

# Application of Notrees Windpower, L.P. for Permanent Exemption from EPS Metering Protocols



**Presented to the ERCOT  
Technical Advisory Committee  
November 7, 2013**

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Stratus Energy Group

on behalf of Duke Energy



# Notrees Wind Farm

- Owned and operated by Duke Energy Renewables
- Located in Ector and Winkler Counties in West Texas
- 156 MW nameplate wind generation capacity





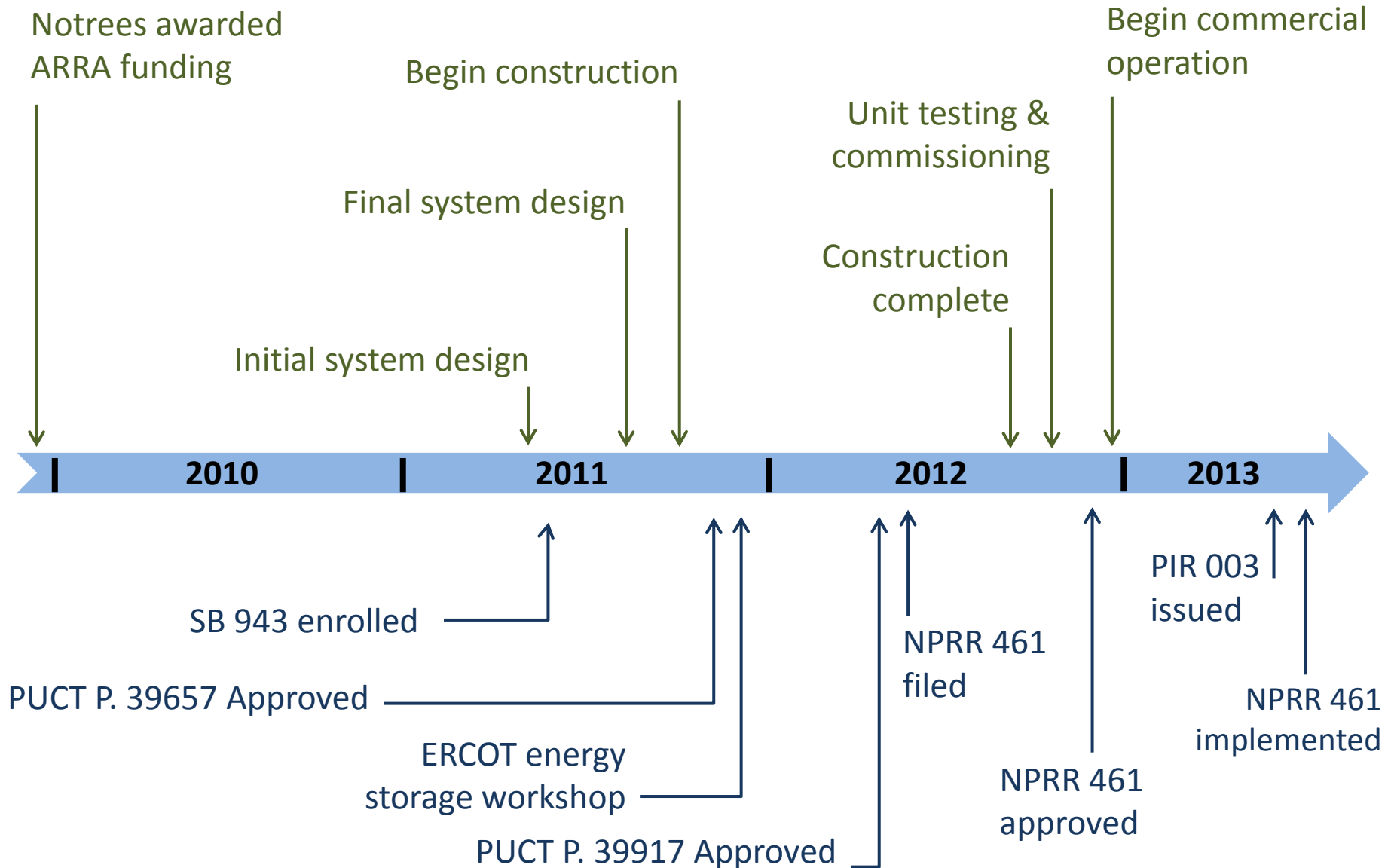
# Notrees Battery Project

- Developed by Duke Energy and Xtreme Power
- 36 MW / 24 MWh output
- Modules housed in 20,000 sq. ft. building
- Construction began Oct. 2011
- Commercial operations began Dec. 2012



