NIST – Color Chart

Conduit Color Chart	Label Color Chart	Wiring Device Color
Normal Power Branch – Grey	Grey w/ white letters	Grey
Emergency Life Safety Branch – Yellow	Yellow w/ black letters	Yellow
Normal Power Research Branch – White	White w/ black letters	White
UPS/Generator Research Branch – Black	Black w/ white letters	Black
Emergency Telecomm Branch – Orange	Brown w/ white letters	Orange
Emergency Equipment Branch – Green	Green w/ white letters	Green
Mechanical Controls – Blue	Blue w/ white letters	Blue
Fire Alarm/VESDA - Red	Red w/ white letters	Red
Security – Purple	Purple w/ white letters	n/a

Note: “Branch” means entire path from main switchboard down to branch circuit device.

Electrical Naming Convention – rev4

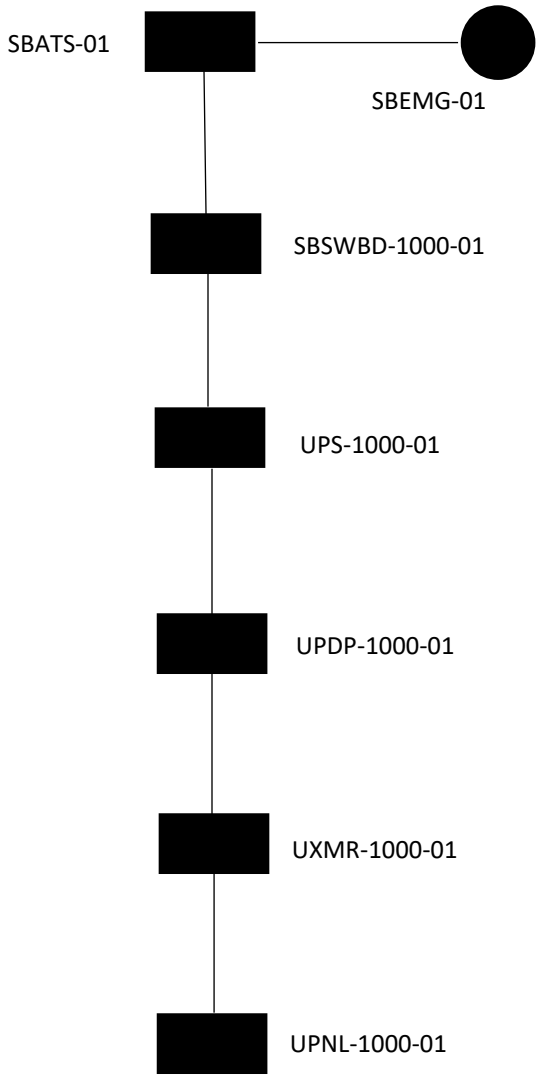
Equipment	Maximo ID	Label
Switchgear	B##-SWGR-####-##	SWGR-##-####
Switchboard	B##-SWBD-####-##	SWBD-####-##
Motor Control Center	B##-MCC-####-##	MCC-####-##
Power Distribution Panel (e.g. I-Line or Pow-R-Line 4B styles)	B##-PDP-####-##	PDP-####-##
Branch Distribution Panel	B##-PNL-####-##	PNL-####-##
Transformer	B##-XMR-####-##(#)	XMR-####-##(#)
	The third digit in the second grouping is meant for service entrance transformers only, e.g. XMR-001.	
Bus Duct	B##-BD-####-##	BD-####-##
Feeder Bus	B##-FB-####-##	FB-####-##
VFDs	B##-VFD-####-##	VFD-####-##
UPS	B##-UPS-####-##	UPS-####-##
Generator	B##-EMG-####-##	EMG-####-##
Automatic Transfer Switch	B##-ATS-####-##	ATS-####-##
Disconnect (CB or fused switch)	B##-DS-####-##	DS-####-##
Network Protector	B##-NP-####-##	NP-####-##
	The last "##" digits refer to the transformer #, from which the NP is fed. For example: NP-073 is the network protector fed from XMR-073. If the NP is in a room, e.g. NP-1065-001.	
Pad Mounted Switch	BOULDER-PMS-##-##	PMS-##-##
	Named w/ associated man-hole. E.g. PMS-15-01 would be pad mount switch on man hole 15, switch #1, or PMS-1A-01 is pad mount switch on mand hole 1A, switch #1.	
Air Switch	B##-AS-####-##	AS-####-##
High Speed Switch	BOULDER-HSS-##	HSS-##
Man Hole	BOULDER-MH-##	MH-##

B## - Denotes Building number numeric. #### - Denotes room/column line. ##- Denotes numeric (in some cases, this could denote a numeric/alpha character, e.g. MH-1A).

