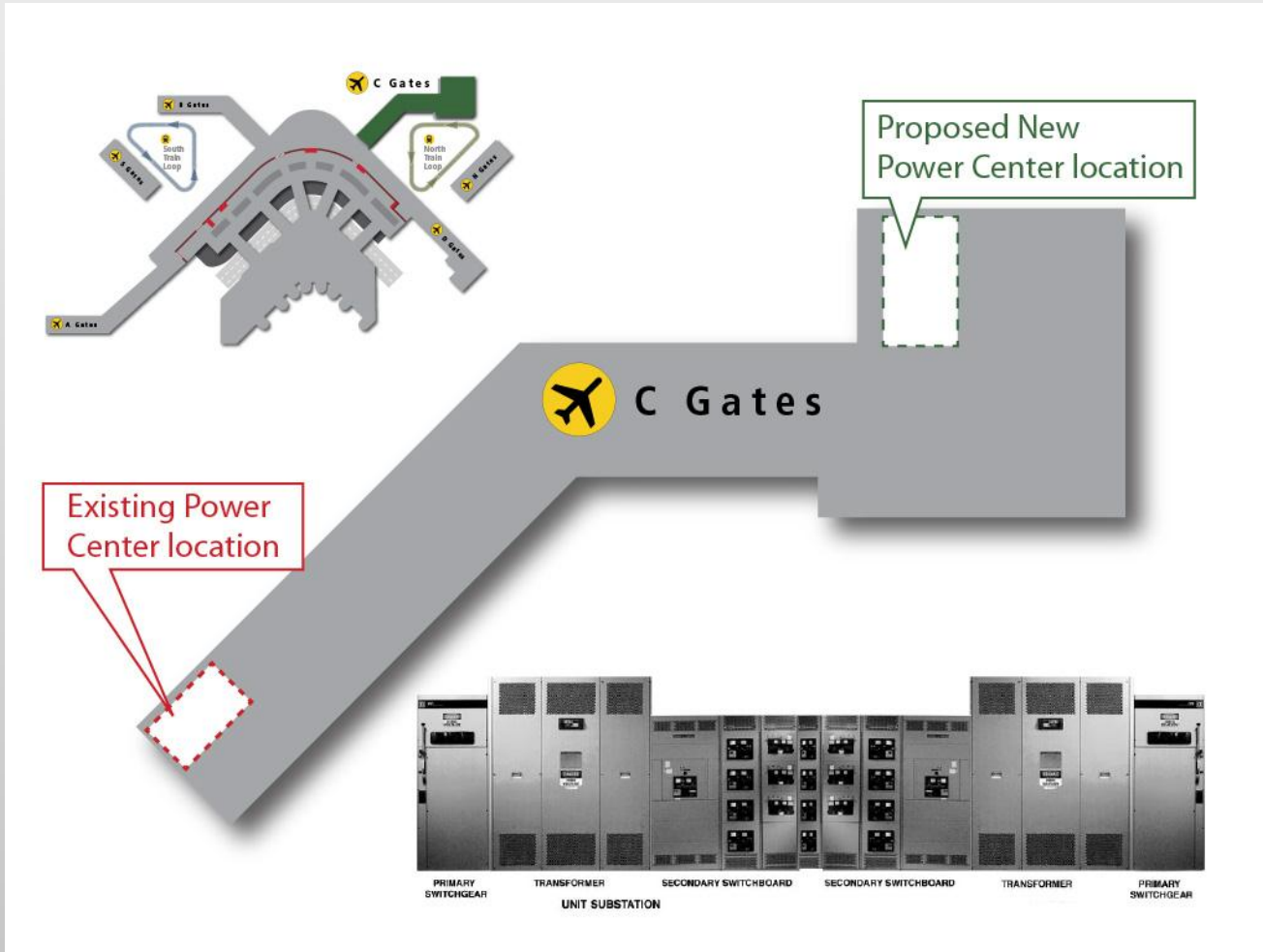


# Concourse C – New Power Center

Commission Briefing  
September 22, 2015

# Project Location



**New Power Center will serve power needs at North end of Concourse C.**

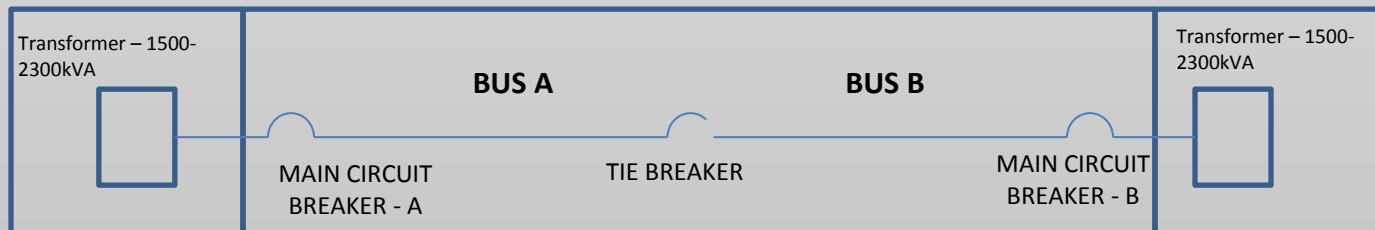
# Three Issues on Concourse C

1. Existing Concourse C Power Center is close to maximum capacity
  - no power for new projects/equipment.
2. Fire zones in Concourse C are compromised
  - unsafe conditions for emergency response.
3. Obsolete distribution equipment at existing electrical room
  - Risk of failure, no replacement parts.

**Concourse C has inadequate power capacity, and outdated equipment.**

# Existing Concourse C Power Center

1. Two separate power feeds for redundancy and reliability.
2. Each Bus can be loaded to 1000A Maximum.
3. Projected loads over next three years put us over the maximum allowed load.
  - No new electrified equipment.
  - Impacts operations, airline tenants, ADR.



**Existing Power Center on Concourse C will be overloaded in 3 years.**

# Fire Zones

1. Electrical Power Distribution Fire Zones.
  - All equipment in a fire zone to be powered by a power source within the same zone.
  - Some Concourse C loads are currently fed from the C1 Power Center, located in a different fire zone.
2. Project will re-feed loads from the new Power Center, re-establishing fire zone integrity.

