



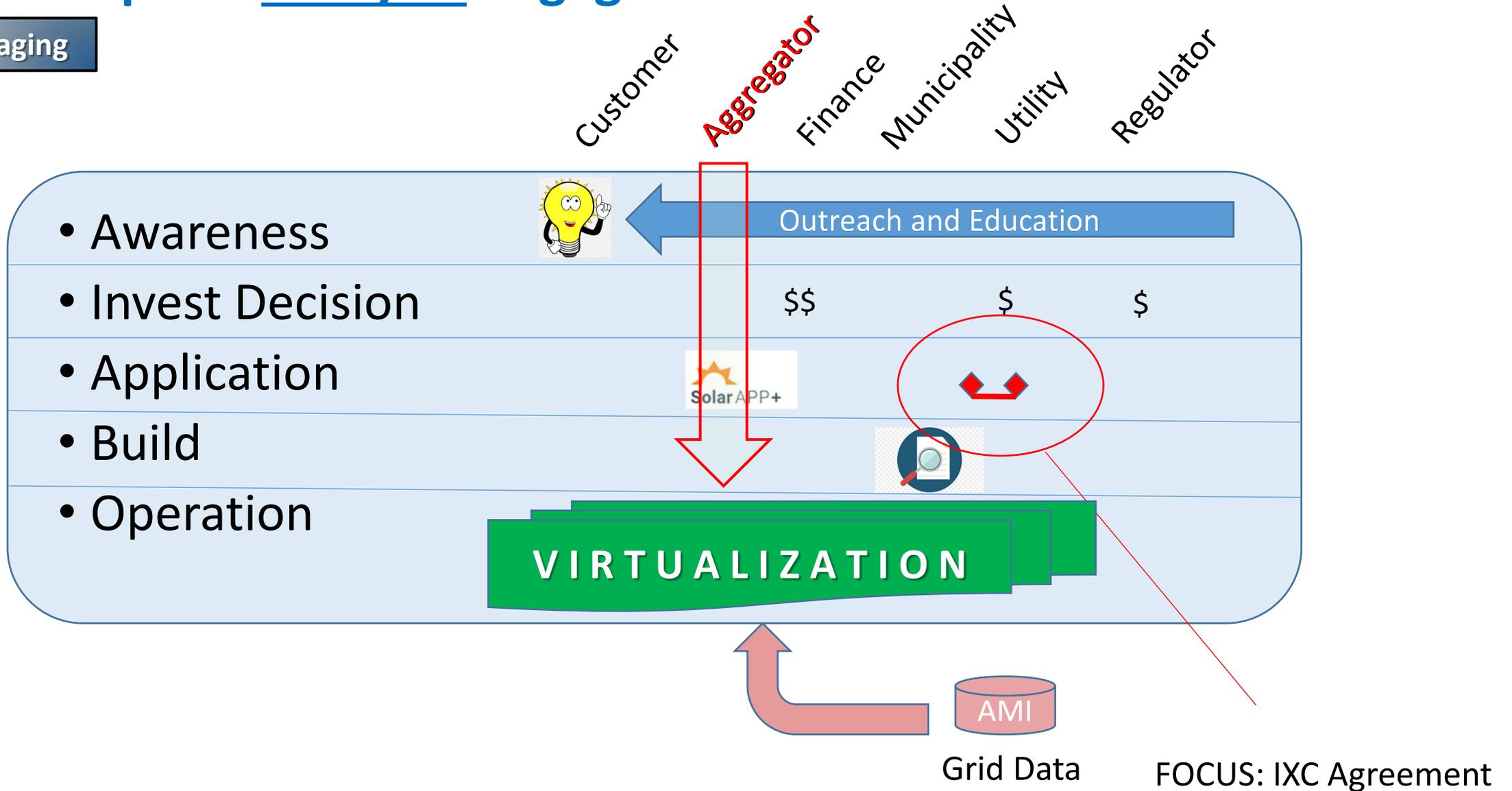
# GRID MODERNIZATION KEY CONCEPTS

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

**VIRTUAL**  
Edition

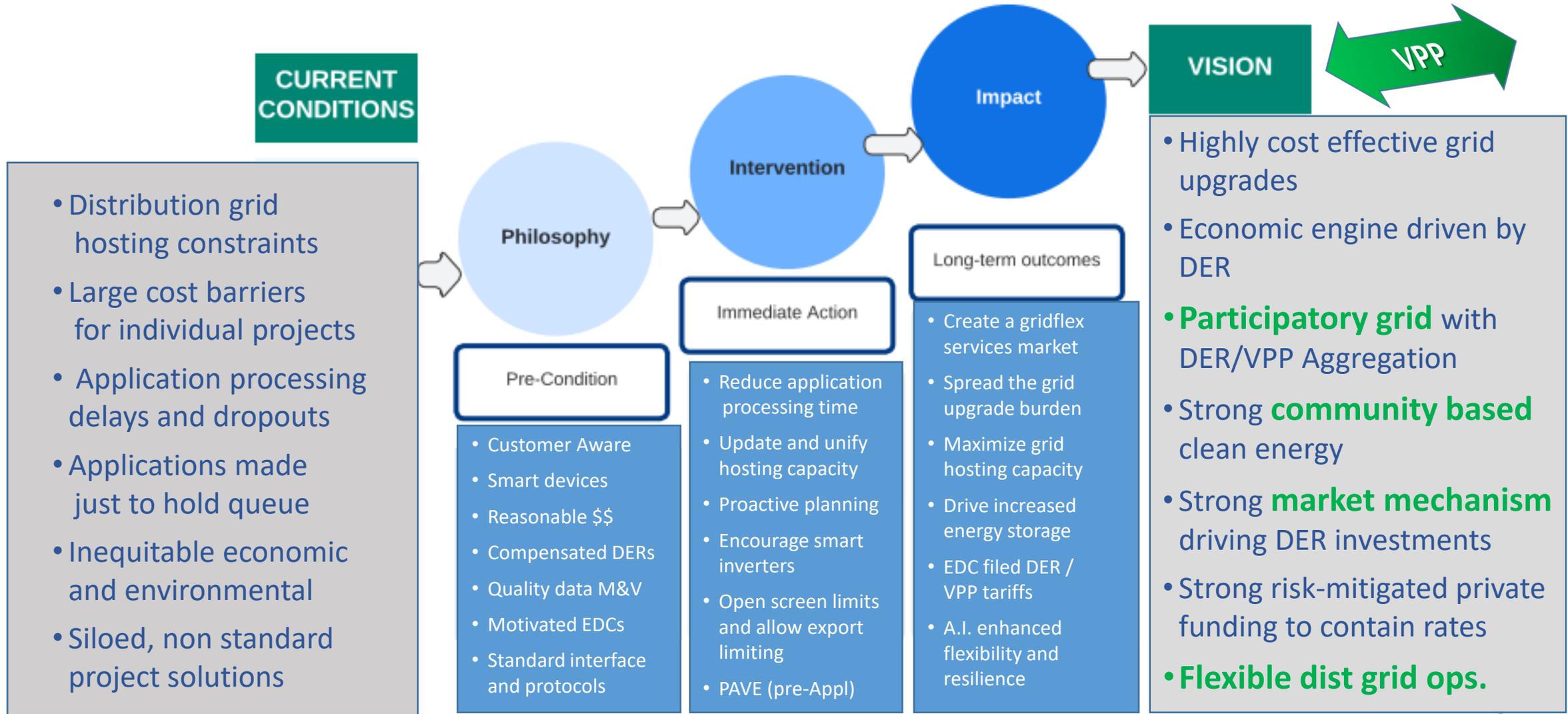
