



NJ Grid Modernization Program

**Reducing Friction for DER Interconnection to the electric
distribution system for advancement of NJ's Energy Master Plan strategies**

MSSIA Grid Modernization Conference Trenton NJ

January 23, 2024

Presented By: Paul Heitmann NJ BPU



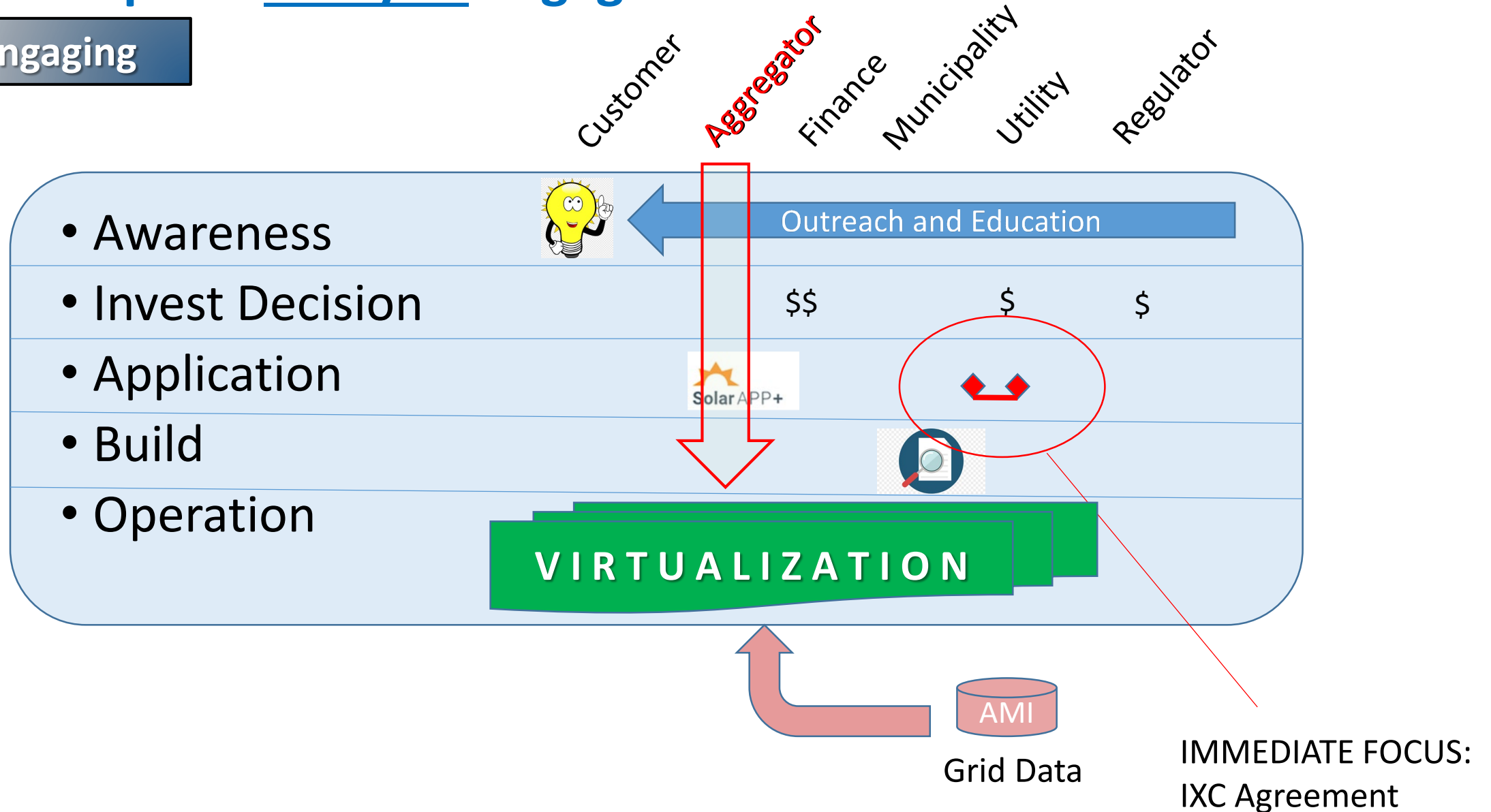
GRID MODERNIZATION KEY CONCEPTS

ENGAGE | INCREMENT | STAY REAL | COLLABORATE
Customers | *Change* | *On Barriers* | *On Approach*

