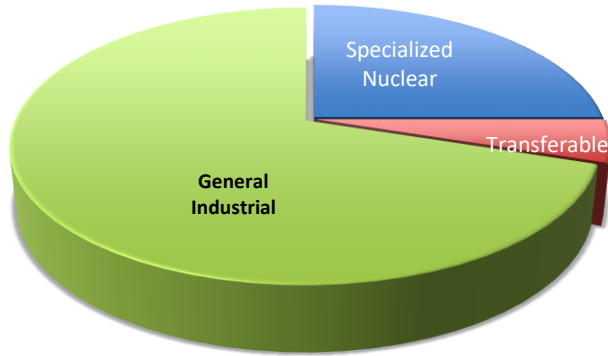
Surplus Stream



Recovery Options



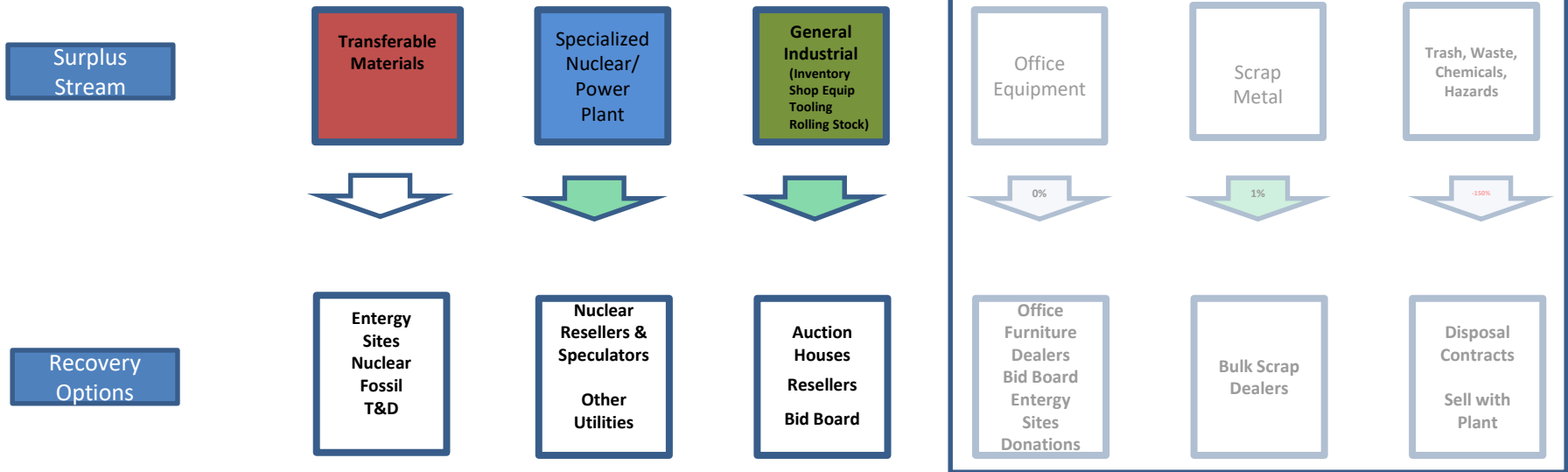
# What's in the Warehouse to move ?



Breakdown by Inventory Value

## WH Value by Category

- Nuclear Power Plant – Special 25%
- Industrial - General 70%
- Transfers - Site to site / Pulls 5%



# Current Investment Recovery Efforts

- Marketing across 5 main channels
  - Internal transfers (Southern Entergy Sites)
  - Direct to utility (all of you)
  - PIM Equipment Committees (adding to and appending ECs)
  - 3<sup>rd</sup> party vendor (resellers)
  - Return to supplier (OEM)

# Internal Transfers

- Identifying matches from EWC plants to plants in the South (part #, CAT ID, nouns, description, etc)
- Analytics on criticality, usefulness, obsolescence, usage vs stocking level, etc.
- This will go on in phases depending on schedule plant shutdown schedules