# DER Adoption Lifecycle Engagement

Engaging



# Energy Transition Change Process

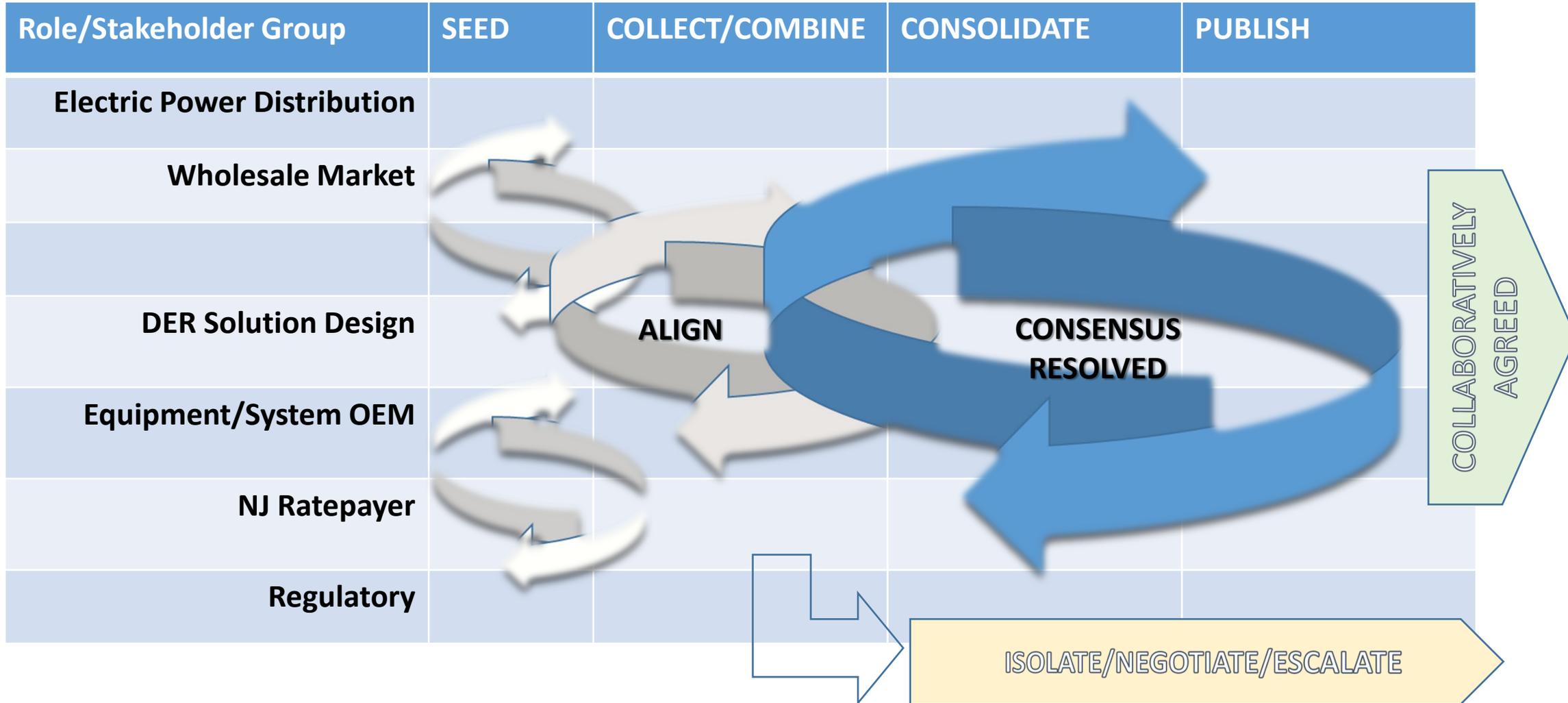
Incremental



# NJ Grid Modernization Program (Actors)

Realistic

AIMING FOR BEST COLLABORATIVE RECONCILIATION



# Facilitated Stakeholder Engagement

DOCKET NO. 0021010085

[www.njcleanenergy.com/gridmod](http://www.njcleanenergy.com/gridmod)