VIRTUAL
Edition

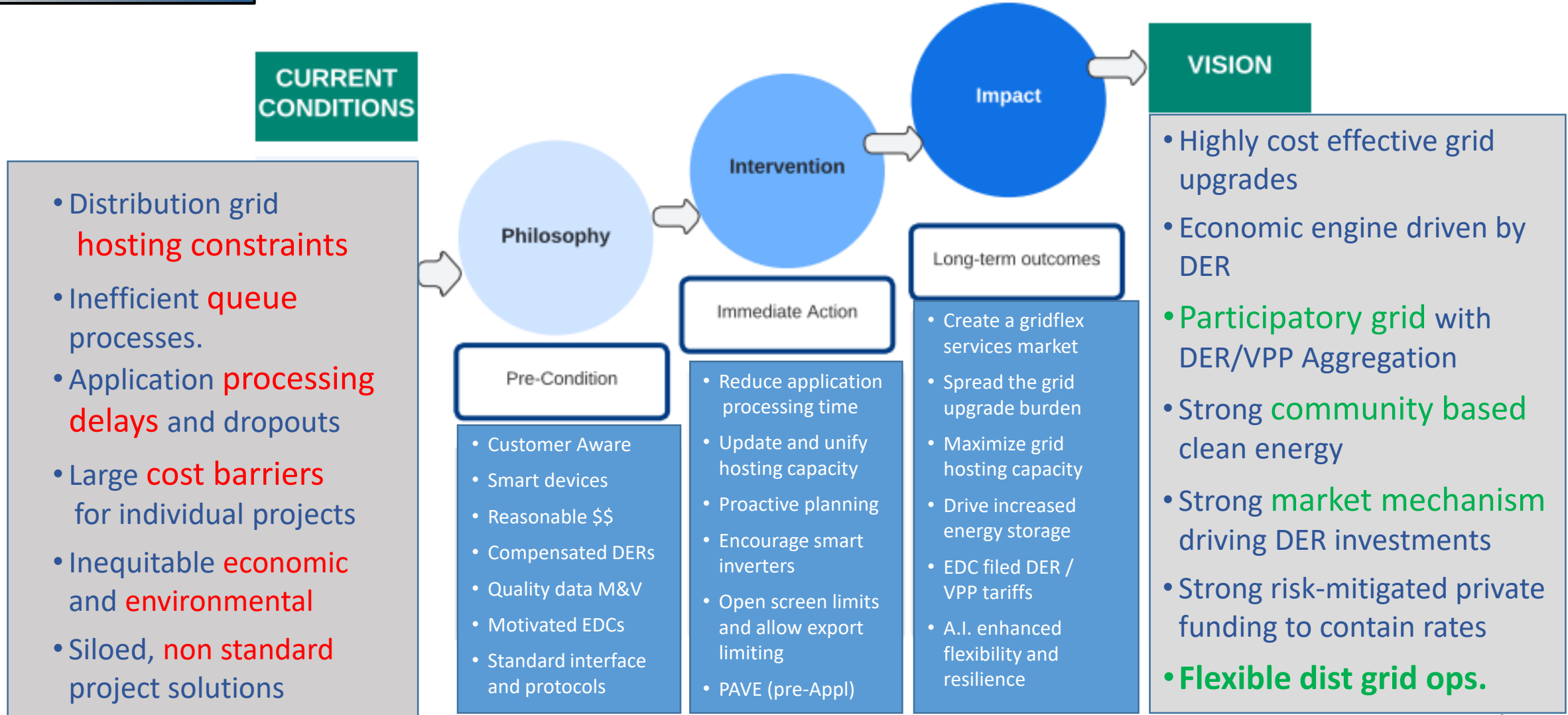
DER Adoption Lifecycle Engagement

Engaging



Energy Transition Change Process

Incremental

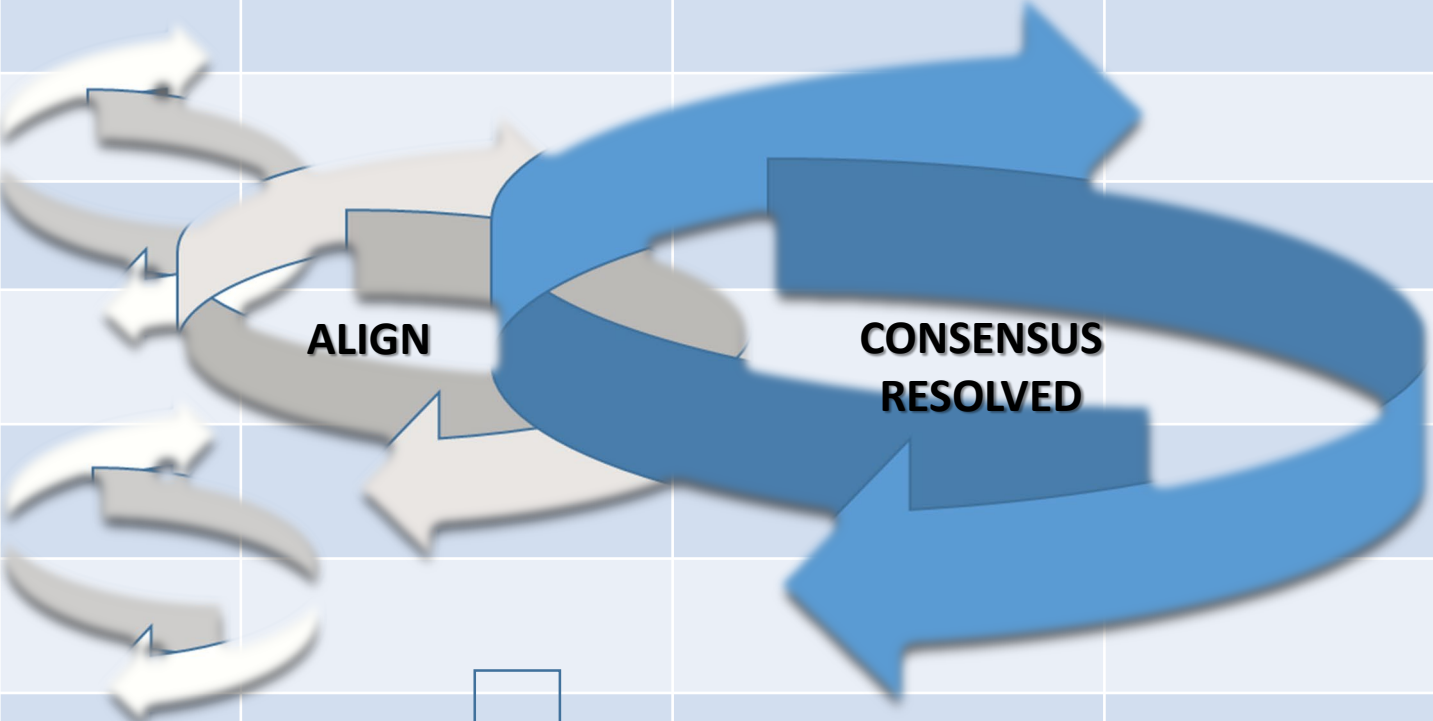


NJ Grid Modernization Program (Actors)

Realistic

AIMING FOR BEST COLLABORATIVE RECONCILIATION

Role/Stakeholder Group	SEED	COLLECT/COMBINE	CONSOLIDATE	PUBLISH
Electric Power Distribution				
Wholesale Market				
DER Solution Design				
Equipment/System OEM				
NJ Ratepayer				
Regulatory				