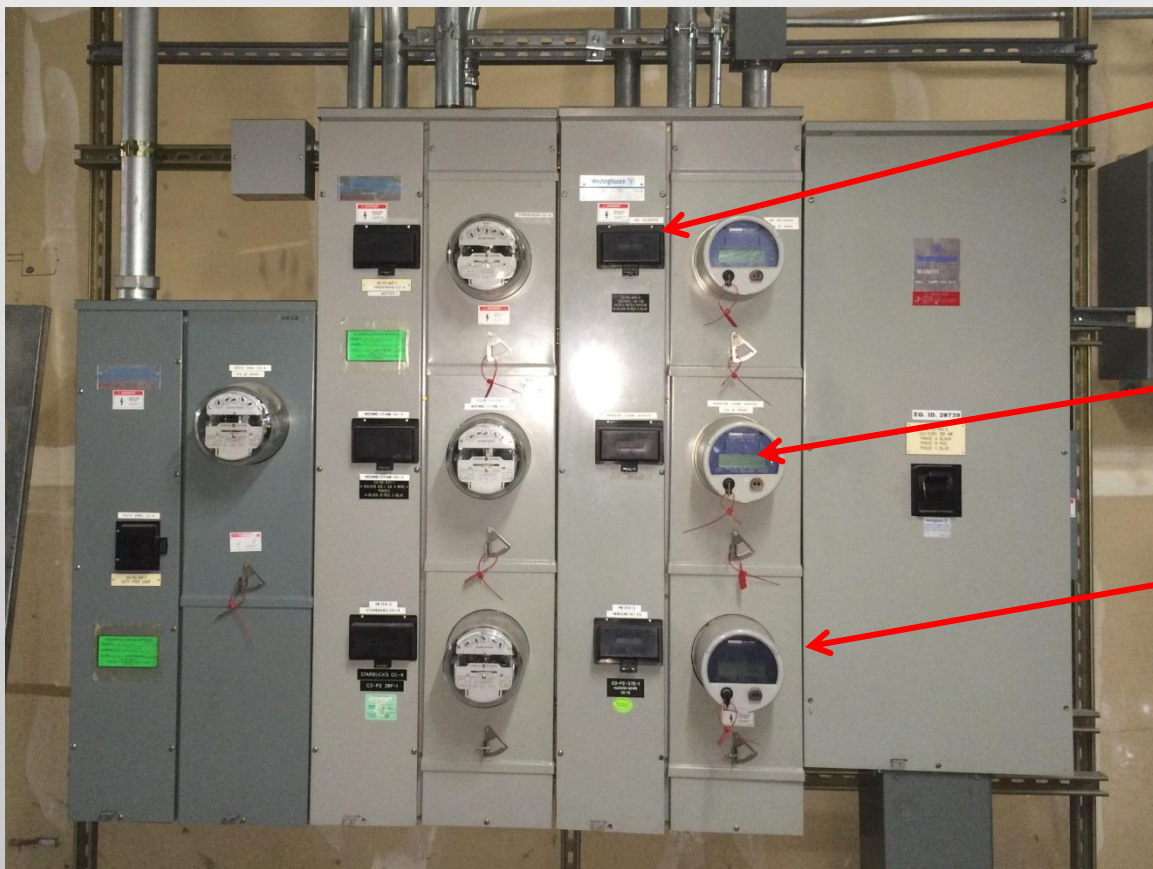
Project will improve safety

# Electrical Distribution Issues

1. Distribution equipment at end of Concourse C does not have spare capacity.
  - Branch circuit panels have few or no spare breakers.
  - Tenant panels are obsolete configuration with outdated meters.
  - Power for new Tenant spaces is minimally available, installation is expensive.
2. Project will replace old panels and install new distribution with ample capacity.

**Obsolete equipment and inadequate capacity cannot power future needs.**

# Outdated Distribution Panel



Replacement breakers not available – failure will result in extended outage

Meters not networked – manual meter readings required

Modules no longer manufactured – cannot add new tenant services

Obsolete equipment poses risk of unplanned, extended outages.

# Risk of Status Quo

1. Existing Concourse C Power Center projected to be at maximum capacity within the next 3 years.
2. New projects will not be able to install electrical equipment.
  - Airline tenant projects, ADR, operations could be impacted.
3. Risk of unplanned and extended outages.
  - Existing equipment is reaching end of life, may fail with no available spare parts.

Doing nothing poses failure risks and will limit our ability to support growth.



# Opportunities

Combining this project with the eGSE Phase 2 project for the construction phase provides opportunity to:

- Manage one Major Contract
- Accelerate schedules for both projects.
- Reduce design and construction costs.
- Consistency of design, supply and installation of major equipment.

**Accelerated schedule and reduced cost by combining with eGSE Phase 2.**

# Schedule

- Start Design 4<sup>th</sup> Quarter 2015
- Complete Design 1<sup>st</sup> Quarter 2016
- Commission Authorization  
for Construction 1<sup>st</sup> Quarter 2016
- Advertise for Construction 1<sup>st</sup> Quarter 2016
- Substantial Completion 4<sup>th</sup> Quarter 2017

Project schedule will be complete in 4<sup>th</sup> Quarter 2017.

# Project Budget

Estimated project Cost prior to design:

- Design Cost (18.1%) \$1,900,000
- Construction Costs (81.9%) \$8,600,000
- Project Total Cost \$10,500,000

Pre-design estimated cost of \$10.5 million.

# Questions?

