

# *SCE SONGS*

## *Work Clearance Management*

***Project Review and Lessons Learned***  
***SAP Centric EAM 2009***  
***WCM Focus Group Presentation***  
***March, 2009***

# Agenda

- **Intro**
  - **Who is SCE SONGS Nuclear**
  - **Units / Territory**
- **SAP ERP Implementation**
  - **History / Legacy**
  - **Implementation Scope**
  - **Timeline**
- **SAP WCM Implementation**
  - **Users**
  - **Experiences**
  - **Enhancements**
- **Lessons Learned**
  - **Project**
  - **Training**
  - **Post Go Live**
- **Future Plans**
  - **Mode Dependent**
  - **Lineups**
- **Q & A**

# SCE Our Territory



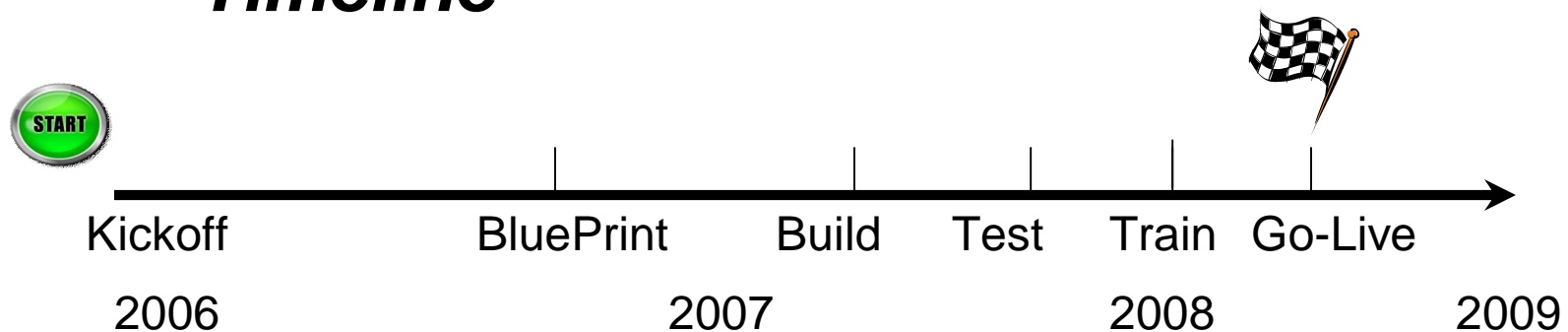
## ***Who is SCE SONGS ?***

- Southern California Edison ( SCE )
- San Onofre Nuclear Generating Station (SONGS)
- 2 Unit PWR ~2200 Mwe
- Powering 1.5 million homes



# *SAP ERP Implementation*

- ***2006 Project Kickoff***
- ***Primary Legacy Application***
  - ***Mosaic / Home Grown CMMS w/ Tagging***
- ***Implementation Scope***
  - ***Full ERP for GBU***
    - ***EAM, WCM, SCM, HR, FI, CO...***
- ***Timeline***



## *SAP WCM Implementation*

- ***Users***

- ***All SONGS Station Users***

- ***Work Control / Develops WCA/WCD***
    - ***Operations / Develops and Executes WCD***
    - ***Supervisors/Workers / Signon to Hold Protection***



# *SAP WCM Implementation*

- ***Experiences***
  - ***Good and Improving***
- ***Not Without Challenges***
  - ***Training***
    - ***Significant Change for End Users***
      - » ***Process Retraining***
      - » ***Terminology / Navigation***
  - ***Organization Participation***
    - ***Difficult Time for Station***
    - ***Leadership Changes***
    - ***Lack of Available Resources***
    - ***Training Attendance***
  - ***Testing***
    - ***Proper Test Cases***
    - ***Day In the Life***

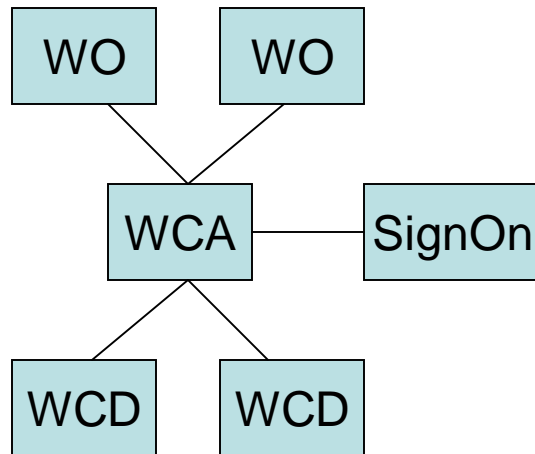
# *SAP WCM Implementation*

- ***Enhancements***
  - ***Standard w/ Enhancements Used for***
    - ***OSHA Sign On / Group Tagging***
    - ***Shared Tagging***
    - ***Special Reports***
    - ***Forms***



# SAP WCM Implementation

- **Standard w/ Enhancements Used for;**
  - **SignOn Process**
    - **OSHA Sign On / Group Tagging**
      - **Screens for Holders to Accept and Control**
      - **Additional Logical Interlocks to WCM Process**
      - **Controls Limiting Active Holders**



The screenshot shows the 'Active Clearance Holders' application window. It features a toolbar with buttons for 'Sign on', 'Sign off', 'History', 'Active WCA Holder Rpt', and 'Work Clearance Application'. Below the toolbar is a table with the following data:

Holder	Userid	Full Name	Date	Time	Order
WORKER	SMITHJ14	JOHNNIE L SMITH	03/02/2009	10:15:25	000800213238

## *SAP WCM Implementation*

- ***Standard w/ Enhancements Used for;***
  - ***Shared Tagging – We Clearly Missed the Mark***  
***Major Outage Impact / Loss of Trust***
- ***Shared Tagging***
  - ***Restrict Eligible Tag Types***
  - ***Restrict to ETG Status***
  - ***No Sharing During Test Phase***
  - ***Clearly Indicate Responsibly***
  - ***Enforce Sequence for Untagging***
  - ***No Preprinting of Tags***
  - ***Limit to Exactly One Tag***
  - ***No Reuse of Tags***
  - ***Automate Tagging / Untagging Status***

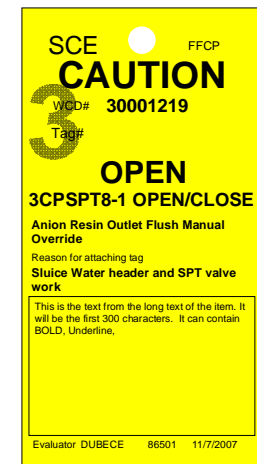
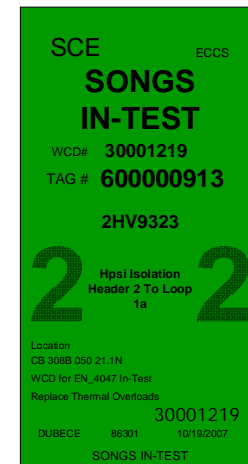
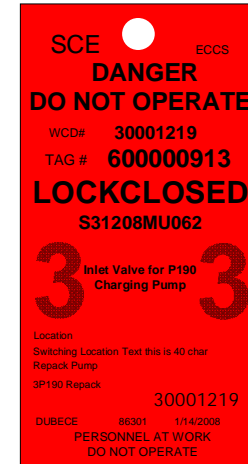
## *SAP WCM Implementation*

- ***Standard w/ Enhancements Used for;***
  - ***Special Reports***
    - Maintain Safety and Schedule***
      - ***Work Management Coordination***
      - ***Equipment Unavailable for Isolation Use***
      - ***Clearances Ready for Release/Pickup***
      - ***SignOn Report***



# SAP WCM Implementation

- **Standard w/ Enhancements**
  - Used for;**
    - **Forms**
      - Provide Work Instructions**
        - **Tagging / Untagging Worksheets**
          - » **Tags to be Hung / Picked Up**
          - » **Shared Tags**
        - **Walkdown Worksheets**
          - » **Supervisors View of Protection**
        - **Tags for Isolations**
          - » **Danger**
          - » **Caution**
          - » **In Test**



## *Lessons Learned*

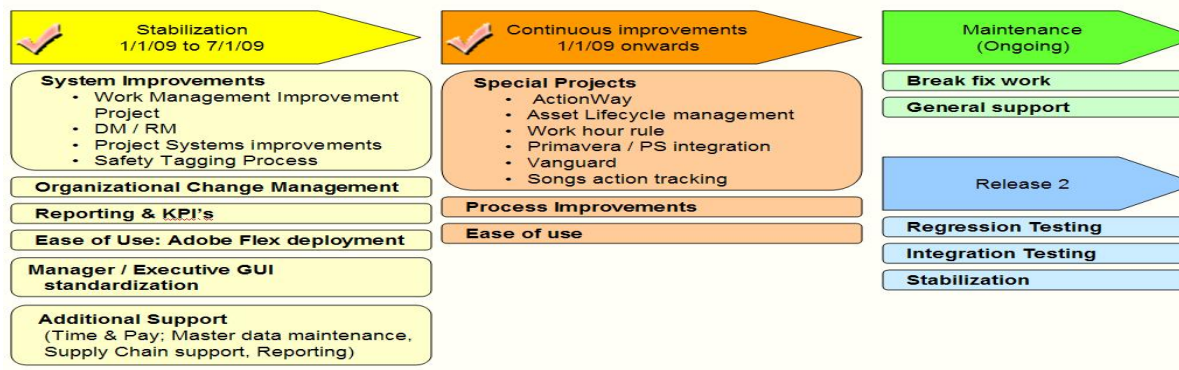
- ***SAP is a Journey, Not an Event***
  - ***Project***
    - ***All Parties Must Contribute***
      - ***Commitment***
      - ***Knowledge***
      - ***Experience***
      - ***Organization Change is the HARD PART !***
  - ***Training***
    - ***Classroom Process Based Training***
    - ***Basic Skills***
    - ***Navigation***
    - ***Terminology***

# Lessons Learned

## • **Post Go Live**

### – **Stabilization / Not Total Scrap Out**

- **Work Management**
- **WCM**
- **DM / RM**
- **Project Systems Improvements**
- **Adobe Flex Ease of Use**
- **Management GUI Standardization**
- **Reporting / KPI's**



## *Future Plans*

- ***Stabilize, Learn Through Doing***
  - ***Upcoming Major SONGS Activities***
    - ***Back to Back Steam Generator Replacements***
  - ***Upgrade Needed to Ep4***
    - ***Mode Dependent Tagging***
    - ***Line Ups***
      - ***Maintain Plant Configuration***

