Grid Interconnect and DSMC Best Practices

Nexant User Consortium 2018

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Reimagine tomorrow.

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DSMC and Grid Interconnect Project Goals

Objectives

Optimize Cost

Optimize business processes and operations

Common Platform

Improve business operations and support unified self-service tools

Enhance Capabilities

Remove obsolete technology and design responsive to future changes

Principles

Contextual Solution

In depth knowledge of business processes and back office systems

Right Team

Combines the right product, industry, and company knowledge

Aligned Solution

Align with key initiatives like CIS re-platform and grid modernization programs

Success Criteria

Solution Setup

- Single instance iEnergy platform installed and configured as SaaS environment
- Mock demo data utilized for Conference Room Pilot

Demonstrate Capabilities

- Configurability of the workflow based on the user defined business process
- End-to-End DSM workflow for two programs – Prescriptive and Custom
- End-to-End Grid Interconnection workflow for two tariffs – WDAT and NEM-GMA

Discovery

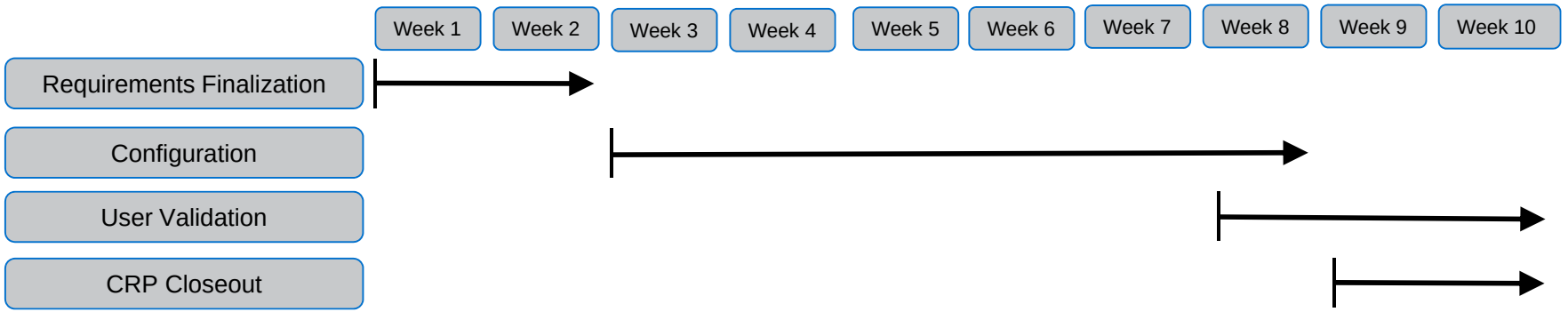
- Document evaluation comments/defects and identified resolution path
- List of outstanding processes, functionality, data issues, and potential gaps
- Proposed a feasible architecture for the Grid Interconnection / DSM initiative

Scope and Timeline

Scope

- Conduct Requirements Verification Workshops
- Provision, Setup, and Configure iEnergy environment for CRP
- Conduct User Training sessions for DSM and Grid Interconnection to SMEs
- Configure iEnergy Platform for DSM, Grid Interconnection scenarios and use cases
- Configure Technical and Mock Integration scenarios
- Conduct showcase / demo workshops to review and refine configured scenarios
- Support SMEs during hands-on validation of the configured iEnergy Platform
- Conduct close-out presentation, gap analysis, and complete closure document

Timeline

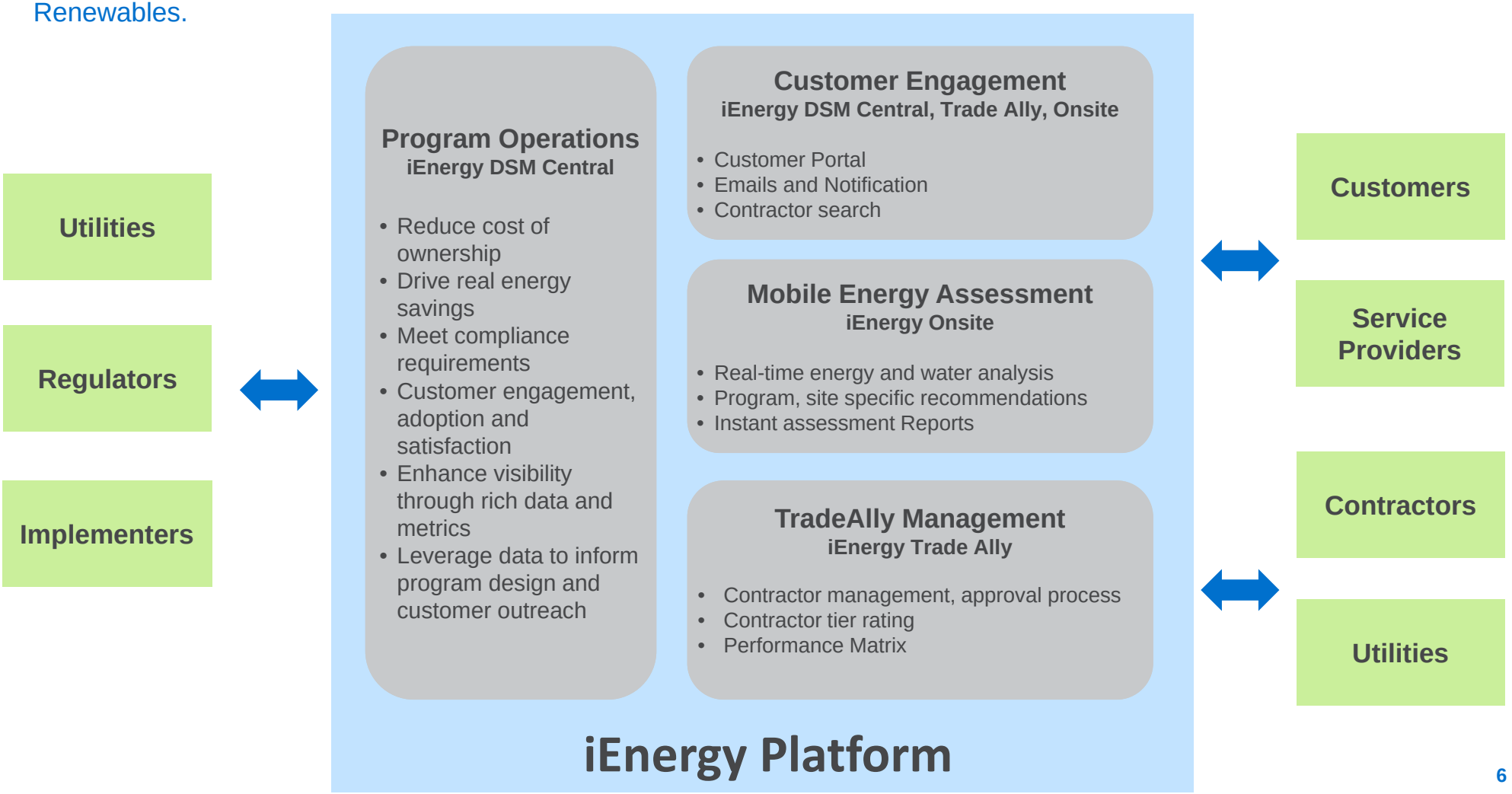


Demand Side Management

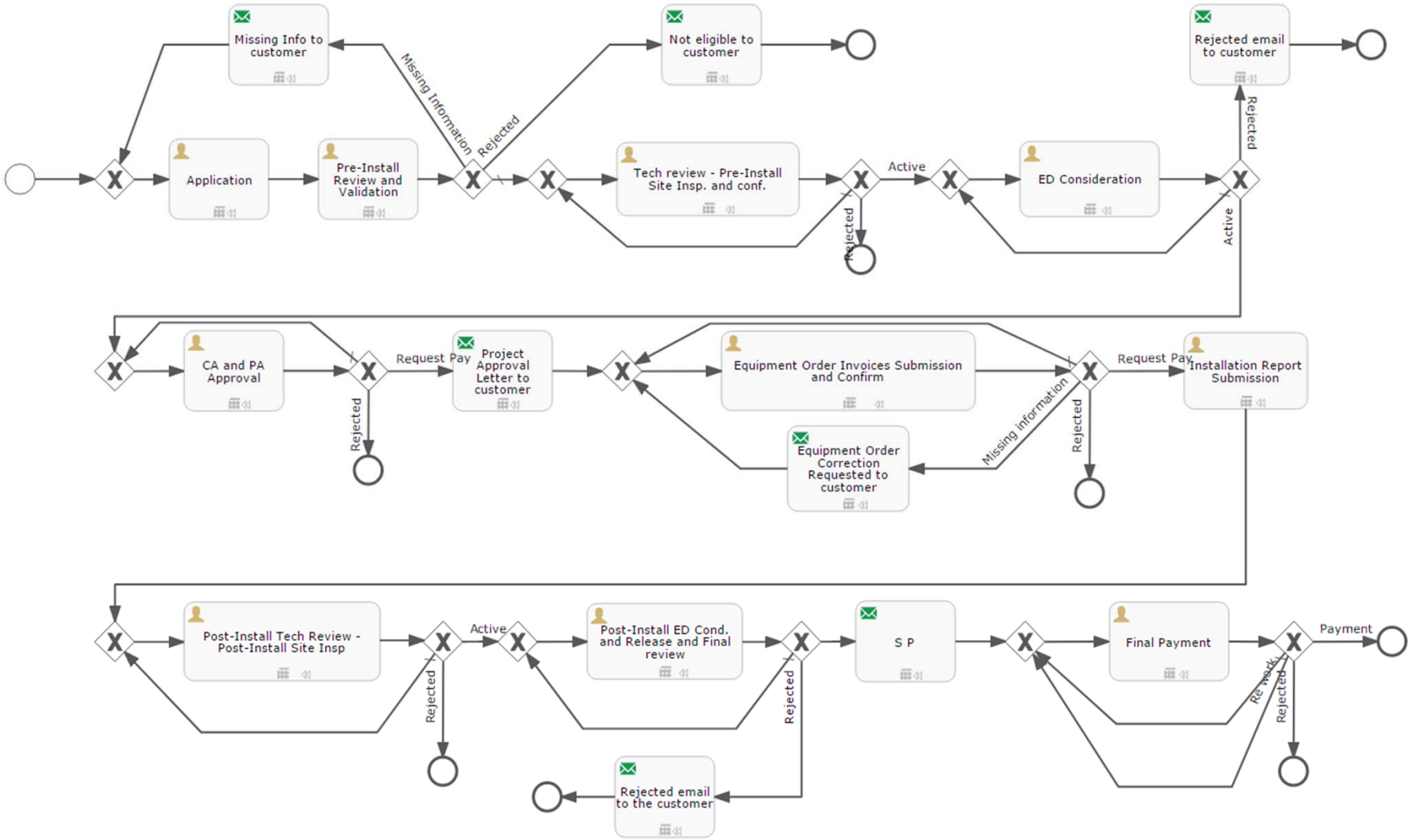
iEnergy Case Study

DSMC Solution Overview

Nexant iEnergy is a purpose-built, highly configurable data management, analytics and customer engagement platform that allows utilities to efficiently manage the business processes related to Energy Efficiency, Demand Response and Renewables.



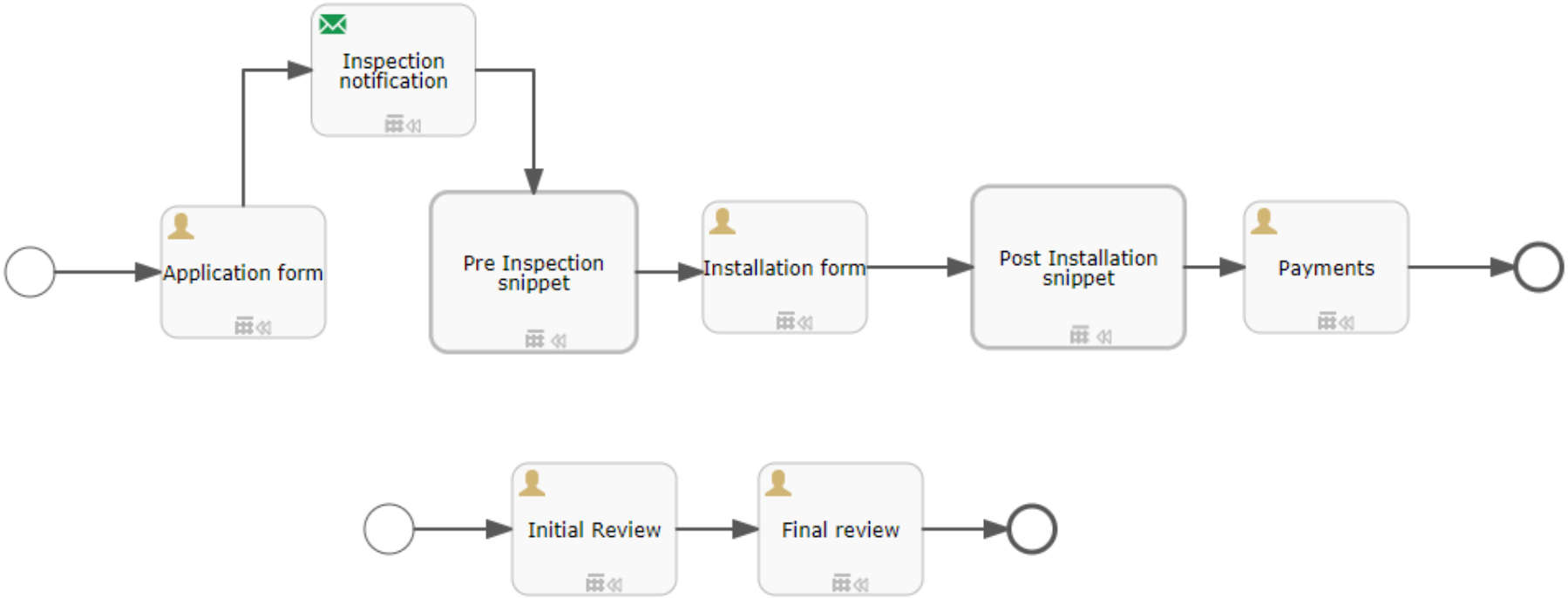
DSMC Process Workflow – Sample



Best Practices using New Features

Workflow Modifications

- Snippets - Reuse the sections (inspections, Milestone payments) of the workflow in smart way
- Reduces maintenance, form configurations
- Modifications to in-progress projects



Best Practices using New Features

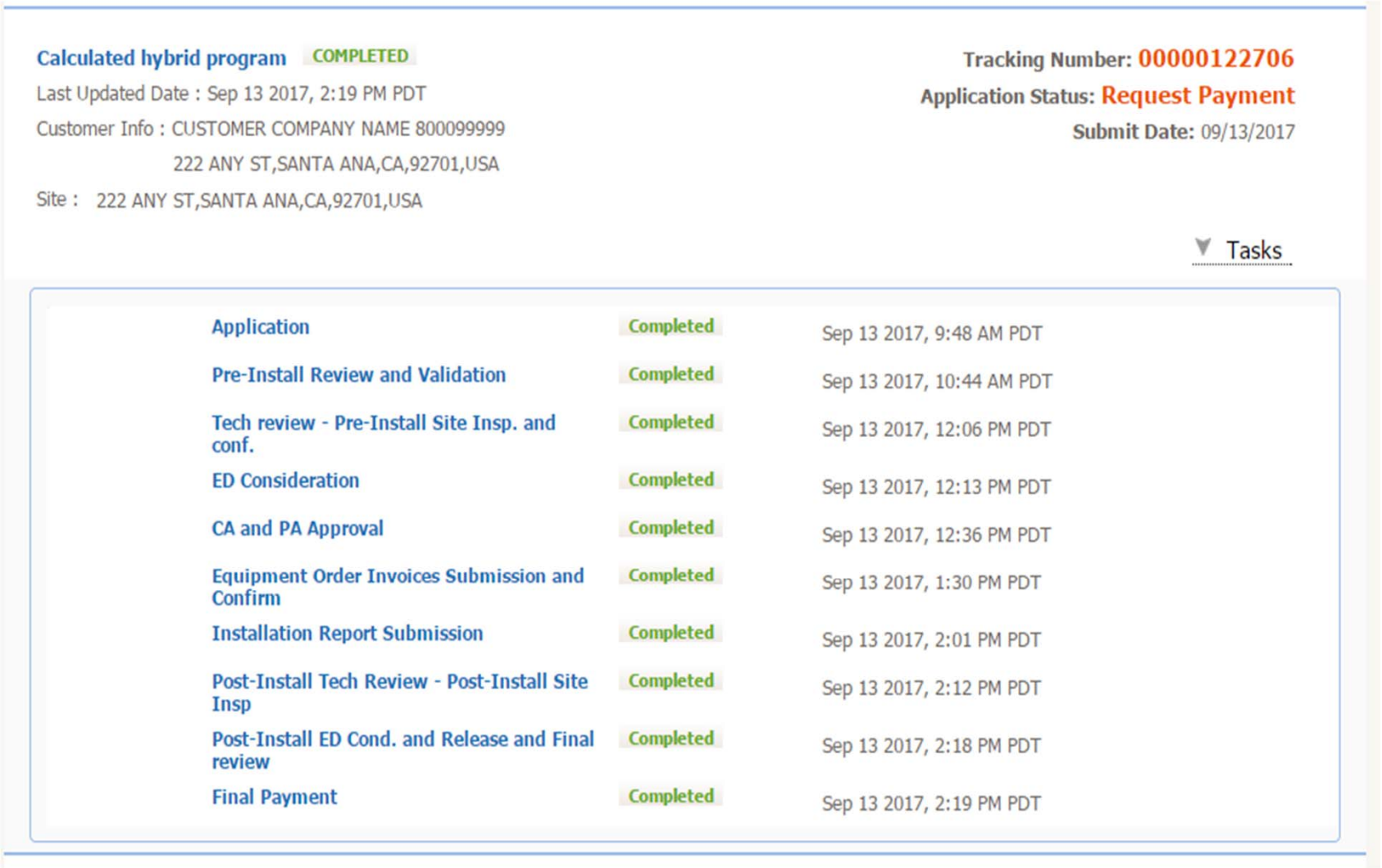
Formula Functions

- Use formula functions for complex calculations(dates, conditional cases, random numbers, duplicate checks)
- Use formula function to remove dependency on tokens; reuse in all forms
    - AttributeValueByLabel(“name”)

Data Extract for Reuse

- Current Reporting tool does not address all the data extraction needs.
- Extraction on filters(program, status, creation dates)
- One click, real time, script based extract for future need

DSMC Business Process Steps – Sample



Calculated hybrid program COMPLETED

Last Updated Date : Sep 13 2017, 2:19 PM PDT

Customer Info : CUSTOMER COMPANY NAME 800099999
222 ANY ST,SANTA ANA,CA,92701,USA

Site : 222 ANY ST,SANTA ANA,CA,92701,USA

Tracking Number: 00000122706

Application Status: Request Payment

Submit Date: 09/13/2017

Tasks

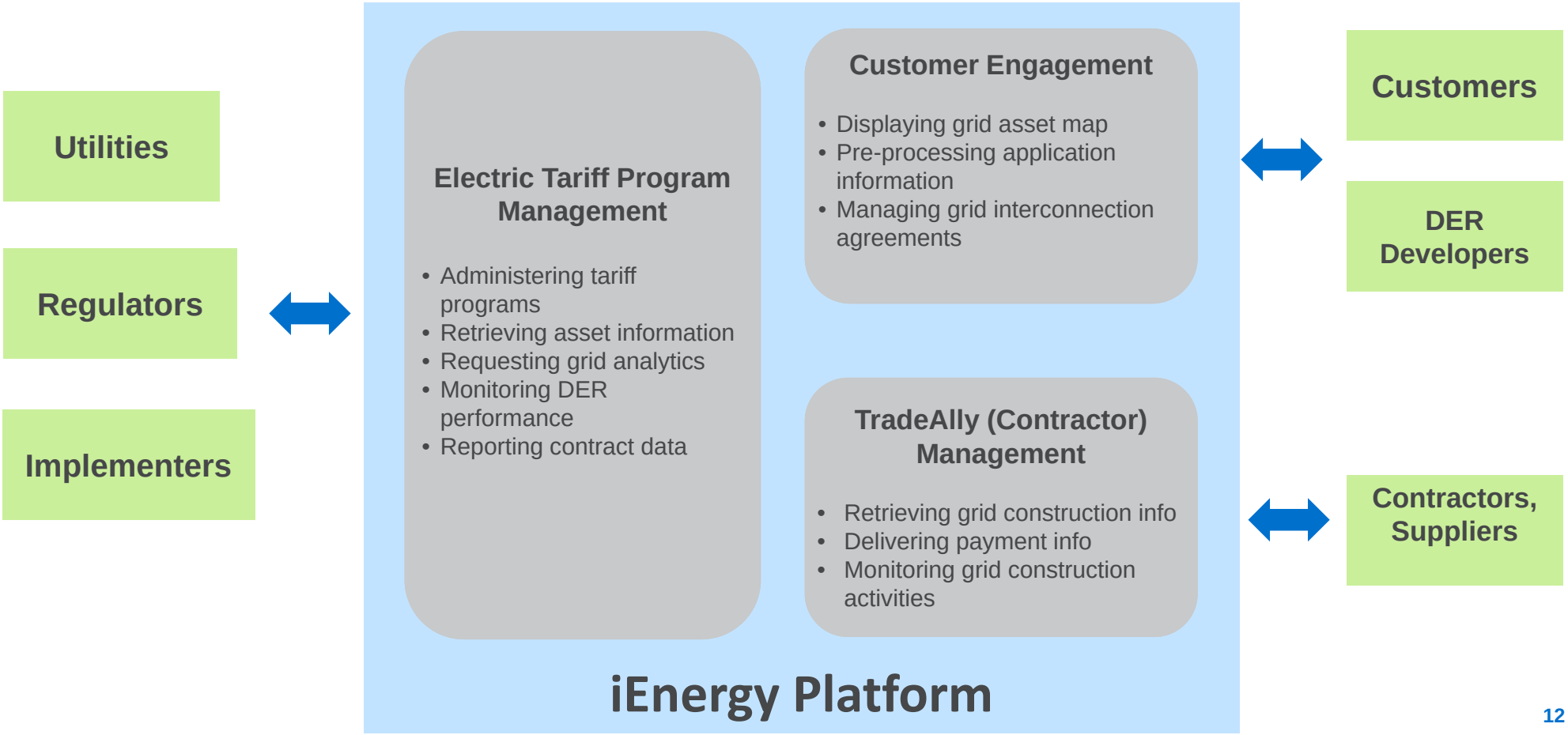
Application	Completed	Sep 13 2017, 9:48 AM PDT
Pre-Install Review and Validation	Completed	Sep 13 2017, 10:44 AM PDT
Tech review - Pre-Install Site Insp. and conf.	Completed	Sep 13 2017, 12:06 PM PDT
ED Consideration	Completed	Sep 13 2017, 12:13 PM PDT
CA and PA Approval	Completed	Sep 13 2017, 12:36 PM PDT
Equipment Order Invoices Submission and Confirm	Completed	Sep 13 2017, 1:30 PM PDT
Installation Report Submission	Completed	Sep 13 2017, 2:01 PM PDT
Post-Install Tech Review - Post-Install Site Insp	Completed	Sep 13 2017, 2:12 PM PDT
Post-Install ED Cond. and Release and Final review	Completed	Sep 13 2017, 2:18 PM PDT
Final Payment	Completed	Sep 13 2017, 2:19 PM PDT

Grid Interconnection

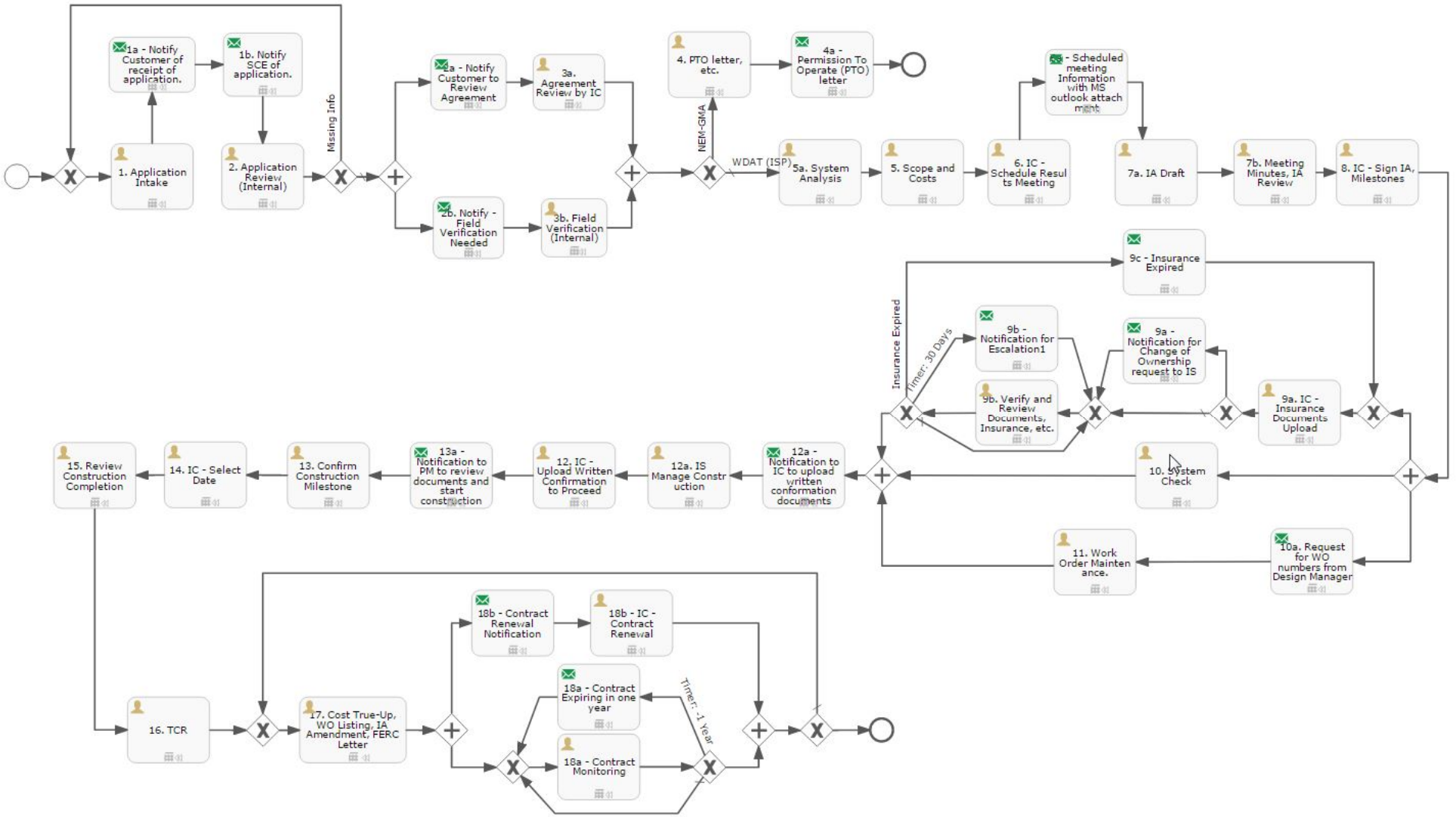
iEnergy Case Study

Grid Interconnect Solution Overview

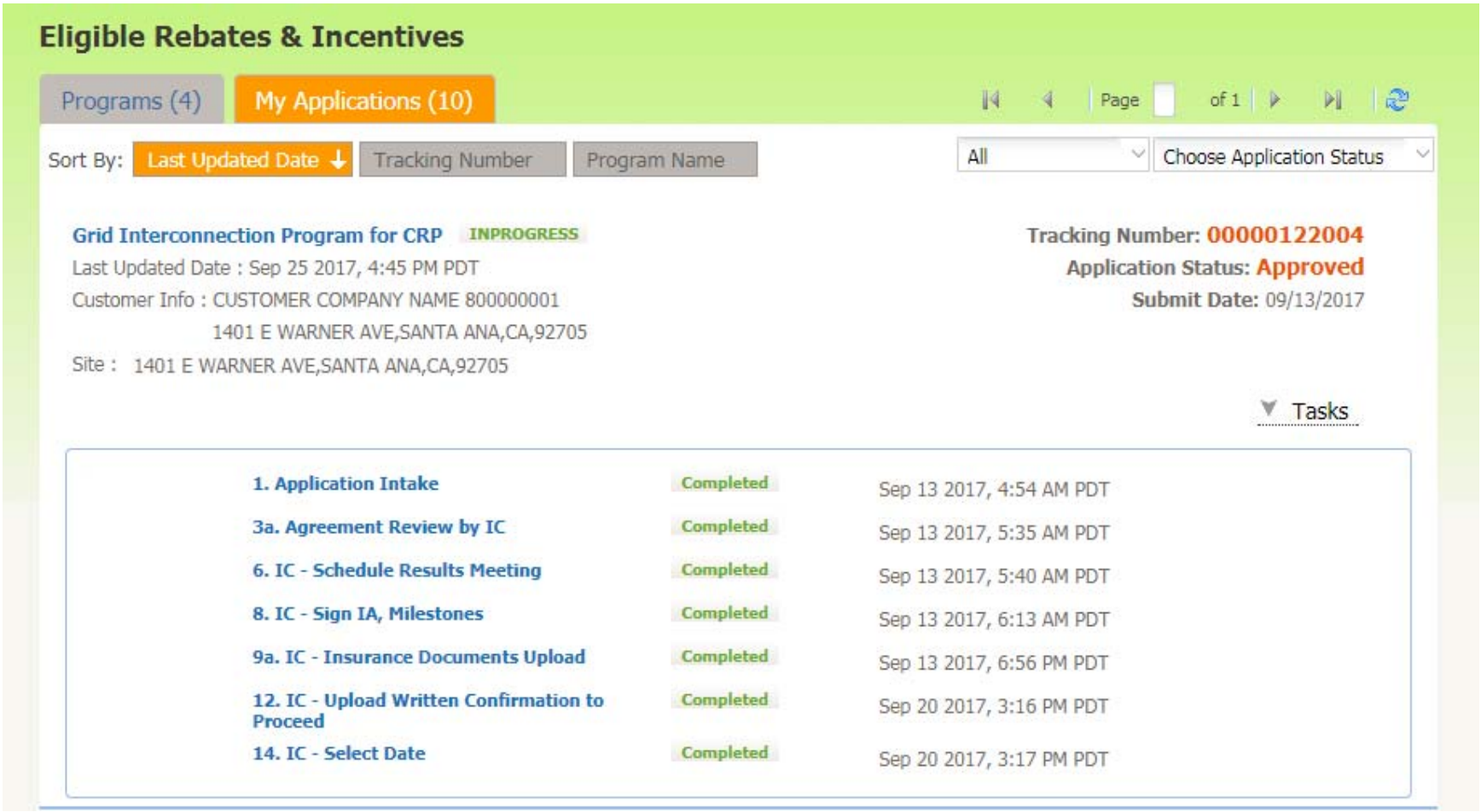
Nexant iEnergy is a purpose-built, highly configurable data management, analytics and customer engagement platform that allows utilities to efficiently manage the business processes related to grid-connected distributed energy resources (DER), including but not limited to energy efficiency, demand response, renewables, distributed generation, EV, and storage.