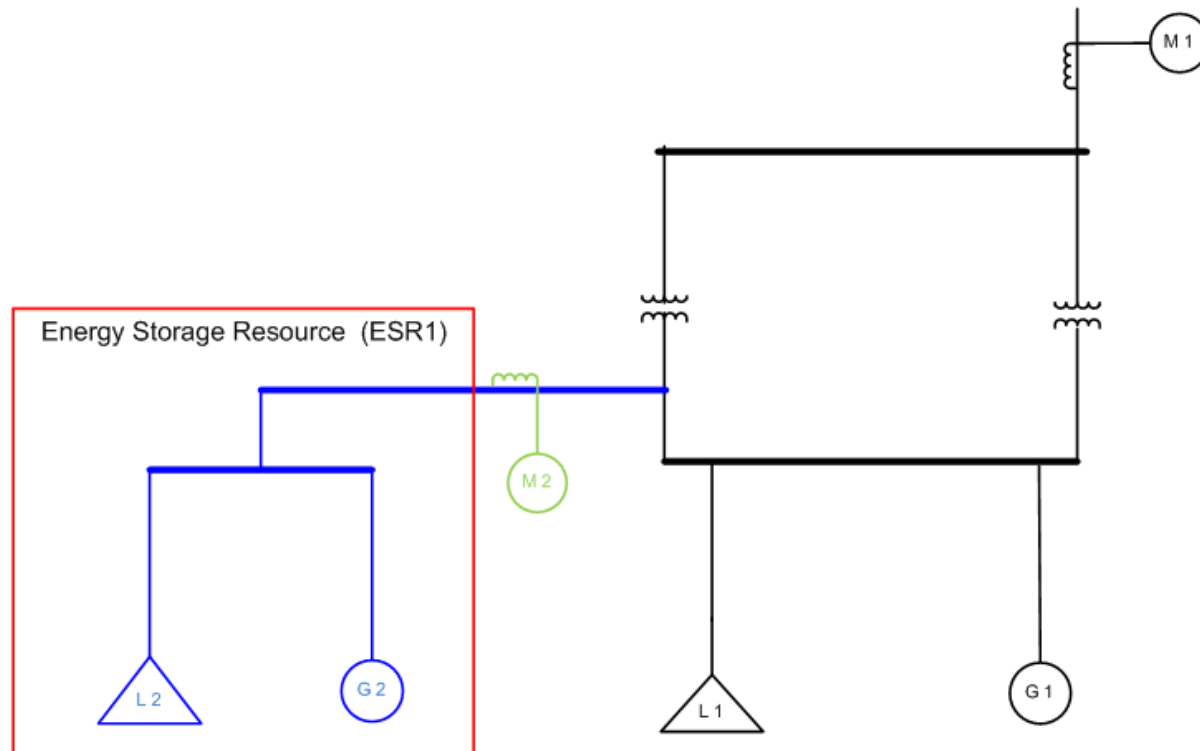


# Timeline





## Questions

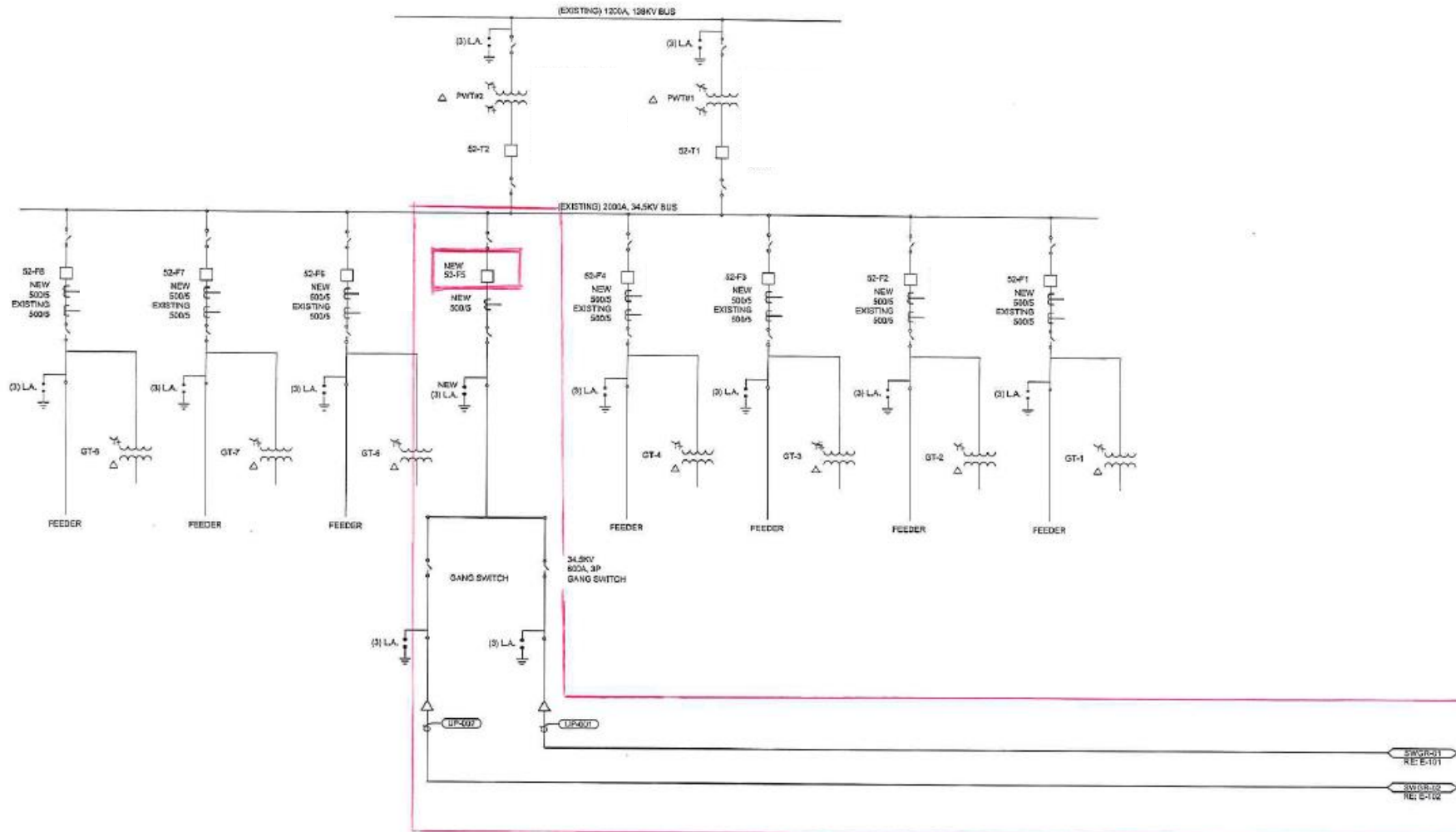




# Notrees proposed metering design

## GENERAL DRAWING NOTES

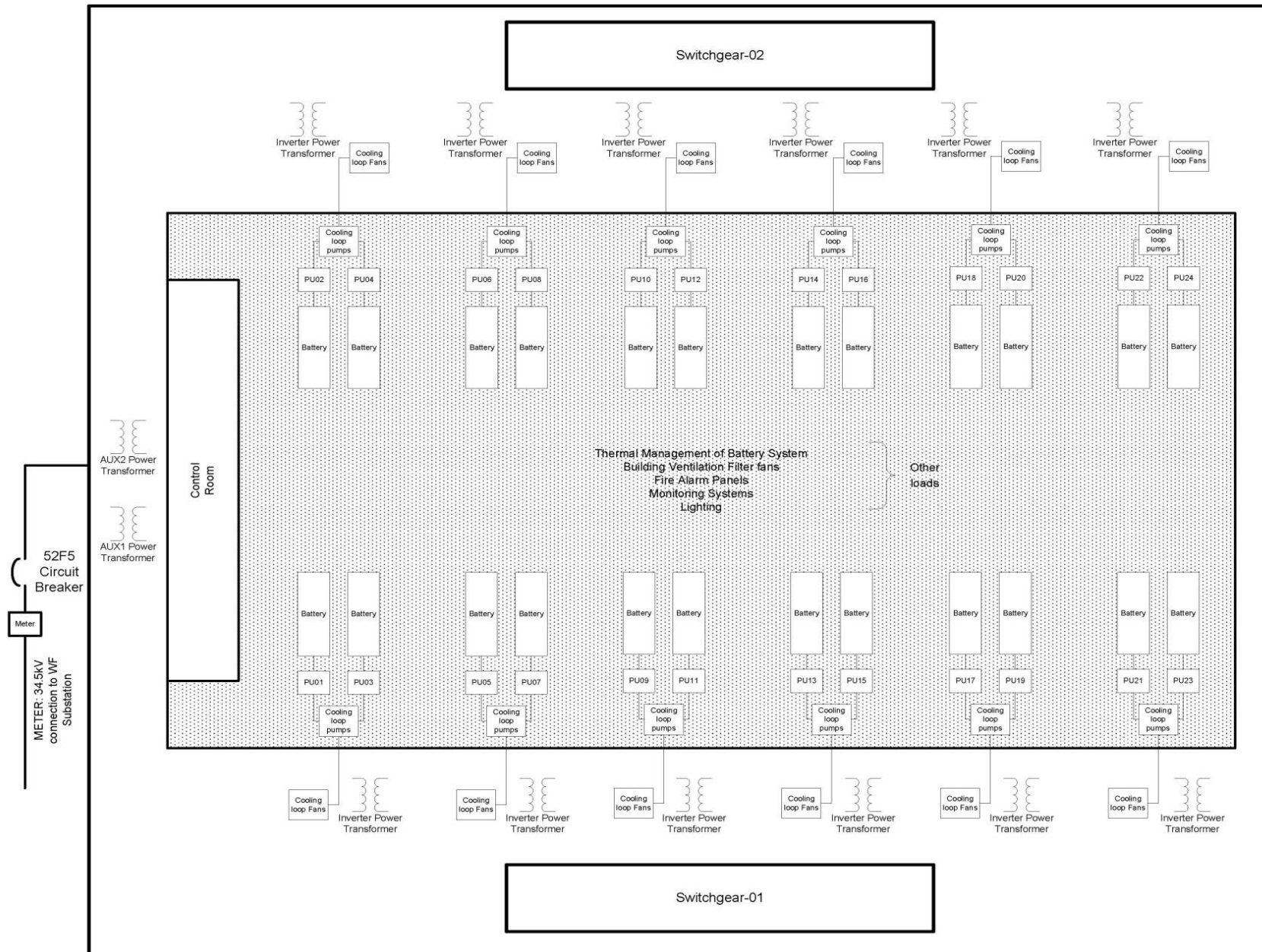
1. ALL P.E.S. & NEW ENGINEERS SHOWN SHALL BE METERING CLASS.
2. EVERYTHING SHOWN ON THIS DRAWING TO BE PROVIDED & INSTALLED BY OTHERS.



<b>Issue Project Consistent</b> 11/01/11 RCB 08/25/11 RCB		<b>Xtreme Power</b> 117991-E-100		<b>EPC</b> 117991-E-100		<b>XTREME POWER</b> DUKE ENERGY FARM ONE LINE DIAGRAM (1)		117991-E-100 0	
0. ISSUE FOR CONSTRUCTION 1. ISSUE FOR REVIEW	11/01/11 RCB 08/25/11 RCB	117991-E-100 0	117991-E-100 0	117991-E-100 0	117991-E-100 0	117991-E-100 0	117991-E-100 0	117991-E-100 0	117991-E-100 0



# Notrees equipment schematic





# Notrees Temporary Metering Design



- Detailed metering design work with ERCOT began in April 2011.
- Notrees and Oncor have operated under an ERCOT-approved temporary metering design since December 2012.
- Permanent exemption will allow continued use of approved temporary design with telemetered values for loads to be excluded from Wholesale Storage Load calculation in accordance with PIR 003.



# Protocols allow exemptions

## ***10.14.1 Authority to Grant Exemptions***

ERCOT may grant on a case by case basis, exemptions from compliance on a temporary basis until new arrangements can be completed in accordance with the guidelines as listed below. Any permanent exemption to this Section requires approval by the Technical Advisory Committee (TAC) and the ERCOT Board. Any permanent exemption shall be subject to periodic review and revocation by the ERCOT Board.



# Duke Energy request



Duke Energy respectfully requests TAC approve its application for permanent exemption from compliance with metering design Protocols for the Notrees Battery Facility.