COLLABORATIVELY
AGREED

ISOLATE/NEGOTIATE/ESCALATE

Facilitated Stakeholder Engagement

DOCKET NO. 0021010085

www.njcleanenergy.com/gridmod

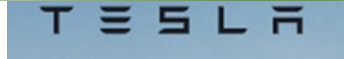
Collaborative

Core Project Team



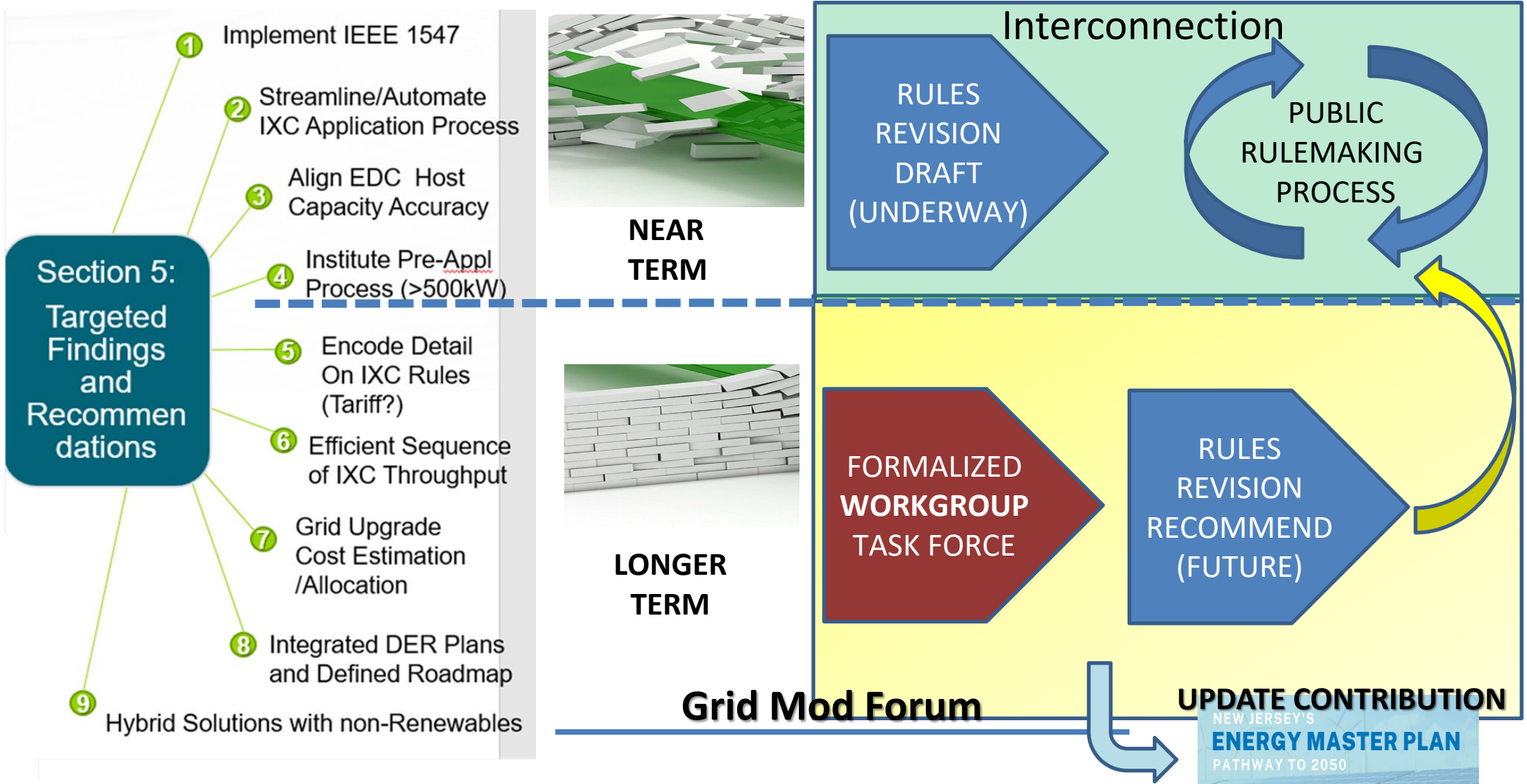
NJ ED Engagem

Non-ED Engagem (Exempl



Advancing Grid Modernization ... by NJBPU Board Order Nov 22, 2022

N.J.A.C 14:8-5



NEAR TERM: Straw** Proposal 14:8-5

** Noticed and released 3/2/2023

Definitions (.1)	General (.2)	Certification (.3)
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Subject to Board review and approval