# Internal Utility Transfer Schedule

Task Name	Duration	% Cor	Start	Finish	Resource Names	Gantt Chart																								
						August 1	September 21	November 11	January 1	February 21	April 11	June 1	July 21	September 11	November 1															
						8/12	9/2	9/23	10/14	11/4	11/25	12/16	1/6	1/27	2/17	3/10	3/31	4/21	5/12	6/2	6/23	7/14	8/4	8/25	9/15	10/6	10/27	11/17		
1	Develop Reports of Inventory Matches	44 days	100%	8/1/18	10/1/18	Blemaster	[Progress bar from 8/1/18 to 10/1/18]																							
2	Establish Selection Criteria for Transfers	5 days	100%	12/12/18	12/18/18	Catino	[Progress bar from 12/12/18 to 12/18/18]																							
3	Develop Inventory lists matched to Waves and selection criteria	7 days	100%	12/19/18	12/27/18	Blemaster	[Progress bar from 12/19/18 to 12/27/18]																							
4	Perform an initial Match list review to verify compatability with Receiving Site	19 days	10%	1/15/19	2/8/19	Catino	[Progress bar from 1/15/19 to 2/8/19]																							
5	Establish a Category 7 list of items that cannot be sold or transferred	15 days	0%	1/28/19	2/15/19	Catino	[Progress bar from 1/28/19 to 2/15/19]																							
6	Review Category 7 list against transfer list and revise if necessary	7 days	0%	2/15/19	2/25/19	Blemaster	[Progress bar from 2/15/19 to 2/25/19]																							
7	Determine Accounting Practices for Transfers. Establish process steps and responsibilities	28 days	70%	1/2/19	2/8/19	Catino	[Progress bar from 1/2/19 to 2/8/19]																							
8	Evaluate impact on PIs, Inventory balance, PE backlog, put-away requirements	14 days	0%	1/2/19	1/21/19	P McKenney	[Progress bar from 1/2/19 to 1/21/19]																							
9	Establish Process steps for transfer of Material (Pilgrim and Receiving Sites)	28 days	40%	1/2/19	2/8/19	Catino	[Progress bar from 1/2/19 to 2/8/19]																							
10	Assign Pilgrim Owners (Procurement , QC, WH) to coordinate the transfers. Create Org chart, Brief Members	23 days	90%	1/2/19	2/1/19	Catino	[Progress bar from 1/2/19 to 2/1/19]																							
11	Prepare Communications Plan & Presentation for initiative	14 days	50%	1/2/19	1/21/19	Bauer	[Progress bar from 1/2/19 to 1/21/19]																							
12	Complete cursory screening of Inventory Lists	13 days	0%	2/1/19	2/19/19	Southern Sites	[Progress bar from 2/1/19 to 2/19/19]																							
13	Present Plan to Supply Chain Managers.	10 days	0%	1/21/19	2/1/19	P McKenney	[Progress bar from 1/21/19 to 2/1/19]																							
14	Schedule meeting with Sites for presentations	6 days	0%	1/15/19	1/22/19	P.McKenney	[Progress bar from 1/15/19 to 1/22/19]																							
15	Present plan to Southern Mrgs and Fleet Mrgs	10 days	0%	1/21/19	2/1/19	P McKenney	[Progress bar from 1/21/19 to 2/1/19]																							
16	Obtain MRB approval for Category 3 & 4 Material	11 days	0%	2/1/19	2/15/19	Catino	[Progress bar from 2/1/19 to 2/15/19]																							
17	Issue and Ship Category 1 & 3(NNS Material)	21 days	0%	2/15/19	3/15/19	Catino	[Progress bar from 2/15/19 to 3/15/19]																							
18	Receive and Accept Category 1 & 3 Material	22 days	0%	3/15/19	4/15/19	Southern Sites	[Progress bar from 3/15/19 to 4/15/19]																							
19	Issue and Ship Category 2 & 4(SR Material)	23 days	0%	3/14/19	4/15/19	Catino	[Progress bar from 3/14/19 to 4/15/19]																							
20	Receive and Quarinteen Category 2 & 4 (SR Material)	23 days	0%	4/15/19	5/15/19	Southern Sites	[Progress bar from 4/15/19 to 5/15/19]																							
21	PEG review Transferred material	100 days	0%	5/15/19	10/1/19	Wszolek	[Progress bar from 5/15/19 to 10/1/19]																							
22	Receiving Sites Receipt Inspect and accept Category 2 & 4 (SR material) into inventory)	100 days	0%	5/15/19	10/1/19	Southern Sites	[Progress bar from 5/15/19 to 10/1/19]																							
23	Obtain MRB approval for Category 5 & 6 Material	22 days	0%	3/1/19	4/1/19	Catino	[Progress bar from 3/1/19 to 4/1/19]																							
24	Stage Cat 5 & 6 Material	23 days	0%	4/15/19	5/15/19	Catino	[Progress bar from 4/15/19 to 5/15/19]																							
25	Perform a final Inventory review to identify new transfer opportunities considering the current plant configuration and anticipated decommissioning needs. Combine any new items into the Cat 5 & 6 schedule.	12 days	0%	6/1/19	6/15/19	Catino	[Progress bar from 6/1/19 to 6/15/19]																							
26	Issue and Ship Cat 5 & 6 Material	22 days	0%	6/15/19	7/15/19	Catino	[Progress bar from 6/15/19 to 7/15/19]																							
27	Inspect and Receive Cat 5 Material	24 days	0%	7/15/19	8/15/19	Southern Sites	[Progress bar from 7/15/19 to 8/15/19]																							
28	PEG Review Transferred Cat 6 material	122 days	0%	7/15/19	12/31/19	Wszolek	[Progress bar from 7/15/19 to 12/31/19]																							
29	Receiving Sites Receipt Inspect and accept Category 6 (SR material)	110 days	0%	7/1/19	11/29/19	Southern Sites	[Progress bar from 7/1/19 to 11/29/19]																							

# Direct to Utility

- Working with all US Utilities to identify matches of material
- In discussions with multiple utilities currently to find sales opportunities
- Approaching with a good faith attitude to
  - move our material for reasonable value,
  - support other utilities with true stocking needs,
  - keep material in play vs moving valuable stock out of nuclear industry or scrapping

# Challenges

- Number of personnel assigned post shutdown to support plant ops until transactions take place (low) – impacting service levels
- Reconciliation of IR activities with normal transfers (QA requirements, etc.)
  - Ship out inspections
- Conflict with utilities initiatives to reduce inventory – focus on must haves (obsolete, critical spares, etc)
  - We can help here as well with analytics, in desired
- Analytical challenges cross-matching data between Entergy and customers
  - We are willing to help and have been providing support
- Time is of the essence as data analytics takes some time to work through
- Plant operations and impacts or IR pulling, packing, shipping
  - Earlier is better – try to do while staffing levels intact
- Identifying material that may be needed for post-shutdown decommissioning activities (shouldn't sell)

# Questions?