

Arizona Corporation Commission Workshop

Sixth Biennial Transmission Assessment

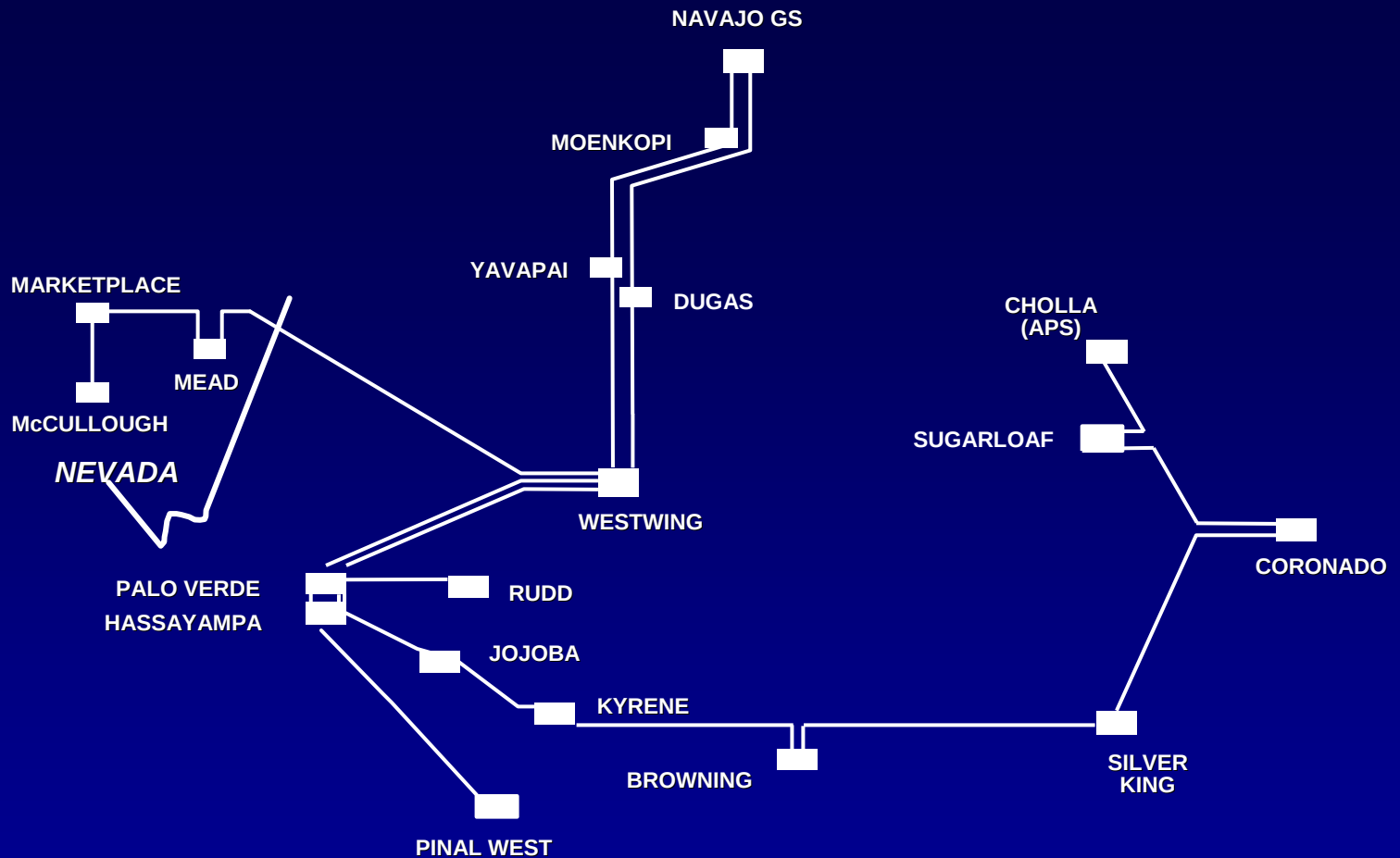
SRP Ten Year Transmission Plan 2010-2019

Chuck Russell, SRP Transmission Planning

**Carnegie Center, Phoenix, AZ
June 3 & 4, 2010**

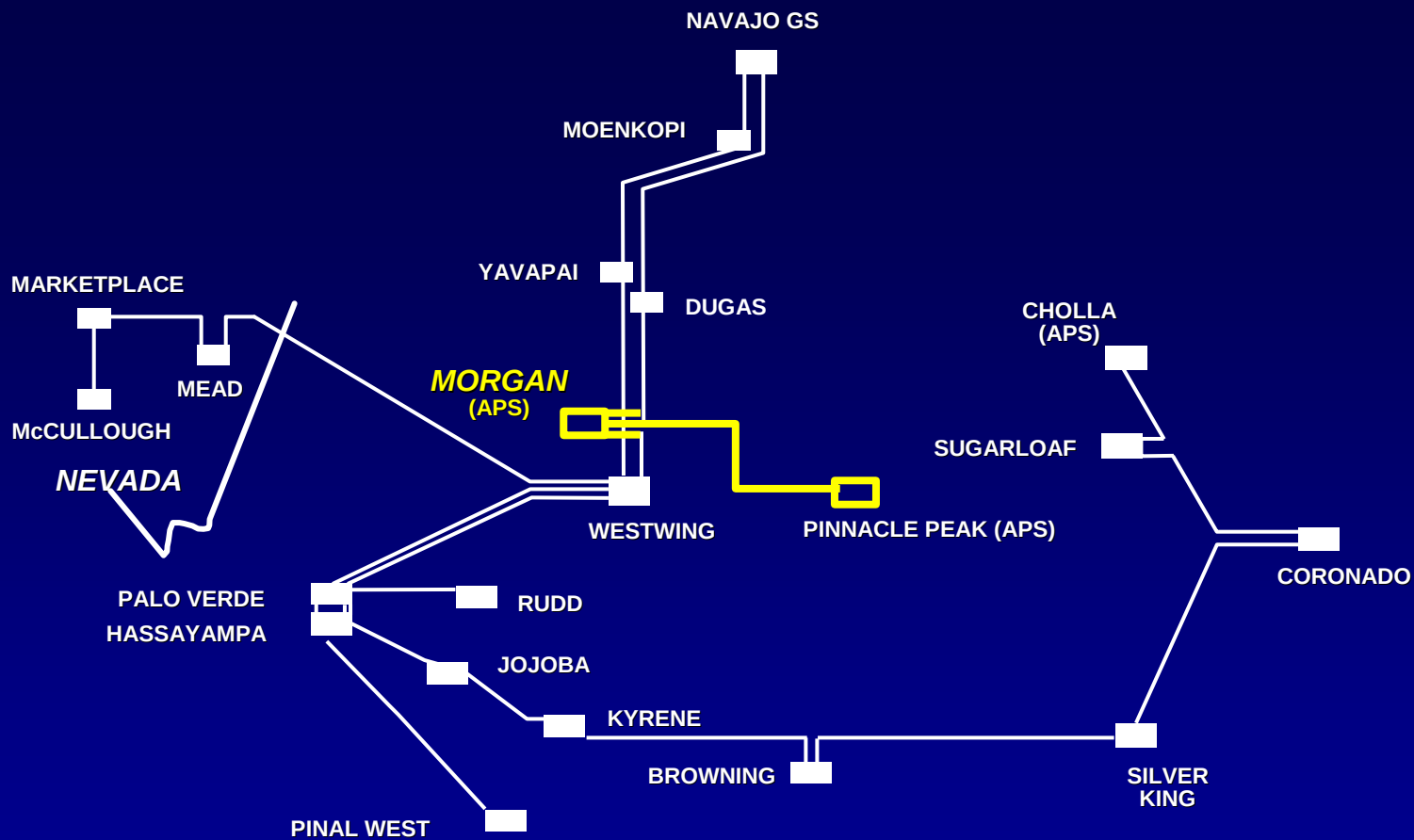


Delivering More Than Power.®



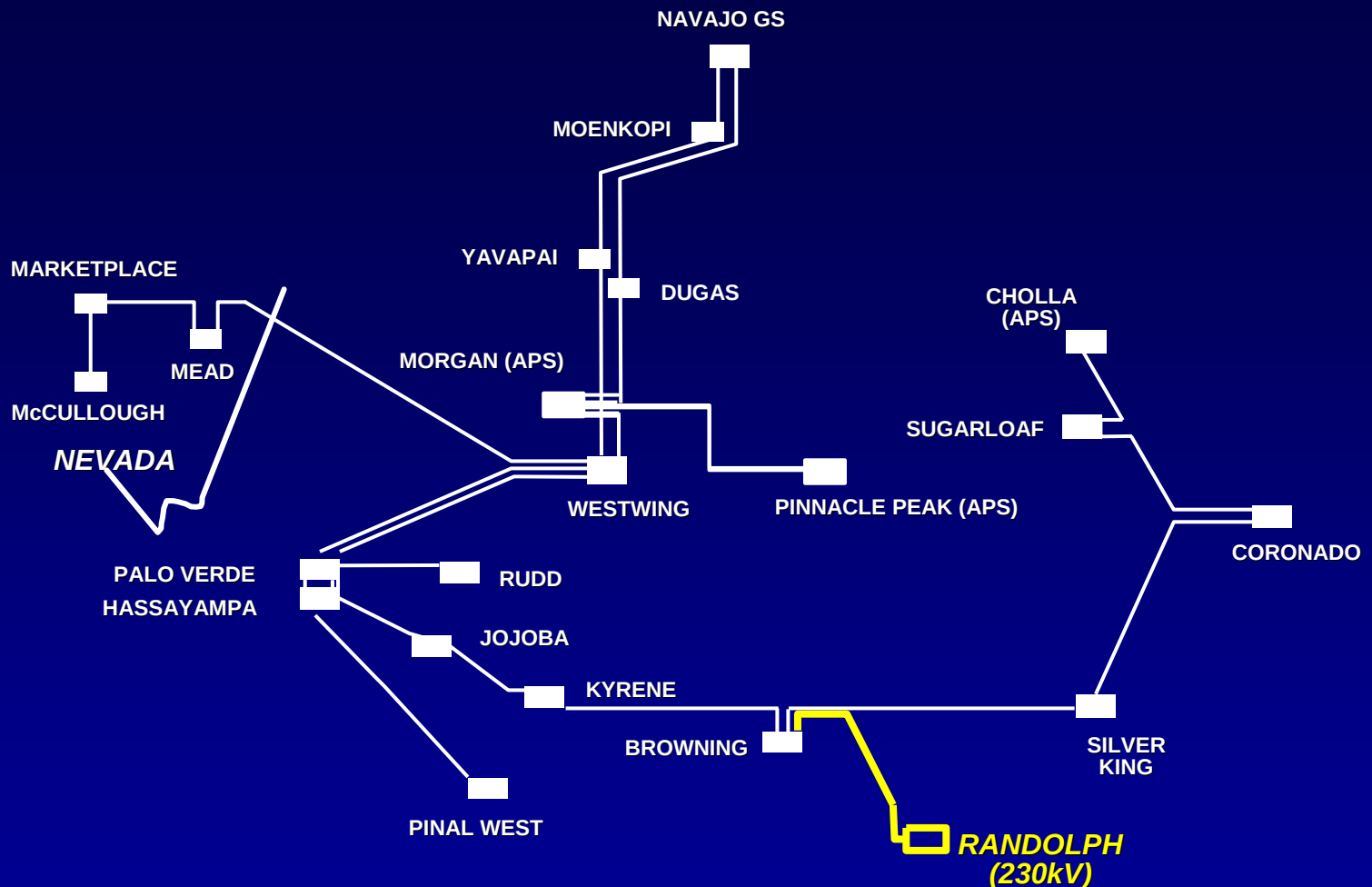
TODAY

**SALT RIVER PROJECT
500kV SYSTEM**



2010

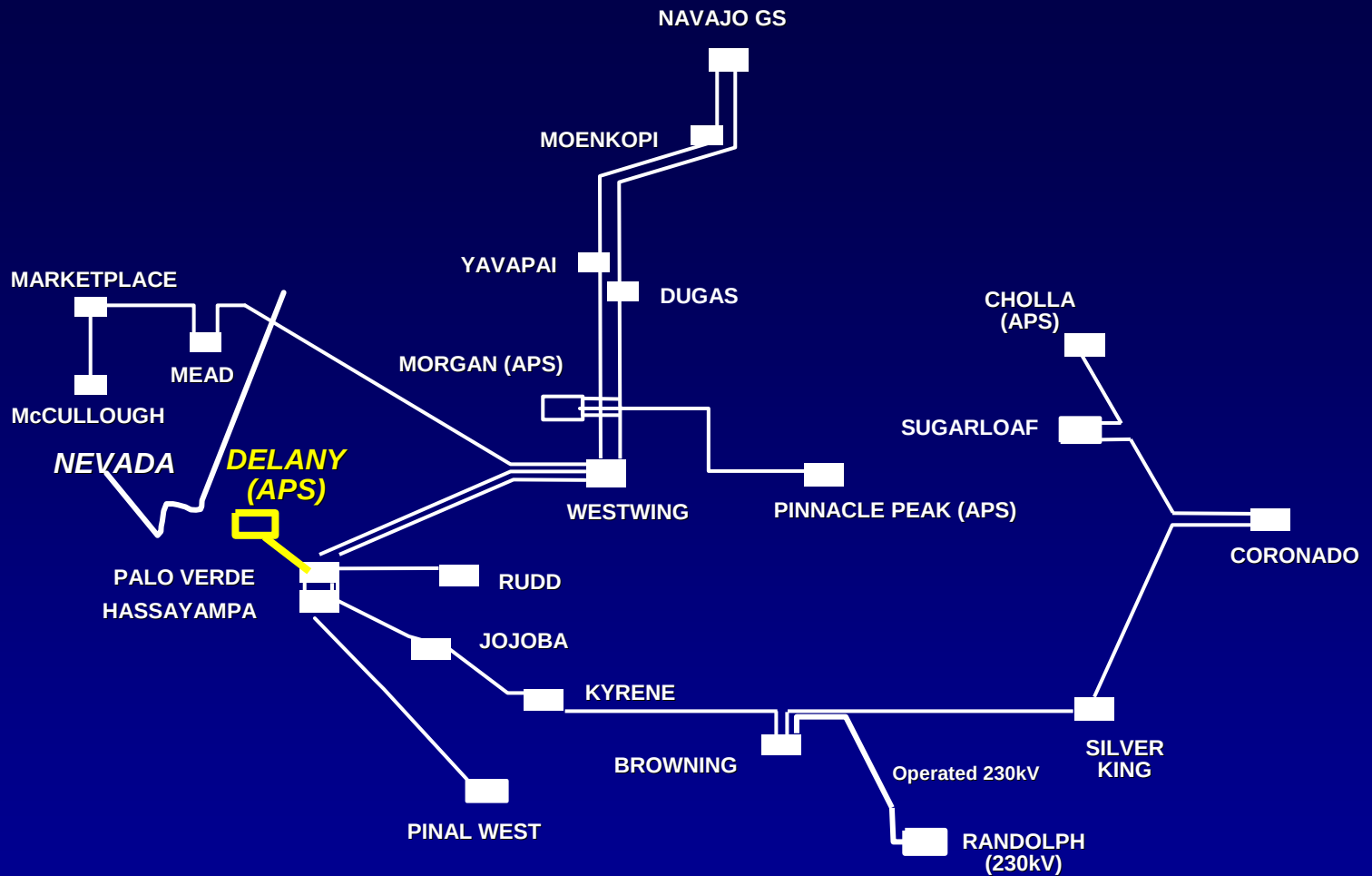
SALT RIVER PROJECT
500kV SYSTEM



**Note: This segment is constructed
500kV, operated 230kV**