Notes:

- Use a numeric to identify equipment, e.g. SWGR-####-**01**, XMR-####-**05**, etc.
- Two general naming conventions for indoor or outdoor equipment:
  - Indoor equipment shall have an additional identifier added to the middle of the equipment name, designating the room where the equipment is installed, e.g. SWGR-**2K111**-01.
    - If the equipment is installed in a hallway, corridor (with no hallway or corr #) or non-descript room, utilize the nearest column designations, e.g. PNL-**A15**-01.
  - Primary voltage rated outdoor equipment (13.2kV) will have no identifier after its numeric name, e.g. HSS-**01**.

    - Outdoor equipment rated at utilization voltage levels (600V and below) will be identified by the designator “B##X”. For example, a 15 kVA dry type transformer, located outside of B02 would be designated as XMR-**02X**-01.
- Recommend adding an “SB” for emergency or standby power in front of a given equipment identifier. For example: **SB**SWGR-1800-01, **SB**PDP-1800-01, **SB**ATS-01, etc.
- For life safety, utilize “LS”, e.g. **LS**PNL-1000-01, **LS**ATS-1000-01, etc.
- Utilize a “M” designator for mechanical loads.
- Utilize “IT” for IT designated loads.
- Utilize “U” for UPS loads.
- Distinction shall be made for those systems that are on standby power and have a stationary UPS system. For example:



Those items including the generator, ATS, downstream equipment off of the ATS but before a UPS, shall use “SB” designators.
Those items downstream of the UPS shall have “U” designators.
If there was no UPS in the system, the system naming would comprise of all “SB” designators.

- An example of a full Maximo technical ID would be: 01-SBSWGR-1000-01, 01C-SWGR-1000-01, 02-PDP-1000-01. Even if room #'s duplicate between buildings which could possibly result in duplicate equipment names, Maximo will have unique identifiers, as the building # is a part of the Maximo asset name.
- Outdoor equipment which services a given building, will still receive a building numeric in its Maximo technical ID, e.g. 12-XMR-052 is the outdoor, padmount transformer that serves Bldg. 12.
- With regards to feeder bus and bus duct naming. The name of the run will be dependent on where the feeder/bus duct receives its electrical feed. For example, if the bus duct, cable tap box is installed in room 1000, then the asset name would be: BD-1000-01, regardless if the entire run spans a number of rooms or floors.
- Not all Equipment entered into Maximo will receive a job plan.
- We will have to be diligent about maintaining unique numeric names for outside/indoor service entrance transformers. Since the site MV one line has all of the service entrance transformers on the drawing, it could get confusing if there were duplicate names on one drawing.
- "BOULDER" is used in the Maximo asset name to identify outdoor equipment that does not service one area. Pad mount switches, man holes and high-speed switches will use this descriptor.
- Use no more than two designators for a given piece of equipment. For example, a mechanical panel on standby could be identified as SBMPDP-1000-01 beginning with the upstream electrical system and then finally the connected load. UITPNL-1000-01 would be used for IT equipment on the standby generator/UPS system.
- Main-Tie-Main switchgear configurations shall be named as -01 & -02. For example: SWGR-2000-01 & SWGR-2000-02. For those switchgear configurations that have no tie, but have dual mains, only use one designator, e.g. SWGR-3000-01.

UPDP-1000-01

480/277V, 3ph, 4W, 600A

Fed from UPS-1000-01

Example of a power distribution panel (for a lab area) on UPS.

PNL-1000-01

208/120V, 3ph, 4W, 100A

Fed from XMR-1000-01

Example of a branch circuit panelboard on “house” power.

- Label standard: 5”H x 7”L, phenolic style labels. Colors as indicated below: