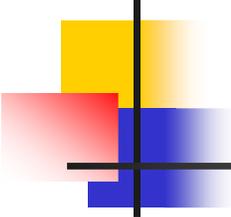


# **COSTWORKS STATUS**

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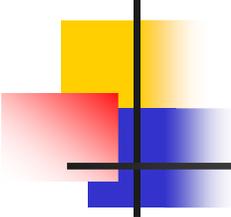


# Why CostWorks

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- Improved RPV estimating accuracy
- Sites can customize each model
  - Modify by Sq.Ft, #of stories, asset facades
  - Use Common Adders and Estimator features.

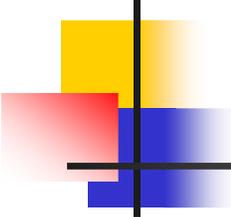
RESULT... Models reflect actual building specifications and design.



# CostWorks Status

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- Contract in place with RS Means.
- CostWorks will use CD version in 2004.
- Web version in 2005.
- CostWorks **WILL** include the Estimator tool.



# First Release

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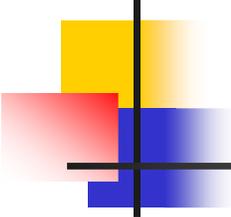
- First release will be in Dec. 2004.
- Contain all building models... 28 standard and 34 custom models.
- Contain 3 OSF models
  - Electric Transmission & Distribution
  - Natural Gas Distribution
  - Steam Generation & Distribution

# CostWorks

## Implementation Schedule

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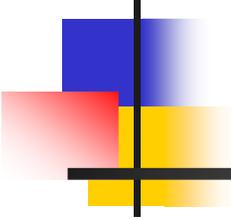
- June – Building model subset migrated.
- June – DOE enhancements completed.
- July – Pilot testing at 2 or 3 sites underway.
- Dec. – Full release of CostWorks (all buildings migrated with 3 OSF systems)



# DOE Enhancements

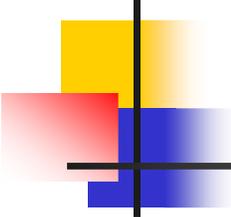
---

- Site Factor cost adder will be added
- Sq.Ft. area ranges will be based on FIMS.
- DOE Common Adders will be included.
- RPV calculation will be added.
  - $RPV = Model\ UC \times UM \times GeoF \times SiteF$



# **CostWorks Design Issues**

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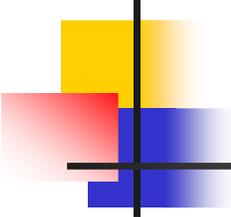


# Data Flow

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## **FIMS -> CostWorks**

- Site Name, Area Name, Property ID, Unit of Measure, Site Factor,
- Maybes... Property Name & Usage Code Description



# Data Flow

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## **CostWorks -> FIMS**

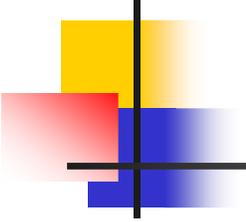
- Site Name, Area Name, Property ID, RPV, Model Name, RPV Unit Cost

## **CostWorks -> CAIS**

- Site Name, Area Name, Property ID, Model Name, Model %s.

## **CAIS <-> FIMS**

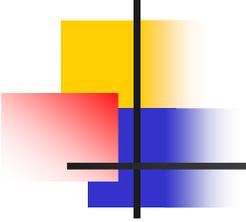
- No changes



# How will Sites use CostWorks?

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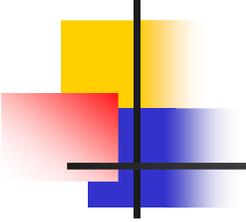
- As a minimum make area and façade corrections for each asset.
- Concentrate only on mission essential assets.
- Modify existing models to satisfy all assets?
- Use a graded approach?



# How to find the appropriate building model

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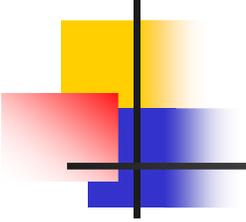
- CostWorks contains 28 standard, 34 custom, and 10 OSF models.
- Modify existing CostWorks Model type pull down screens.
- Link selection to Usage Description using a search feature.
  - Use FIMS to match Usage Description to Model selection.



# How to find the appropriate OSF Model

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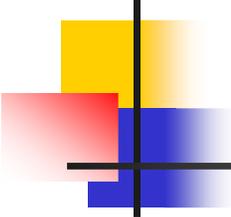
- Drop down list... 10 selections
- Each selection broken down into parts.