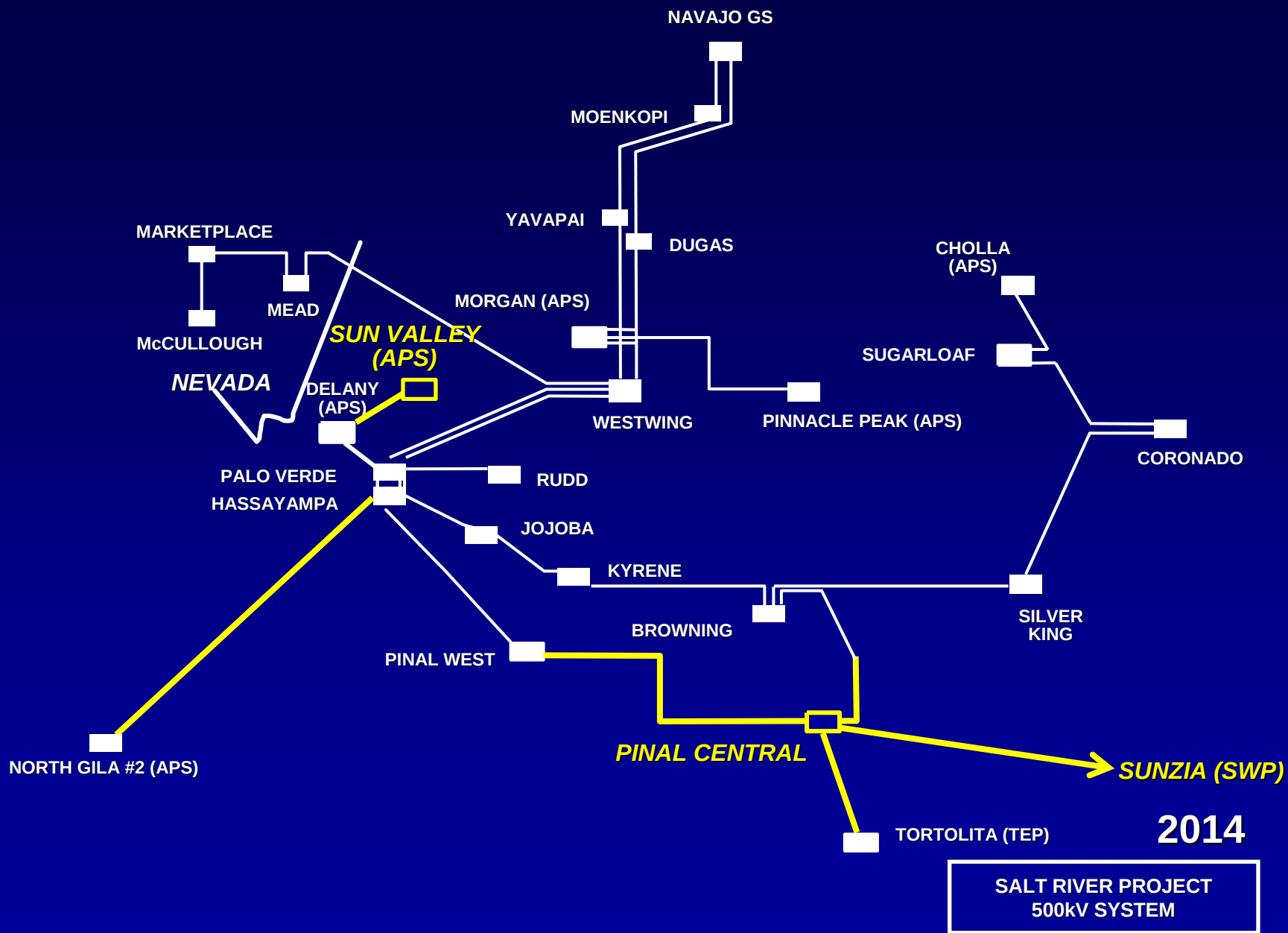
2011

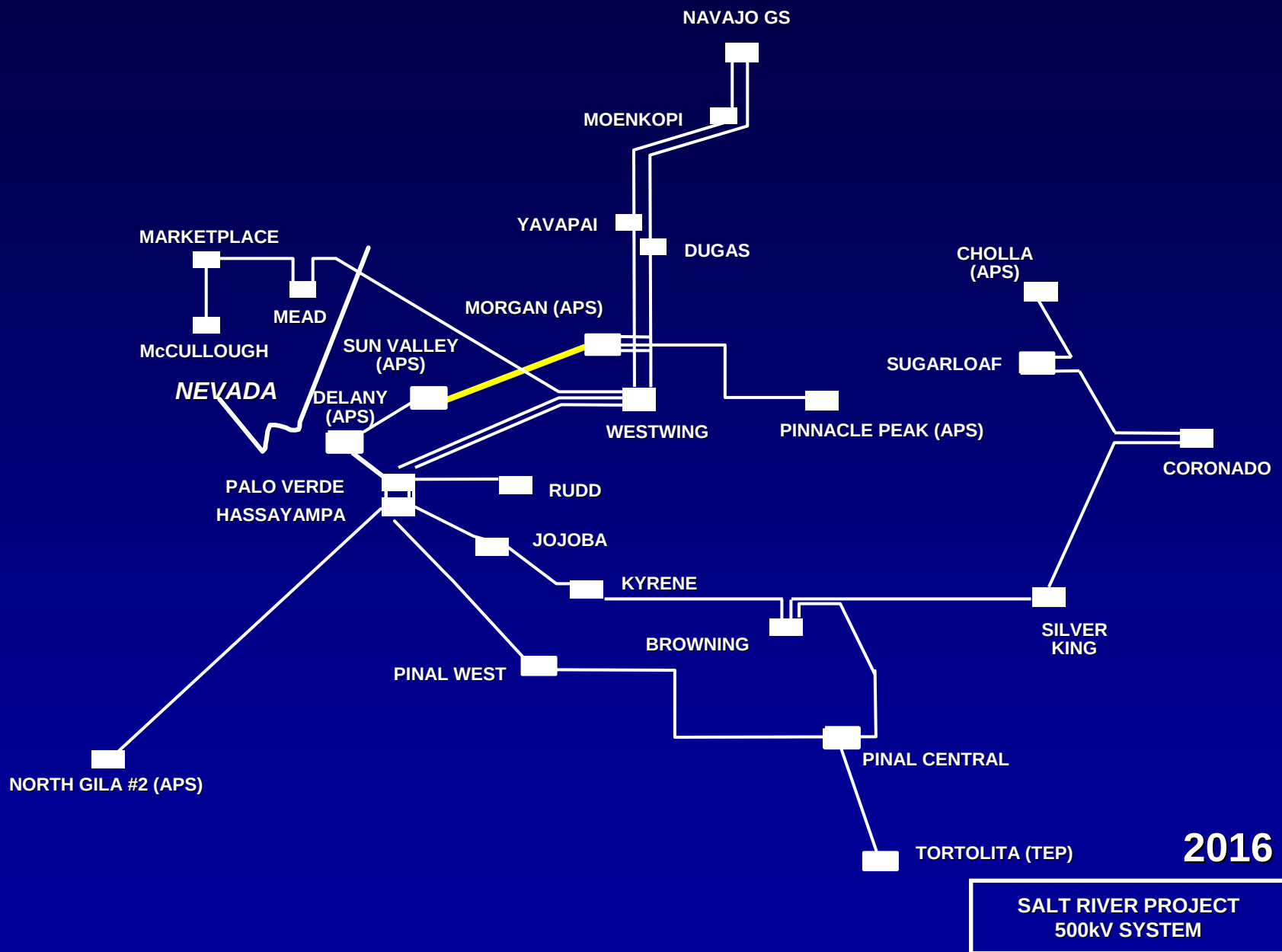
**SALT RIVER PROJECT
500kV SYSTEM**

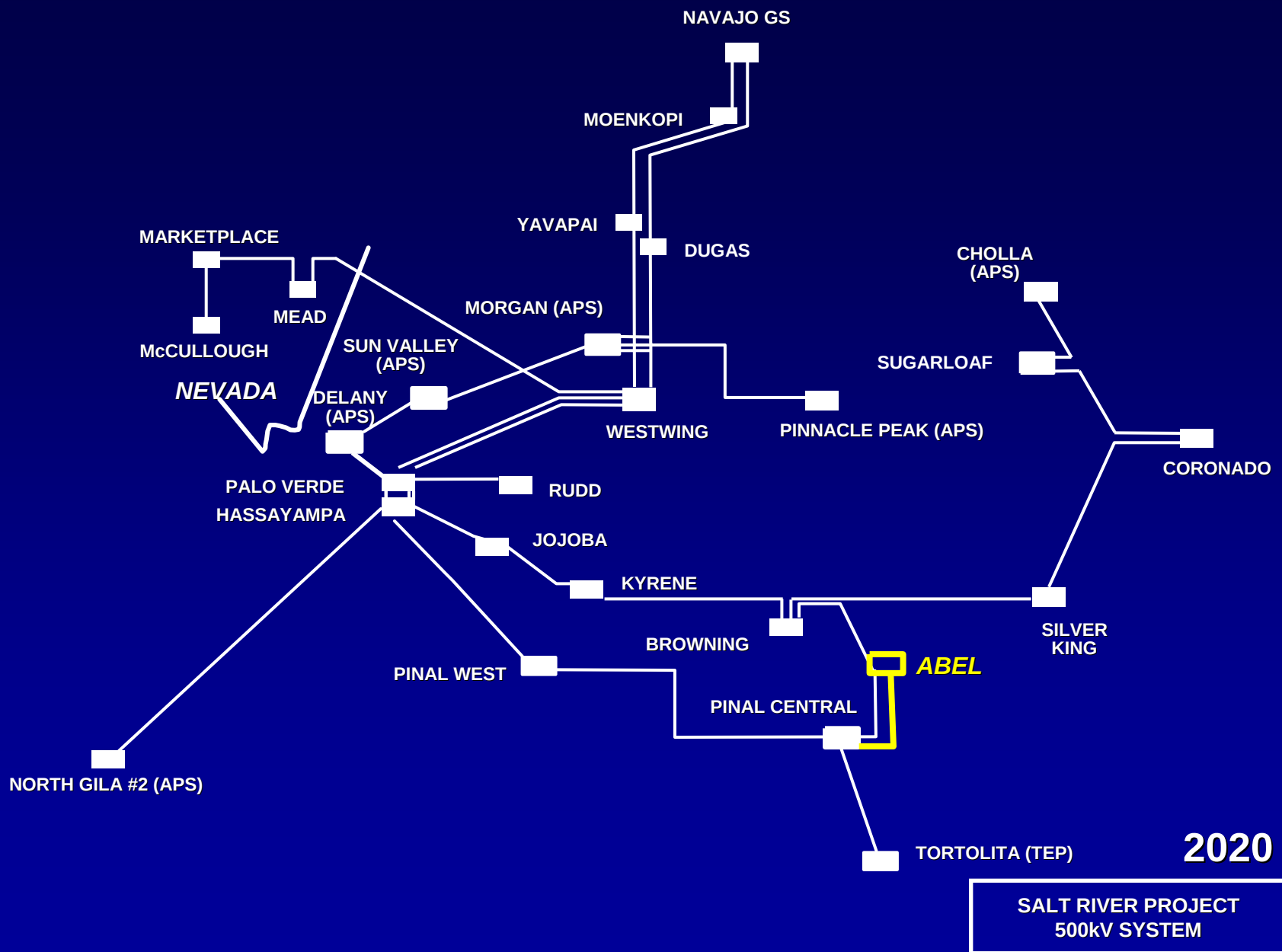


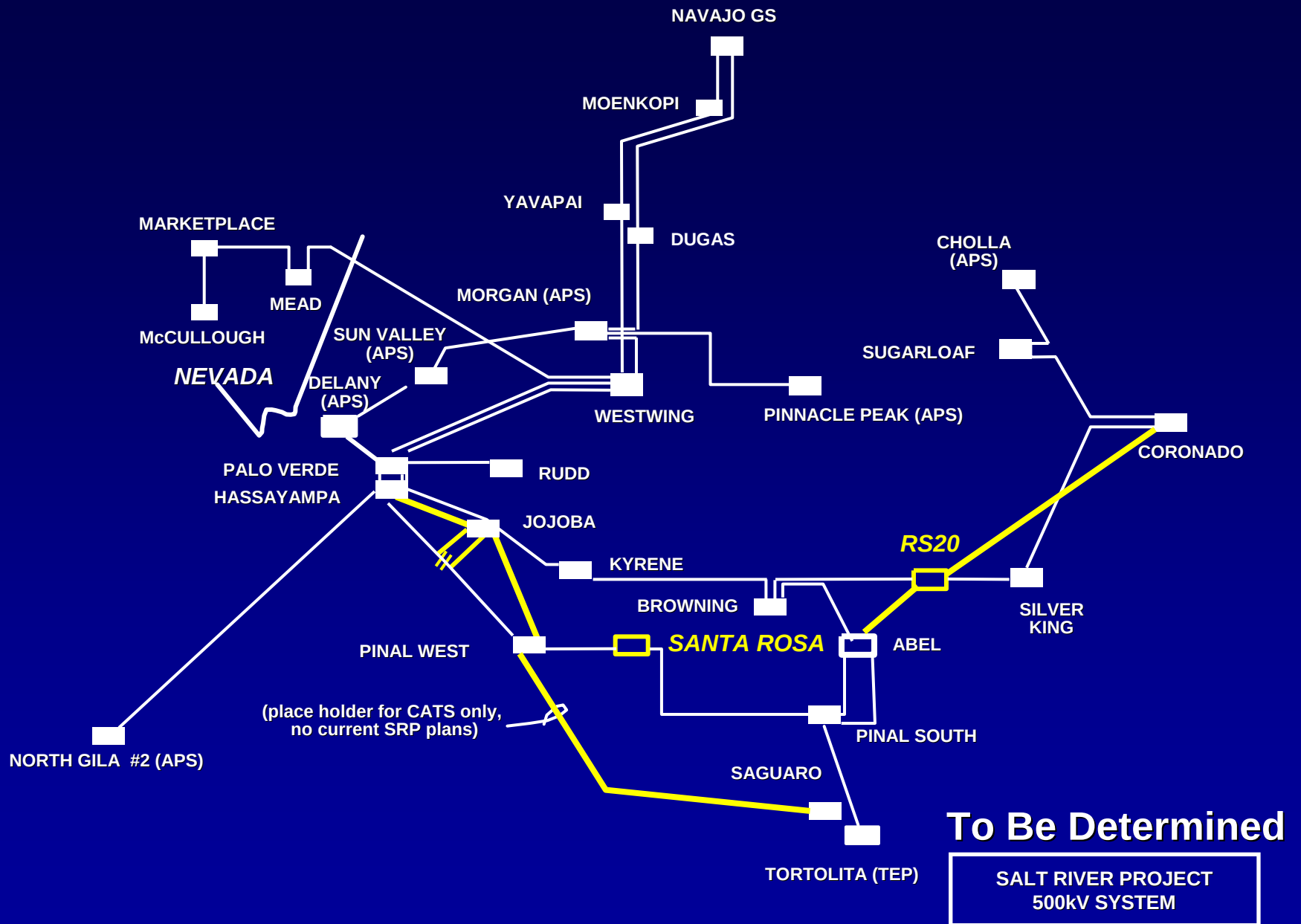
