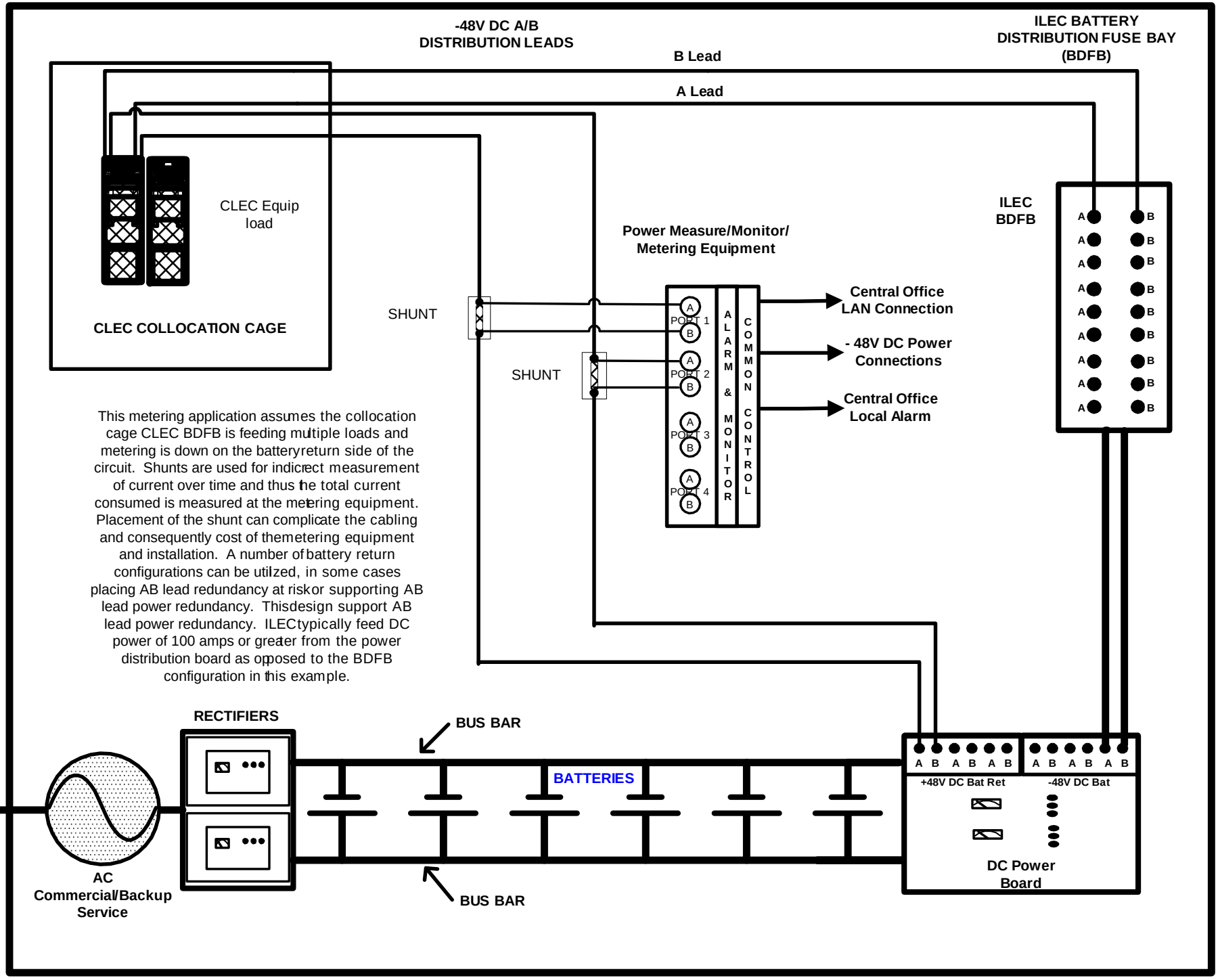
Case No. TO-2005-0336

Direct Testimony of
Don Price

ATTACHMENT DGP - 2


-48V DC A/B
DISTRIBUTION LEADS
ILEC BATTERY
DISTRIBUTION FUSE BAY
(BDFB)
B Lead
A Lead
CLEC Equip
load
CLEC COLLOCATION CAGE
SHUNT
SHUNT
Power Measure/Monitor/
Metering Equipment
ILEC
BDFB
A
B
POWER 1
POWER 2
POWER 3
POWER 4
ALARM & MONITOR
COMMON CONTROL
Central Office
LAN Connection
- 48V DC Power
Connections
Central Office
Local Alarm
This metering application assumes the collocation cage CLEC BDFB is feeding multiple loads and metering is down on the battery return side of the circuit. Shunts are used for indirect measurement of current over time and thus the total current consumed is measured at the metering equipment. Placement of the shunt can complicate the cabling and consequently cost of the metering equipment and installation. A number of battery return configurations can be utilized, in some cases placing AB lead redundancy at risk or supporting AB lead power redundancy. This design support AB lead power redundancy. ILEC typically feed DC power of 100 amps or greater from the power distribution board as opposed to the BDFB configuration in this example.
RECTIFIERS
BUS BAR
BATTERIES
BUS BAR
AC
Commercial/Backup
Service
A B A B A B
A B A B A B
+48V DC Bat Ret
-48V DC Bat
DC Power
Board