# Other Changes

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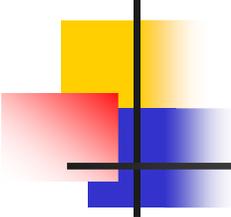
- Sq. Ft. Matrix
- Exterior Wall & Structural Systems
- Common Additives



# Naming Conventions

---

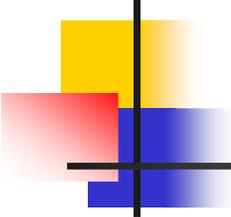
- Must have a common naming convention to export data to CAIS & FIMS.
- How to designate modified models?
  - Use Property ID, Usage Description, Site name and model name?



# Configuration Management

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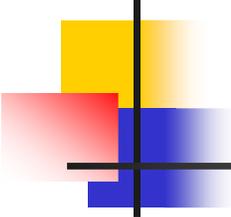
- How can sites share models?
  - Naming conventions
  - Usage Description links
- Where will CostWorks reside in post CD Version?
- Is Centralization the answer?



# Proposed CostWorks Reports

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- Are reports needed?
- Where should reports originate...CAIS, CostWorks or FIMS?
- Use current CAIS percentages cost report.

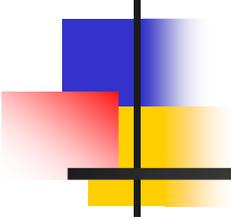


# Saving & Exporting Data

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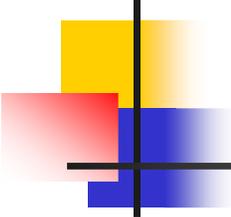
- Each asset could have its own model.
- How to save a modified model for more than one application.
- Export – ASCII and flat file transfers.

# **RPV Model Status, Issues, Questionnaire**



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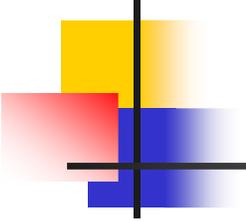
**Wanted: Site Feedback**



# DOE Model Library Status

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- Library will contain 28 standard, 34 custom, and 10 OSF models
- LBNL has proposed 5 new building models.
- RS Means reviewing if new assemblies are needed.
- If developed... added in 2005 release.

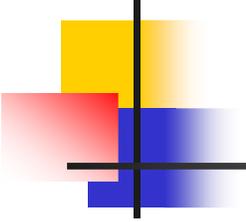


# OSF Models Under Development

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- Utilities – Electric, Gas, Sewage, Steam Generation/Distribution & Water systems.
- Others – Storm Water, Chilled Water, Industrial Gases, Compressed Air, & Fencing and Roads.

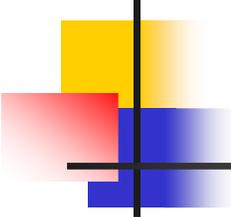
All OSF models will be in the 2005 release of CostWorks.



# Generic OSF Model Development Issues

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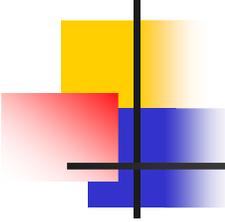
- May need more as-built drawings of steam, water & sewage plants.
- CAIS may need additional electrical distribution and substation equipment unit costs.
- Utility plant GSF, building height, & façade information needed.



# Unit Cost Issues

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- How do we want data to appear?
  - Inventory method
    - Piping by diameter/material.
    - Steam Traps, manholes listed separately
  - Typical length of pipe assembly that includes components.

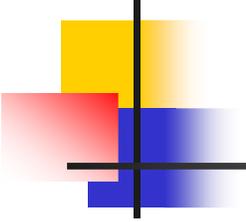


# Questionnaire

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- Sent to CAIS administrators & interested FIMS administrators.
- Need steam, sewage, & water plant specifications.
- Provide no. of stories, capacity, fuel, exterior & structural systems data.

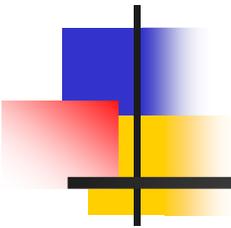
Data needed by March 31, 2004.



# Site Training/Orientation Plans

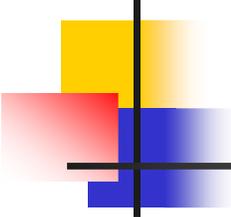
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- Provide CostWorks Training DOE wide.
- Course – 1 day sessions
- Course given at Field Office Locations
  - 2-3 sessions/location
  - Albuquerque, Las Vegas, SF Bay Area, Chicago, Oak Ridge, & Washington DC
  - When... Fall 2004



# **OPEN QUESTIONS/ISSUES**

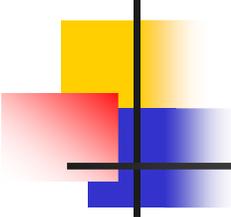
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# Model Quality Assurance

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- How to QA accuracy?
- Who?
- When?



# FIMS Modifications

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- Should Utility plants be listed in FIMS as buildings i.e. steam, sewage, water treatment, pumping stations?
- Should distribution systems be broken out by size & material systems?