2012

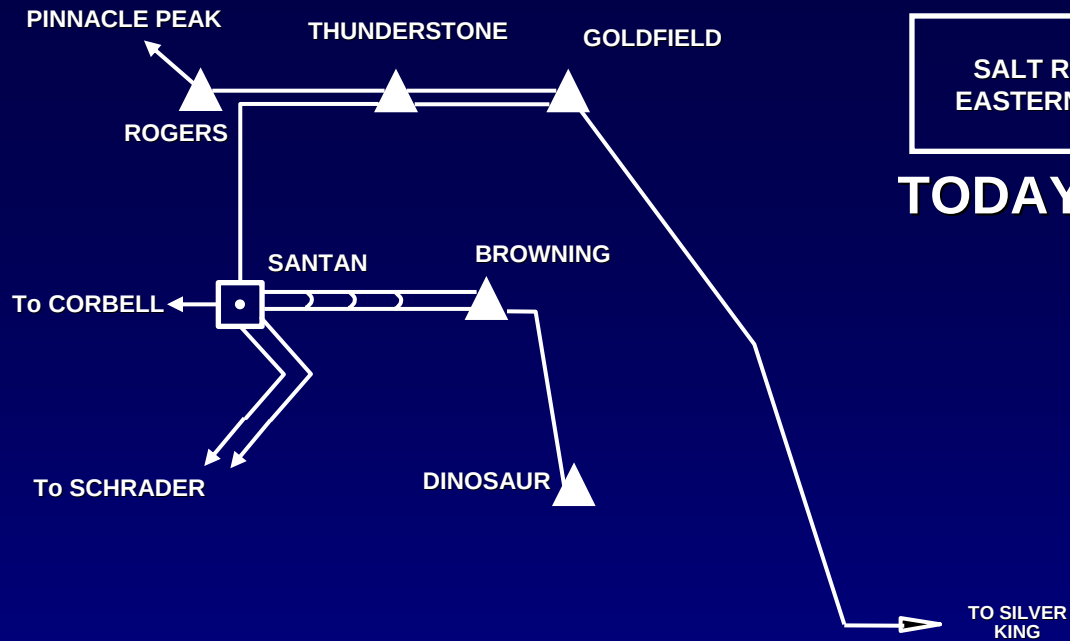
SALT RIVER PROJECT
500kV SYSTEM











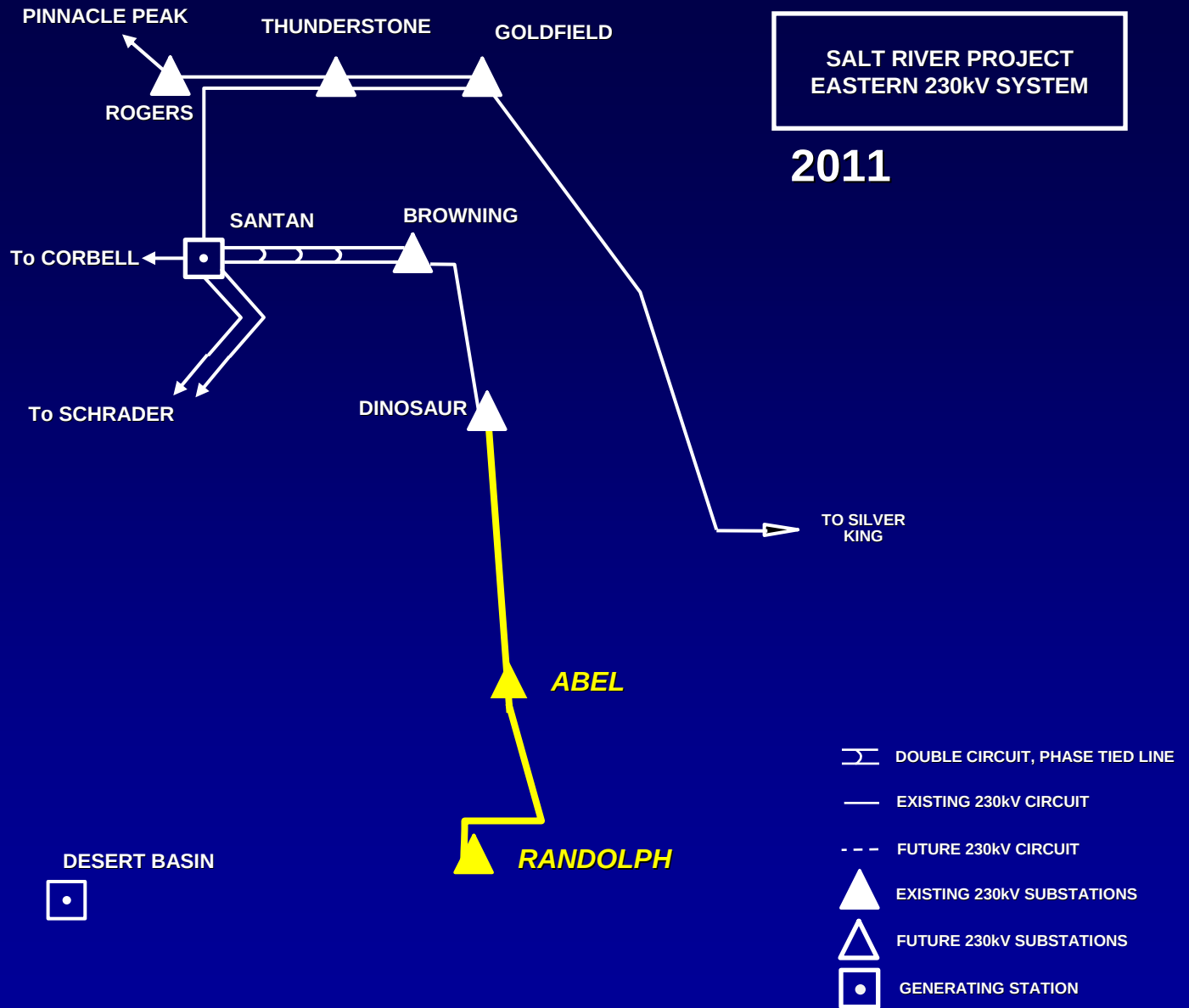
**SALT RIVER PROJECT
EASTERN 230kV SYSTEM**

