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Subject: Assessment of initial Primavera Project Planner (P3) nuclear power plant construction schedule relative to Construction Inspection Program Information Management System (CIPIMS) architectural assumptions

Summary:

Initial evaluation of the demonstration P3 nuclear power plant construction schedule confirmed the ability to successfully import P3 schedule data via the Pervasive Open Database Connect (PODC) driver. Additionally, the use of Microsoft Access 2002/2003 as a host platform for the CIPIMS application on the construction site and mobile inspection devices and its ability to support a 60,000+ line P3 construction schedule appear viable. However, the demonstration P3 schedule group in its current configuration proved to large for the Primavera Sure Trak 3.0 product and is better suited to Primavera Project Planner product suite. This limitation may present challenges in the near real time synchronization of changes to Licensee schedule data after the import of the initial full construction schedule. Integration of the Primavera Project Planner product suite is not deemed cost effective as the Construction Inspection Program (CIP) shall at no time alter the Licensee construction schedule nor impose critical path or obligatory activities upon the Licensee schedule.

Schedule Considerations:

Units of Schedule Measurement:

Universal Time (UT):

The possibility of geographically dispersed offsite fabrication activities and facilities necessitates the need for a central point of reference (Universal Time) for the tracking of schedule activities to ensure the effective and efficient scheduling and management of inspection resources.

Weekends:

How will work activities over weekends be handled?

Holidays:

A common point of reference for holidays that may result in an interruption of construction activities should be established.

How does the possibility of geographically dispersed offsite fabrication activities and facilities factor into holidays that may result in an interruption of construction activities?

Scheduling Unit:

The standard scheduling unit will be a day. It is envisioned that CIP staff will coordinate daily as to start and stop times and locations of specific job site activities scheduled to occur during the day.

Period of Performance:

What is the expected work day? (8 Hrs, 12 Hrs, 24, Hrs)

Planning Horizons:

Identification of a common set of planning horizons will help facilitate improved coordination and communications between the Licensee, NRC HQ, and CIP staff.

2 Week Horizon:

Minimum planning horizon. Dynamically scheduled, coordinated and managed at the job site. Execution of activities within the 2 week horizon are considered to be relatively certain.

1 Month Horizon:

Minimum planning horizon for coordination of activities between NRC HQ and job site. Fairly certain look ahead schedule.

3 Month Horizon:

Short range planning horizon for coordination of activities between NRC HQ and job site.

6 Month Horizon:

Near-term planning horizon for coordination of activities between NRC HQ and job site.

1 Year + Horizon:

Long range planning horizon for coordination of activities between NRC HQ and job site.

Schedule Resolution:

What is the appropriate schedule resolution to adequately identify activities, major milestones, and critical inspection points ?

Level 1 Scheduling:

Planning without resources

Level 2 Scheduling:

Monitoring progress without resources

Level 3 Scheduling:

Scheduling with resources

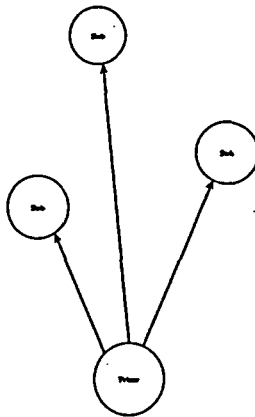
Level 4 Scheduling:

Monitoring progress of a resource schedule

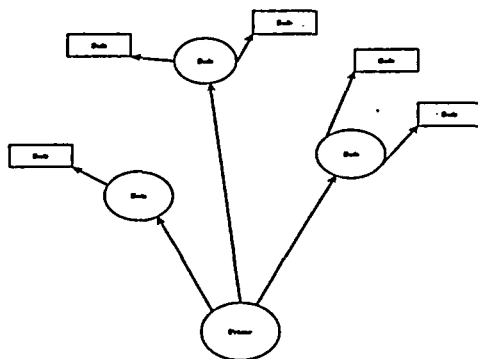
Offsite Fabrication Relationships:

How will various offsite fabrication relationships and scheduling be handled to ensure adequate inspection of activities and materials at offsite fabrication facilities?

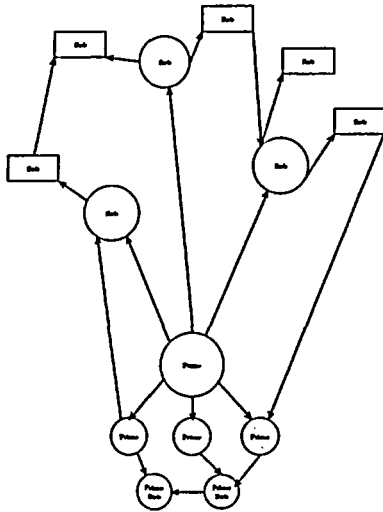
One to One:



One to Many:



Nested:



Standardized Coding Schema:

Inspection and inspection related activities leading to an ITAAC certification should be handled as legal transactions with a clear initiation and conclusion (Federal Register Notice indicating ITAAC Certification) that is supported by referenced materials indexed and related as to clearly define the inspection process and support the inspection findings, and ITAAC verification and certification. Adoption of a common standard coding schema will provide a credible traceability and audibility of the inspection process at a resolution previously not available to the NRC. The following are areas of opportunities where the nuclear industry and NRC may collaborate to improve the effectiveness, efficiency, and realism of its various relationships, communications, and activities:

- **Activity ID Schema**
- **Grouping Schema**
- **Activity Type Schema**
- **Component Schema**
- **Location Schema**
- **ITAAC Mapping**
- **Inspection Point Mapping**
- **Work Item Status**