



CTF Meeting 31 Jan 03

LV System Project Outline Plan

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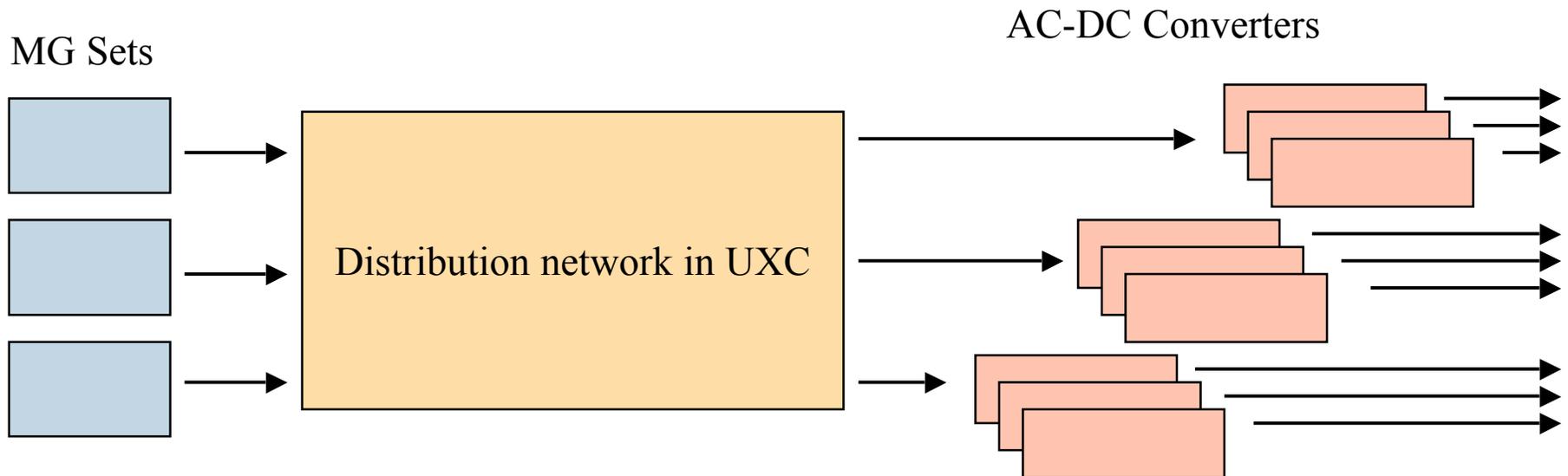
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Scope of LV System

Need to define limits of LV system responsibilities:

- Need to understand division of responsibilities between FNAL and CERN
 - Which parts to be handled by whom?
 - Design oversight?
 - Installation of distribution network?
- Need scope of LV system responsibilities documented





Scope of LV system cont...

Need to define services supplied to subdetectors

- **LV power (of course)**
 - Power for racks?
 - Who will supply regulation?
 - Who will design regulation?
 - Controls? Inhibit?
- **Interface with DCS**
- **Interface with DSS**
- **Counting room?**

Need to define process of setting LV requirements between LV project, detector subsystems and commercial suppliers



Immediate Objectives ...

Expect by CMS Week:

- **Establish liason with ea. subdetector**
 - Names of contact persons playing a role for setting LV requirements
- **Requirements document from each subdetector**
 - To be consolidated into CMS internal note to serve as reference document
- **Cost estimate**

End of '03:

- **Basic AC-DC converter design understood**
- **First-order prototypes seeded to subdetector groups for testing and evaluation**
- **Full liason with CERN engineers on installation of distribution system in experimental cavern**
- **Integration of LV system with CMS detector**



Longer Range ...

Beyond '03:

- **Partial LV system “slice” installed at SX5**
 - Functional testing
 - Validate integration design
 - Useful for commissioning of subdetectors
 - **But this is to be understood as commissioning exercise, not as commitment to supply LV services to subdetectors in SX5**
- **Magnet test**
 - Representative elements of all parts of LV system should be in place on detector by time of magnet test
- **Finalization of AC-DC converter prototypes**
- **Converter fabrication**
- **Installation of LV distribution in experimental cavern**