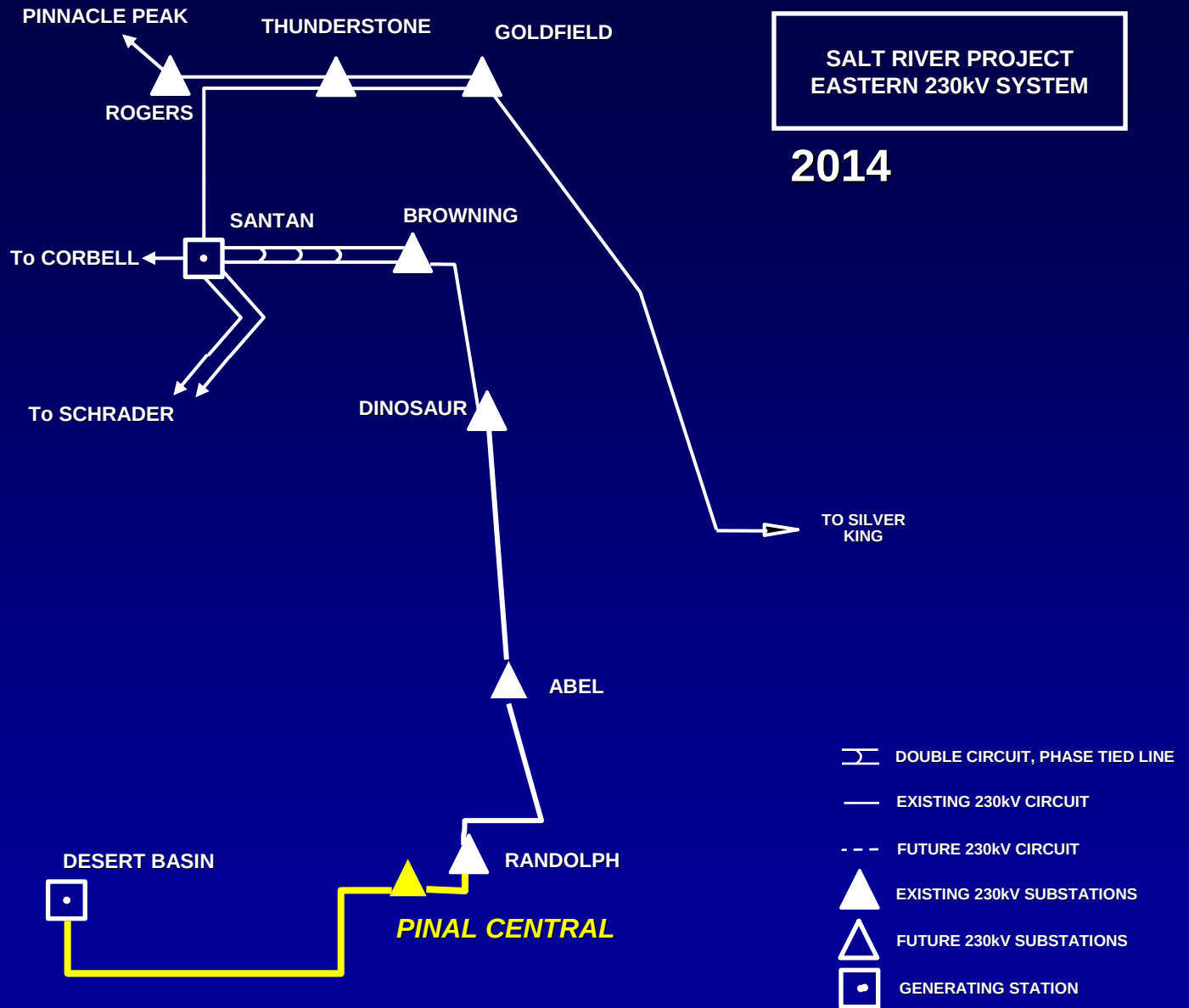
TODAY

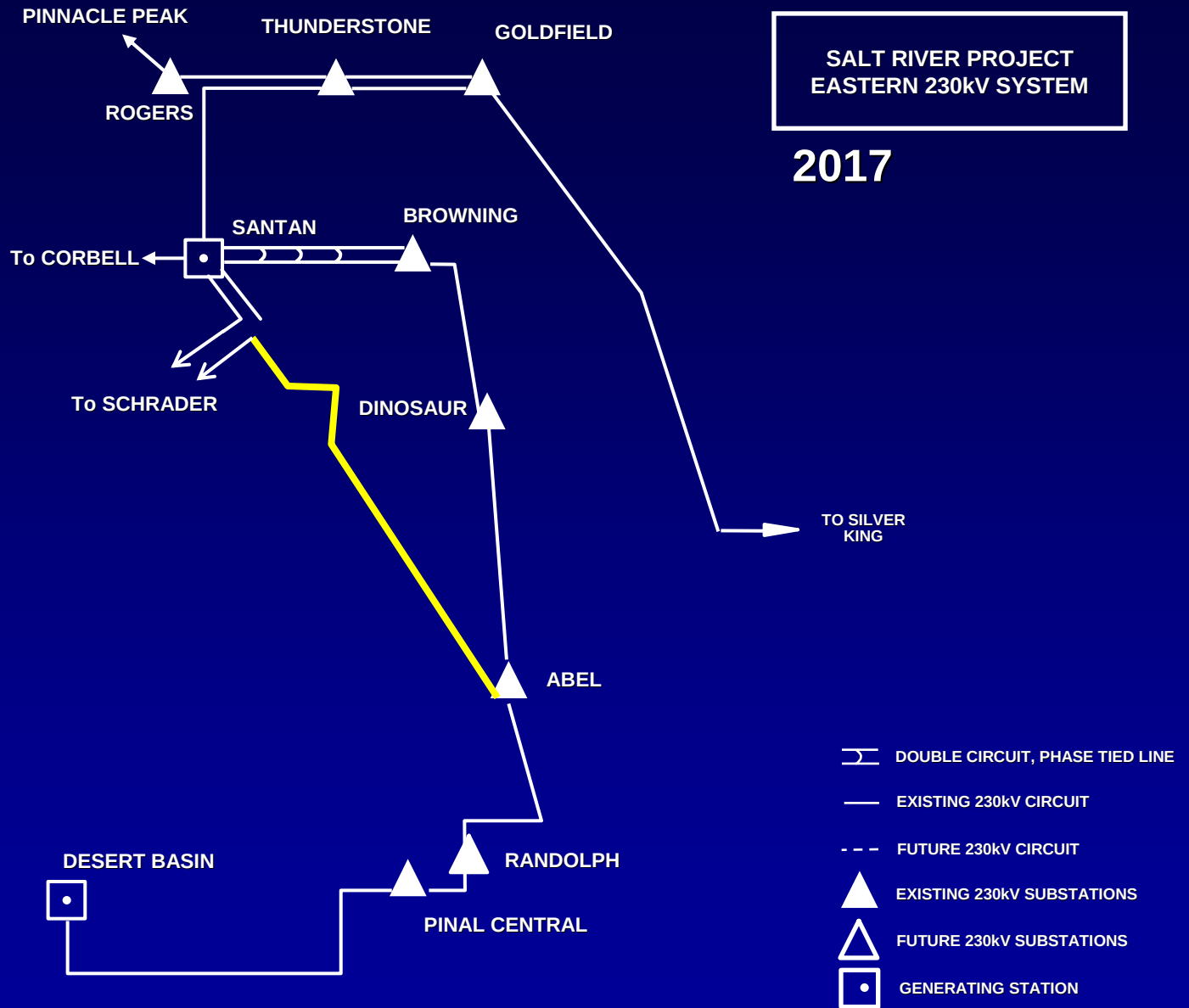
DESERT BASIN

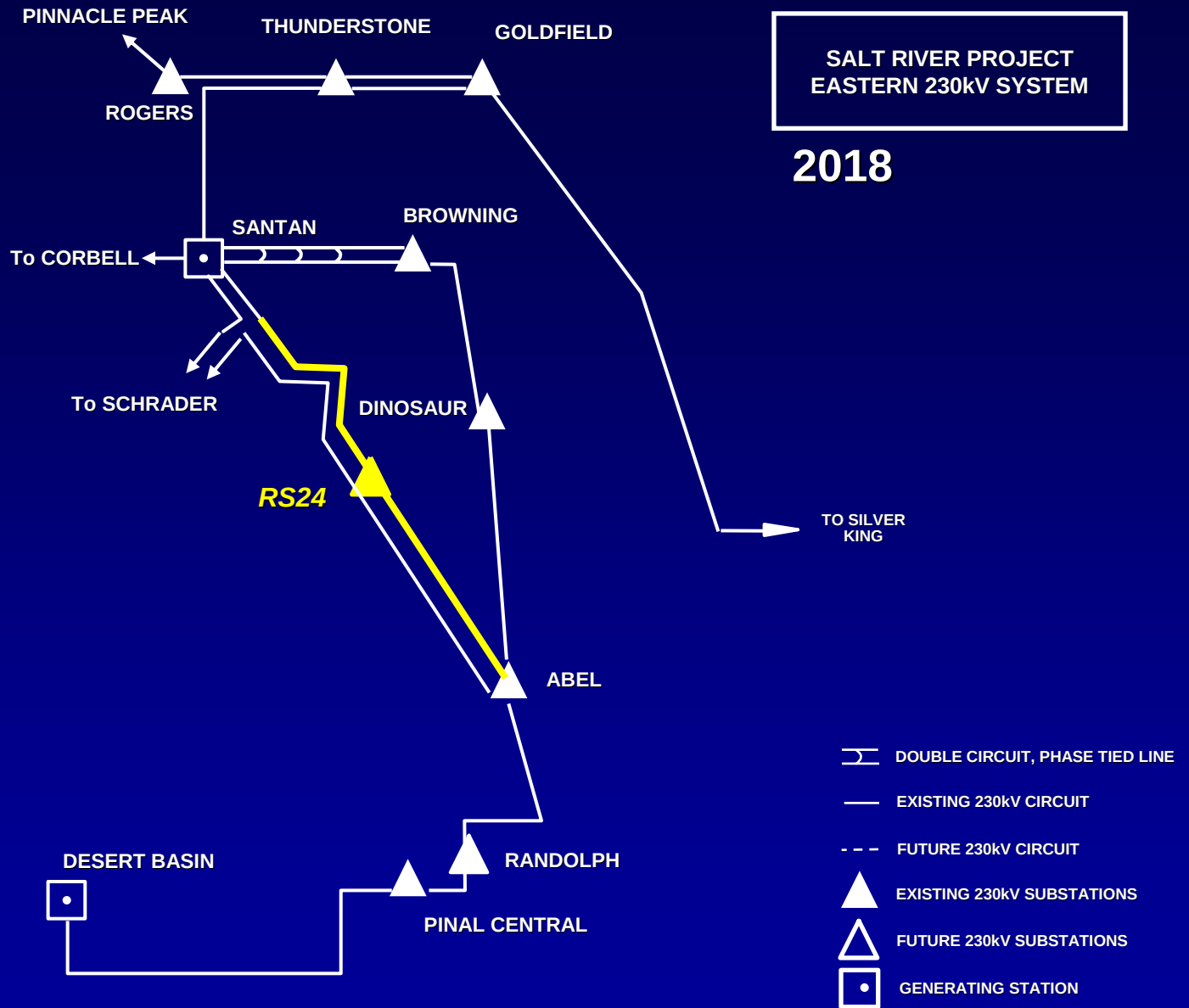


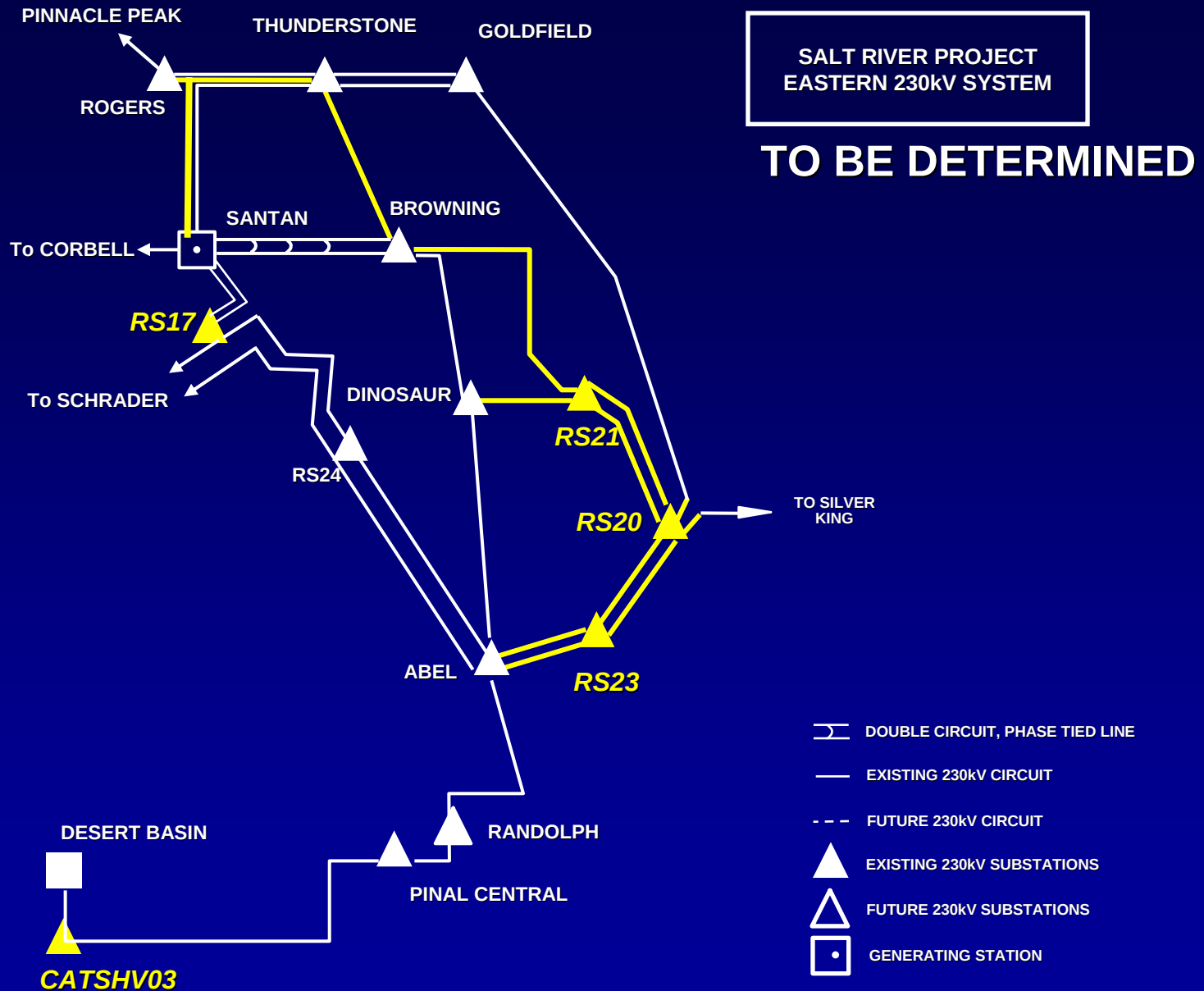
-  DOUBLE CIRCUIT, PHASE TIED LINE
-  EXISTING 230kV CIRCUIT
-  FUTURE 230kV CIRCUIT
-  EXISTING 230kV SUBSTATIONS
-  FUTURE 230kV SUBSTATIONS
-  GENERATING STATION