INTERCONNECT APPL PROCESS

L1 Procedure (.4)	L2 Procedure (.5)	L3 Procedure (.6)	Fees (.7)	Testing/Inspection (.8)	EDC Reporting (.9)
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NEW INTRODUCED SECTIONS

PAVE (.10)	Hosting Capacity (.11)	PSUP (.12)	Dispute Resolution (.13)
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LONGER TERM: GRID MOD FORUM – Initial Workgroups #5, #8

Recommendation #5 –
NJ BPU should convene a technical working group to adopt and develop into N.J.A.C.14:8-5, current specific industry guidance such as from **IREC, California Rule 21, IEEE 1547, and similar sources**

Rec #6 –
NJ EDCs should implement a uniform **streamlined flexible queue process** across EDCs that would prioritize a “first ready, first through” approach to support viable projects

Rec #7 –
NJ BPU should define a mechanism to establish numerical cost and capacity thresholds above **which grid modernization costs could be spread over a broader set of beneficiaries**

Rec #8 –
EDCs should submit **integrated DER and integrated distribution plans** that will allow NJ to meet the EMP goals.

Rec #9 – NJ BPU should consider **allowing non-renewable fuel sources play in the net metering** market at a reduced rate,

GRID FLEXIBILITY SERVICES

HOSTING CAPACITY ROADMAP

Critical Common GMF Workgroup Elements

Category

Element Description

Research and Development

ISOLATE

- Innovation Pilot program
- Standards/Best Practice Identification
- Requirements Derivation/Validation
- Reference Models

**Deliberation/
Info Sharing**

ITERATE

NEGOTIATE

- Defined Governance Model
- NDA within Participation Agreement
- GMF Shared Library
- Secure Collaboration IT Services

**Recommendation
Publication**

COMMUNICATE

ESCALATE

- Balloting Process for Recommendations
- Periodic Public Discussion and Release
- Rules Transition Process

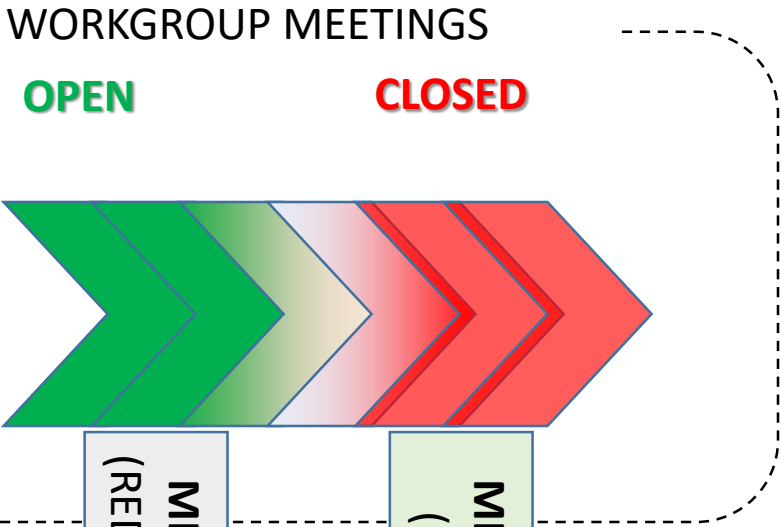
IT Platform For GMF

Workflow

Deliberation/
Info Sharing

BI
WEEKLY

Teams
(BPU)



PANEL



PUBLICATIONS

Research and
Development

- MAINTAIN REFERENCE LIBRARY >>>
- UPLOAD REFERENCE DATA >>>
- COLLABORATE W/ SHARED DOCUMENTS >>>
- INNOVATION PILOTS >>>

Admin
(BPU)

Sharepoint
(Members)