Grid Interconnect Process Workflow – Sample



Grid Interconnect Business Process Steps – Sample

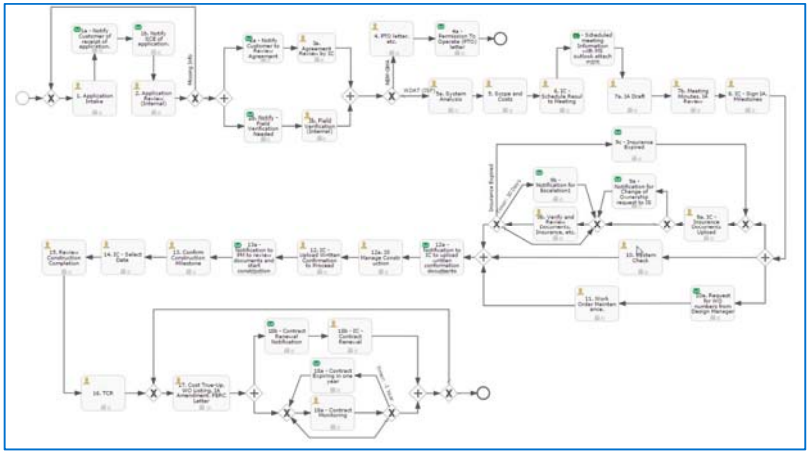


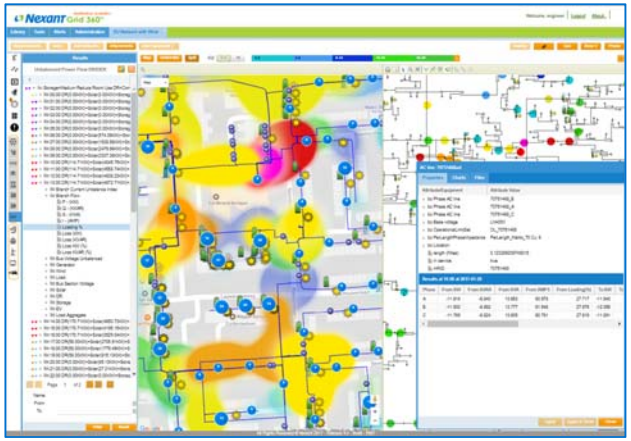
iEnergy + Grid360 Interconnection Process

Manage the solar/storage/EV/DR interconnection process

- **Public User Interface**
- **Engineering Studies**
- **Contracting**
- **Construction**
- **Financial Settlement/Closeout**

1. **Customer requests adding solar/storage/EV/DR at a existing or new location in iEnergy**
2. **Grid360 DA calculates hosting capacity (existing + queued + forecasted load and generation + reserve capacity) and impacts on loading percentage, voltage, and unbalance**
3. **iEnergy presents results to the customer and is used to continue the interconnection process**





Questions?