Collaborative

Core Project Team



NJ ED Engagem

Non-ED Engagem (Exempl



atlantic city electric®  
An Exelon Company



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

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

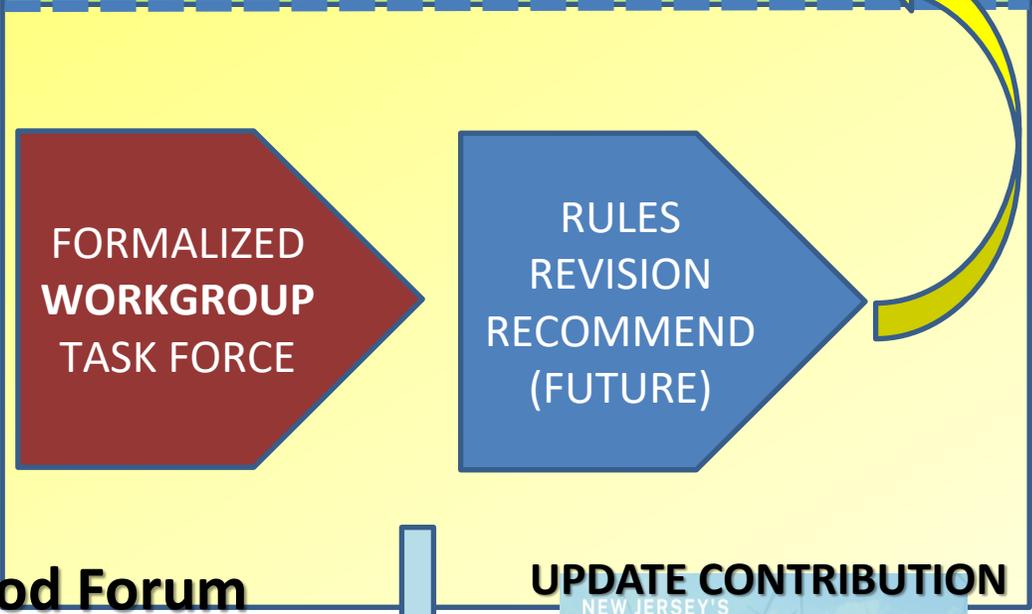
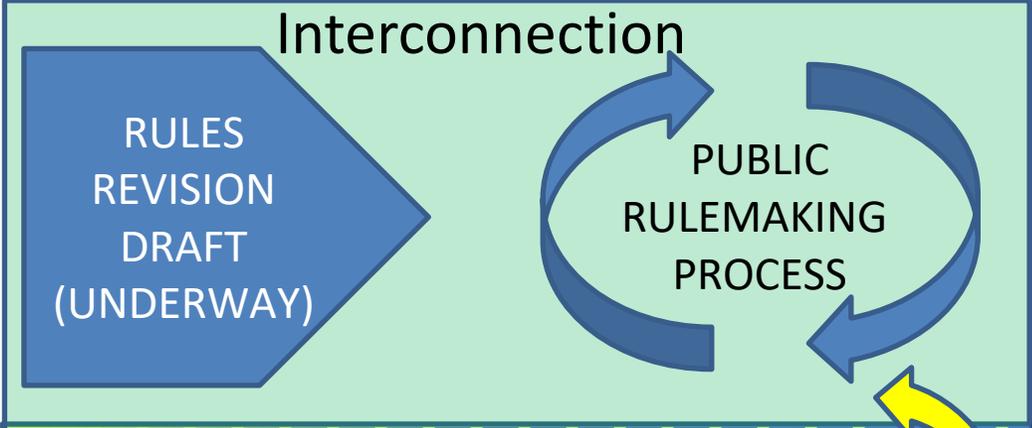
- Section 5: Targeted Findings and Recommendations**
- 1 Implement IEEE 1547
  - 2 Streamline/Automate IXC Application Process
  - 3 Align EDC Host Capacity Accuracy
  - 4 Institute Pre-App Process (>500kW)
  - 5 Encode Detail On IXC Rules (Tariff?)
  - 6 Efficient Sequence of IXC Throughput
  - 7 Grid Upgrade Cost Estimation /Allocation
  - 8 Integrated DER Plans and Defined Roadmap
  - 9 Hybrid Solutions with non-Renewables



**NEAR TERM**



**LONGER TERM**



**Grid Mod Forum**

**UPDATE CONTRIBUTION**

NEW JERSEY'S  
**ENERGY MASTER PLAN**  
PATHWAY TO 2050

# GRID MOD FORUM – Initial Workgroups

**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,

# 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

# A GRID MOD WORKGROUP

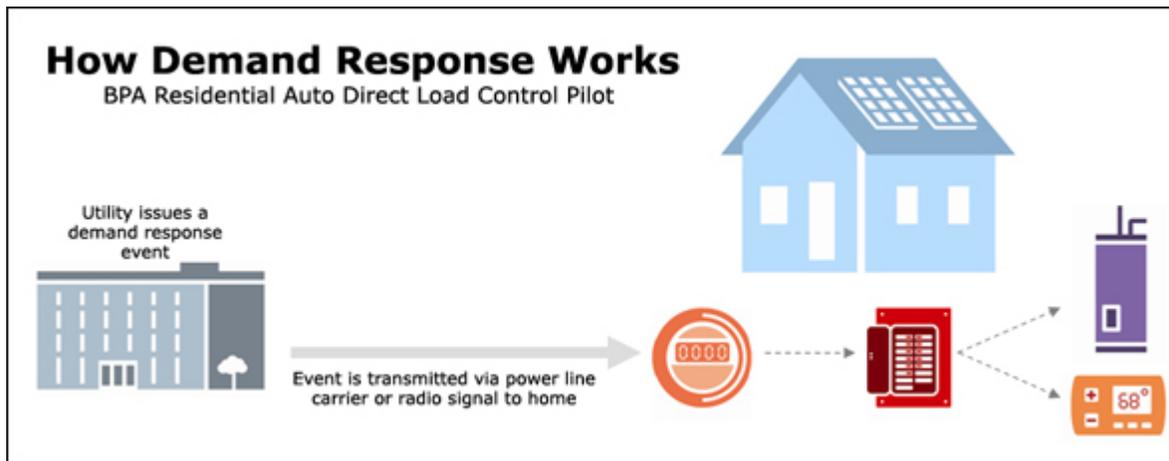
## (Example – DR)

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

GRID FLEXIBILITY SERVICES

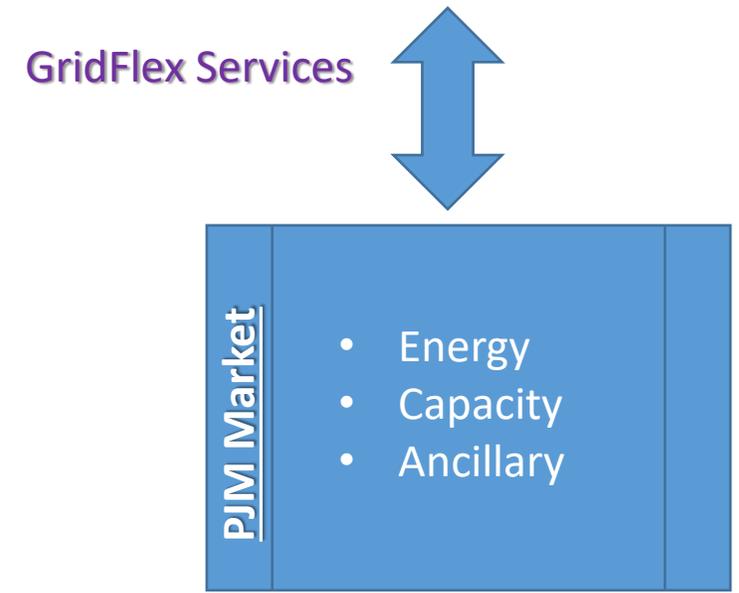
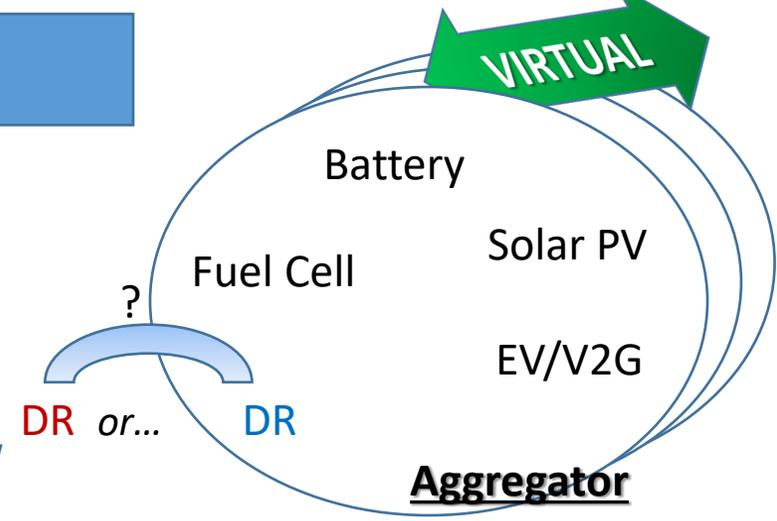
All HW/SW and program op cost is rate-recovered  
Inefficient/inflexible single purpose use case.

TRADITIONAL UTILITY DLC

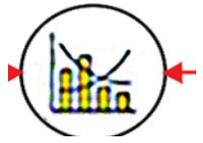


**EDC**  
Annual Payment

Reduced Peak Load



# Technology Changes Driving Grid Modernization



Virtual Energy