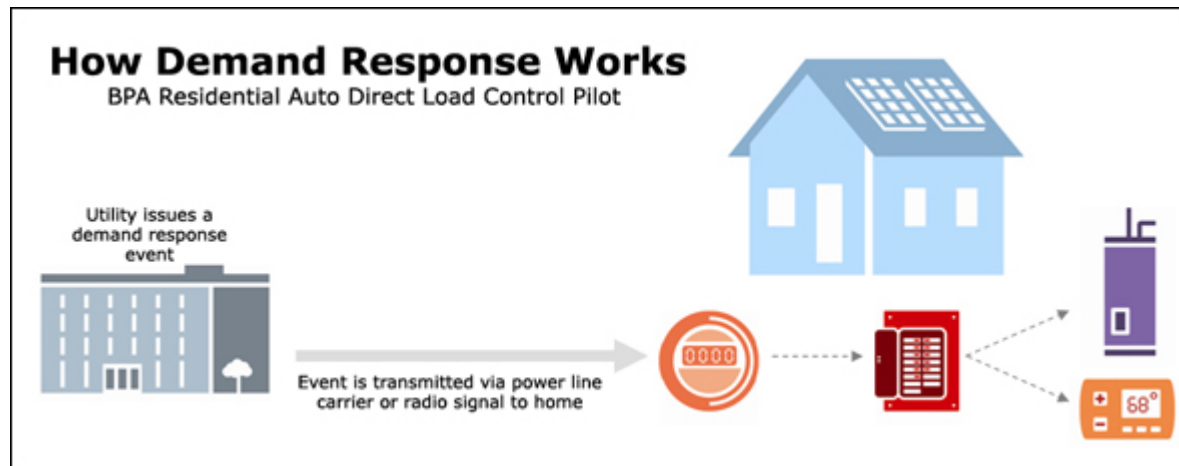
A GRID MOD Concept (Example – DR)

HW/SW is customer-purchased and **flexibly** used by Aggregator for monetizing in wholesale market.

GRID FLEXIBILITY SERVICES

All HW/SW and program op cost is rate-recovered
Inefficient/inflexible single purpose use case.

TRADITIONAL UTILITY DLC



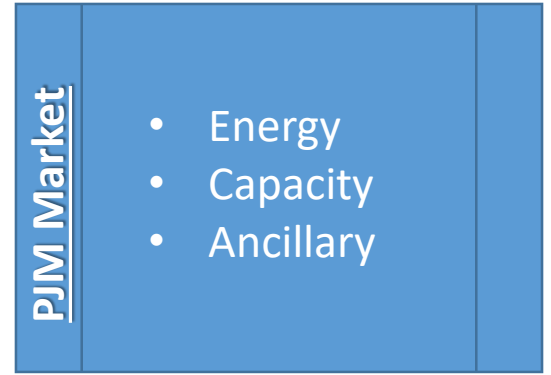
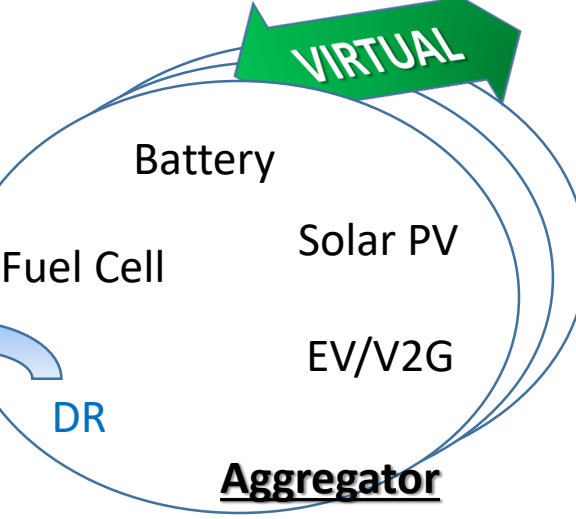
EDC
Annual Payment

DR or...

DR

Reduced Peak Load

GridFlex Services



BACKUP SLIDES

Technology Changes Driving Grid Modernization

It includes a variety of changes, such as **accommodating new technology, new forms of electricity generation and distribution, installing smart meters, updating grid infrastructure, integrating renewable energy sources, and more.**

