



# Southeast Arizona Transmission Study (SATS) Update

Presented to the

## SWAT Oversight Committee

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May 19-20, 2009

Albuquerque, NM

# 2009 SATS Meetings

- February 12, 2009
- April 2, 2009
- June 4, 2009
  - Following the SWTC/TEP Joint Stakeholder Meeting



# 2009 Approved Study Plan

- Present plan & subsequent findings to SWAT, WestConnect and to local stakeholders
- Revise load forecasts
- Engage SATS in early case building to ensure accuracy of database for 2009 ten year planning cases:
  - Focus on Arizona for ten year planning to include cases for years 1 through 5 plus year ten;
  - Preparation for ACC ten year plans, RMR, BTA and compliance studies;
  - Provide support and documentation to other regulatory agencies such as FERC and Rural Utilities Service (RUS);
- Investigate implications of increased FMI loads in SATS study footprint:
  - Seek input from, and participation by FMI, to address their anticipated plant expansion.

# 2009 Approved Study Plan

## continued

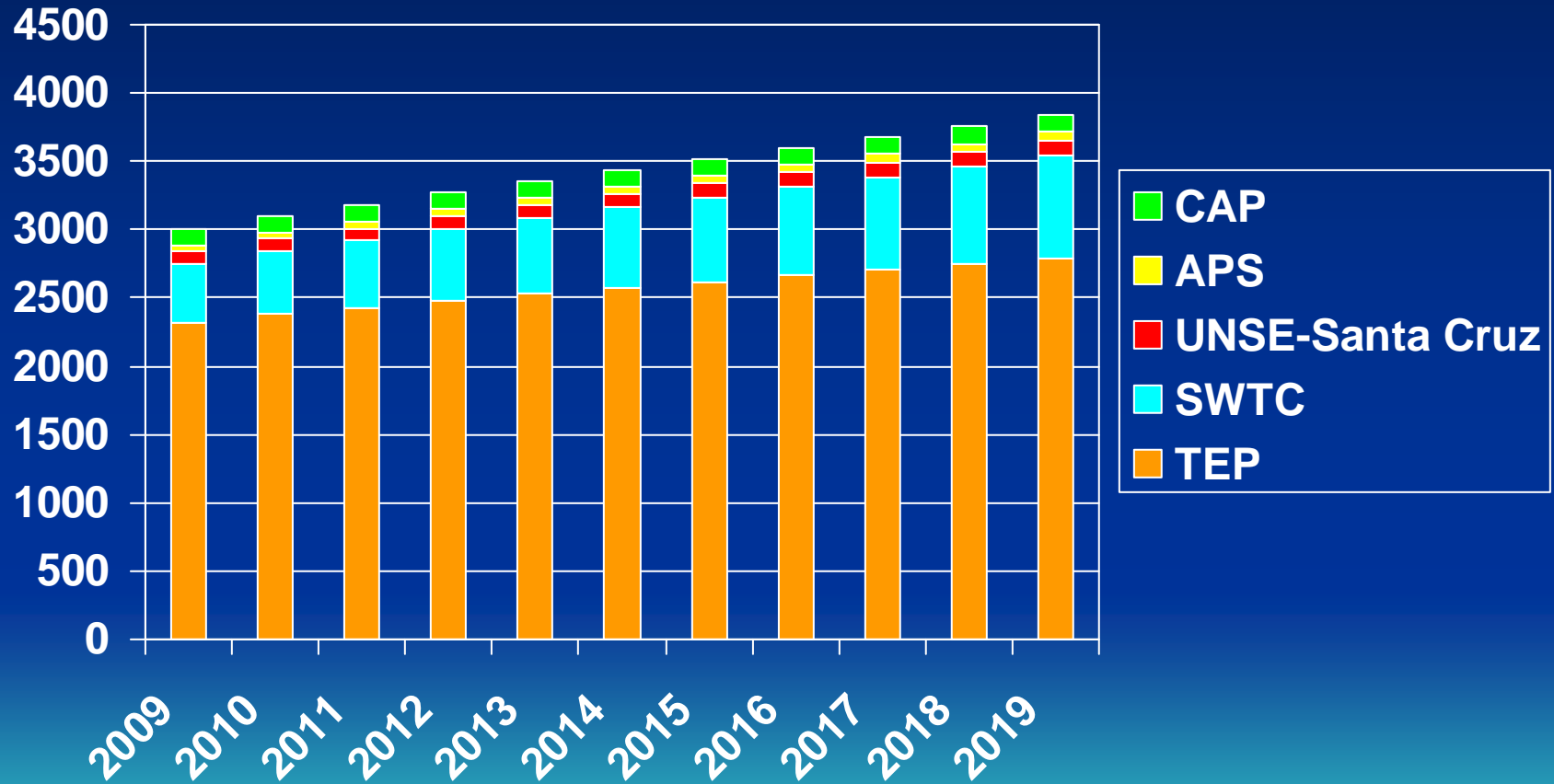
- Investigate alternative configurations to mitigate high flows on the Winchester 345/230kV transformer, Apache – Bicknell 230kV line and 230/345kV Bicknell transformer caused by EHV system contingencies
- Develop and evaluate alternatives to the two joint Tortolita – North Loop 345kV proposals based on the SPPR Three Terminal proposal;
- Investigate impact of SunZia in coordination with CATS-EHV, NM, SWAT RTTF and other entities;
- Develop and evaluate alternatives for joint SWTC/TEP substations to supply TEP/Trico loads south of Tucson;
- Continue Cochise County planning in an effort to comply with ACC recommendations;
- May conduct studies to accommodate renewable projects;
- Complete capital cost estimates and economic analysis, including losses;
- Identify potential projects;
- Conduct Scenario Sensitivity analysis, such as Load Forecast, Efficiency, Local Renewable Resources, Local & Distributed Generation, and location of external resources

# Load Forecasts

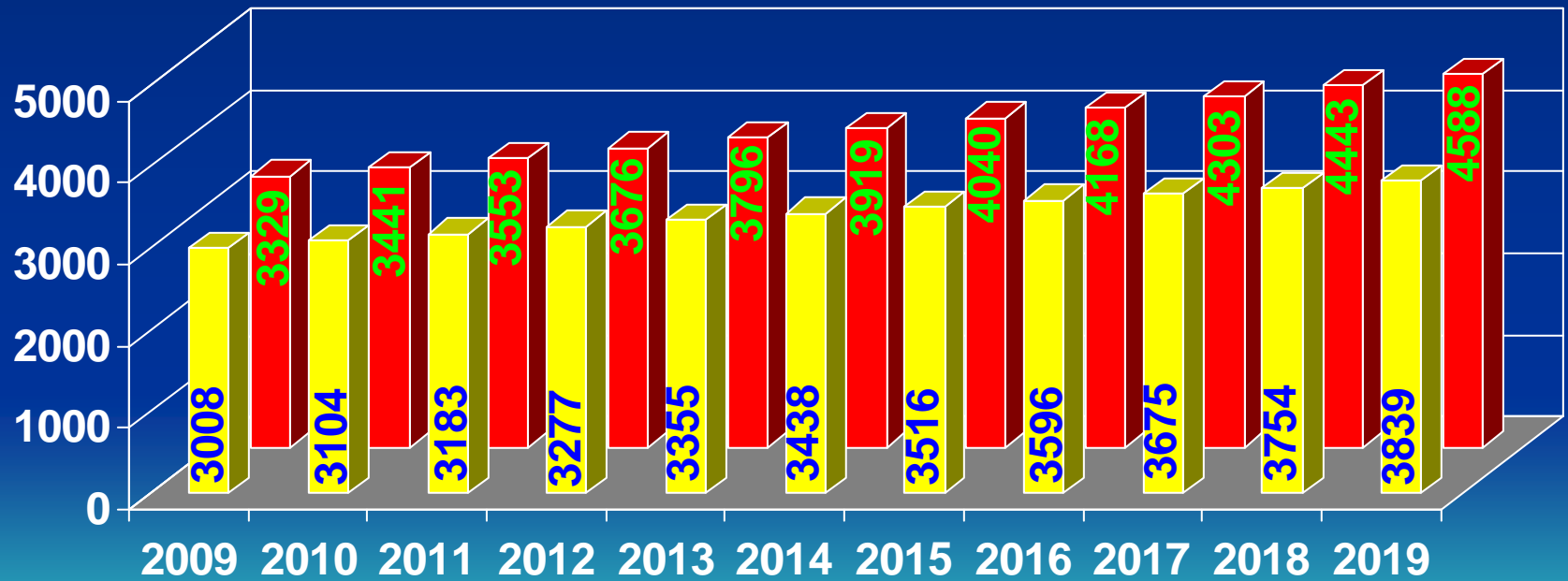
- SATS entities provided updated forecasts in February and March 2009
- SATS forecasted load decreased between 300 MW (2009) and 750 MW (2019) from 2008 forecast




# SATS 2009 Load Forecast



# Comparison of 2008 and 2009 SATS Load Forecasts



# Power Flow Case Development

- 2010 – 2014 and 2019 Heavy Summer Cases
  - Cases sent out for review on February 16<sup>th</sup>
  - SATS Cases
    - 2010 HS – Developed from WECC 09HS3a
    - 2011 – 2014 HS – Developed from WestConnect 2013 case
    - 2019 – Using the CATS-HV 2019 case
  - All cases have been developed and distributed
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# FMI Loads in the SATS Footprint

- FMI invited to SATS meetings.
- Attended April 2, 2009 meeting
- Due to economic conditions no updates to provide



# Cochise County Update

- Study Group Update
  - Study Scope Approved
  - Consultant Hired
  - Expected Completion Date of June 30, 2009
- AZ Senate Bill 1387
  - Gives Fort Huachuca oversight for reviewing permits and other types of construction activities
  - Affects a large portion of the SATS Footprint



# Remaining Activities

- Investigate alternative configurations to mitigate high flows on the Winchester 345/230kV transformer, Apache – Bicknell 230kV line and 230/345kV Bicknell transformer caused by EHV system contingencies
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