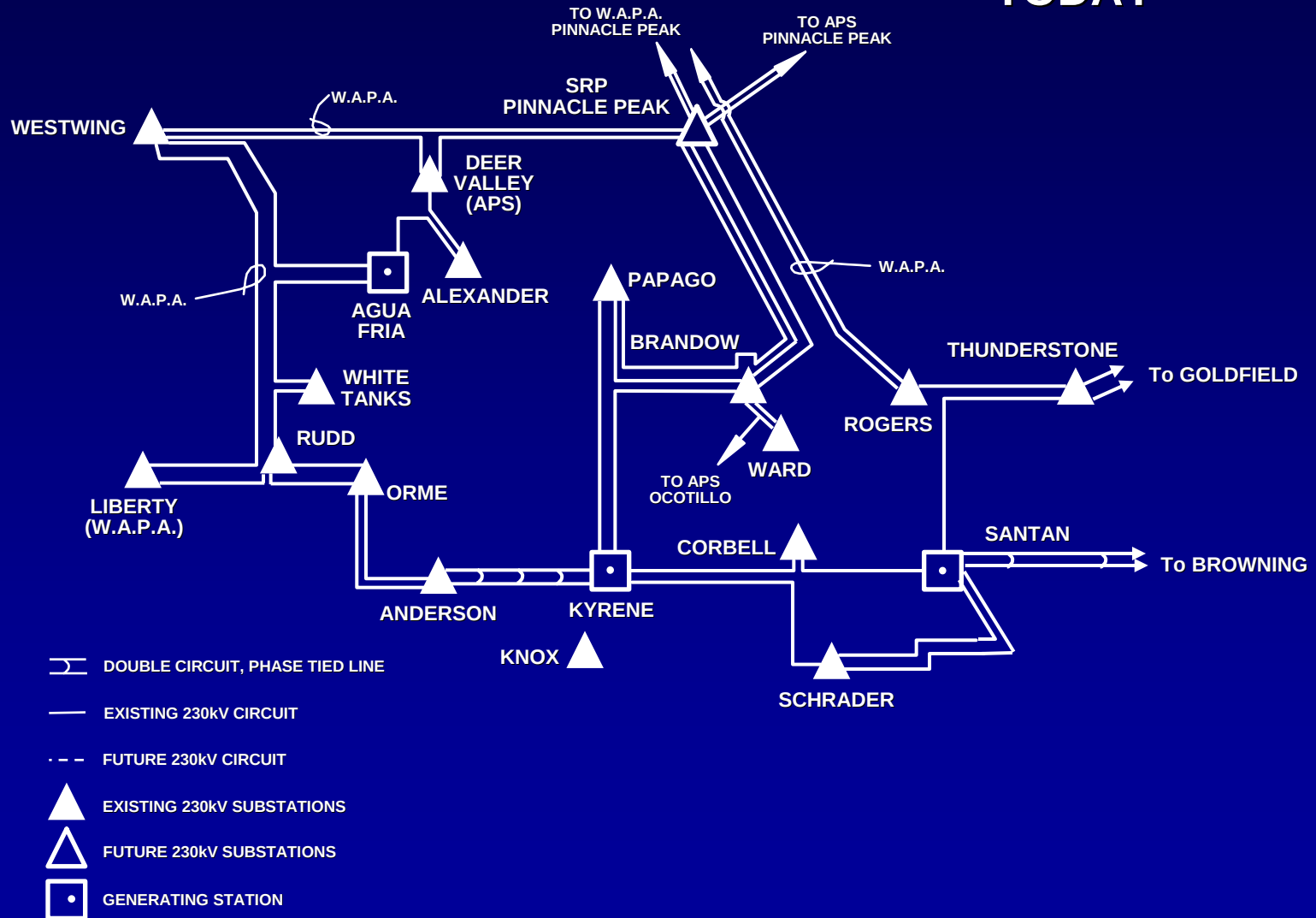






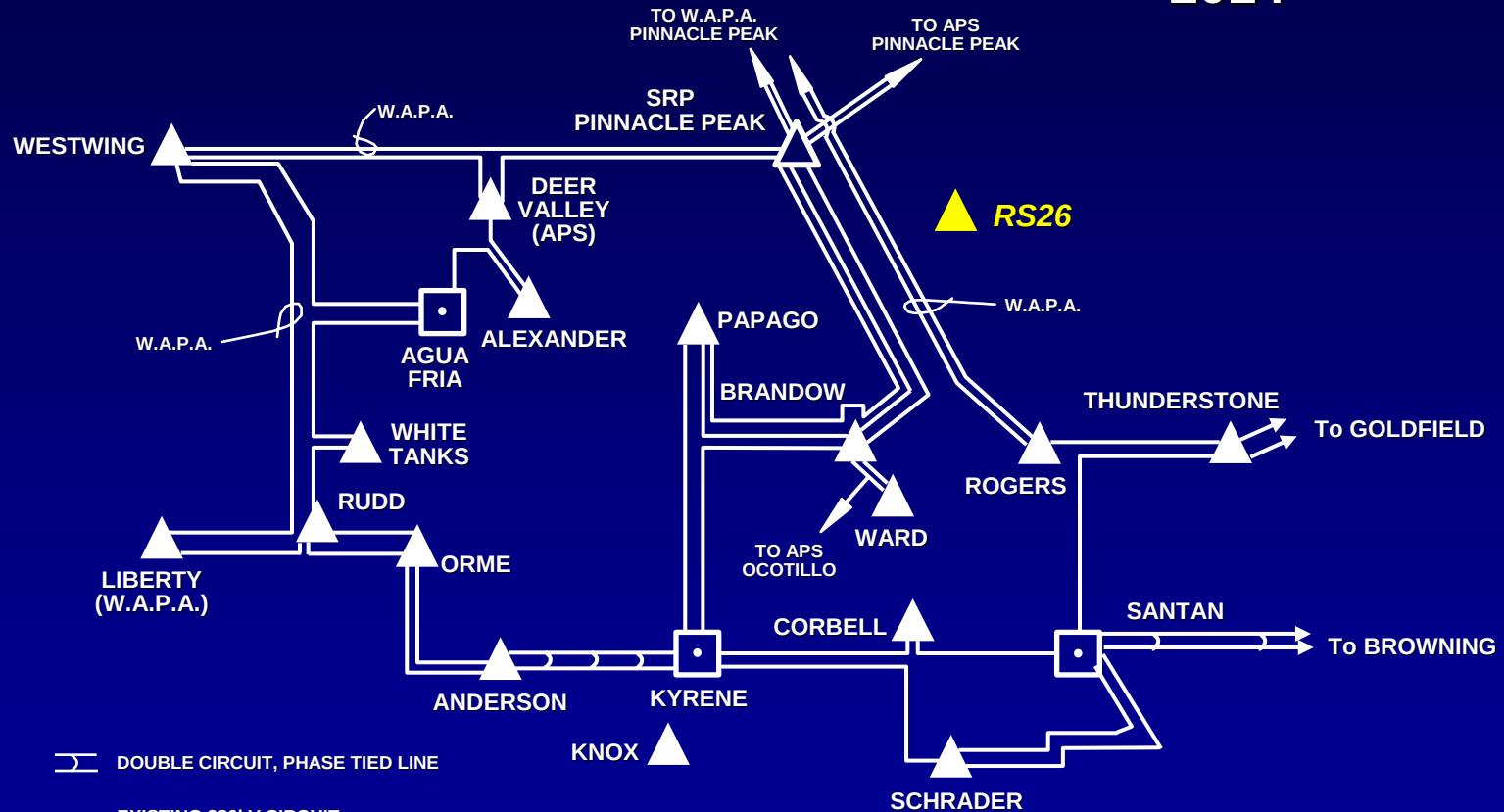
SALT RIVER PROJECT
WESTERN 230kV SYSTEM

TODAY



SALT RIVER PROJECT
WESTERN 230kV SYSTEM

2014



DOUBLE CIRCUIT, PHASE TIED LINE

EXISTING 230kV CIRCUIT

FUTURE 230kV CIRCUIT

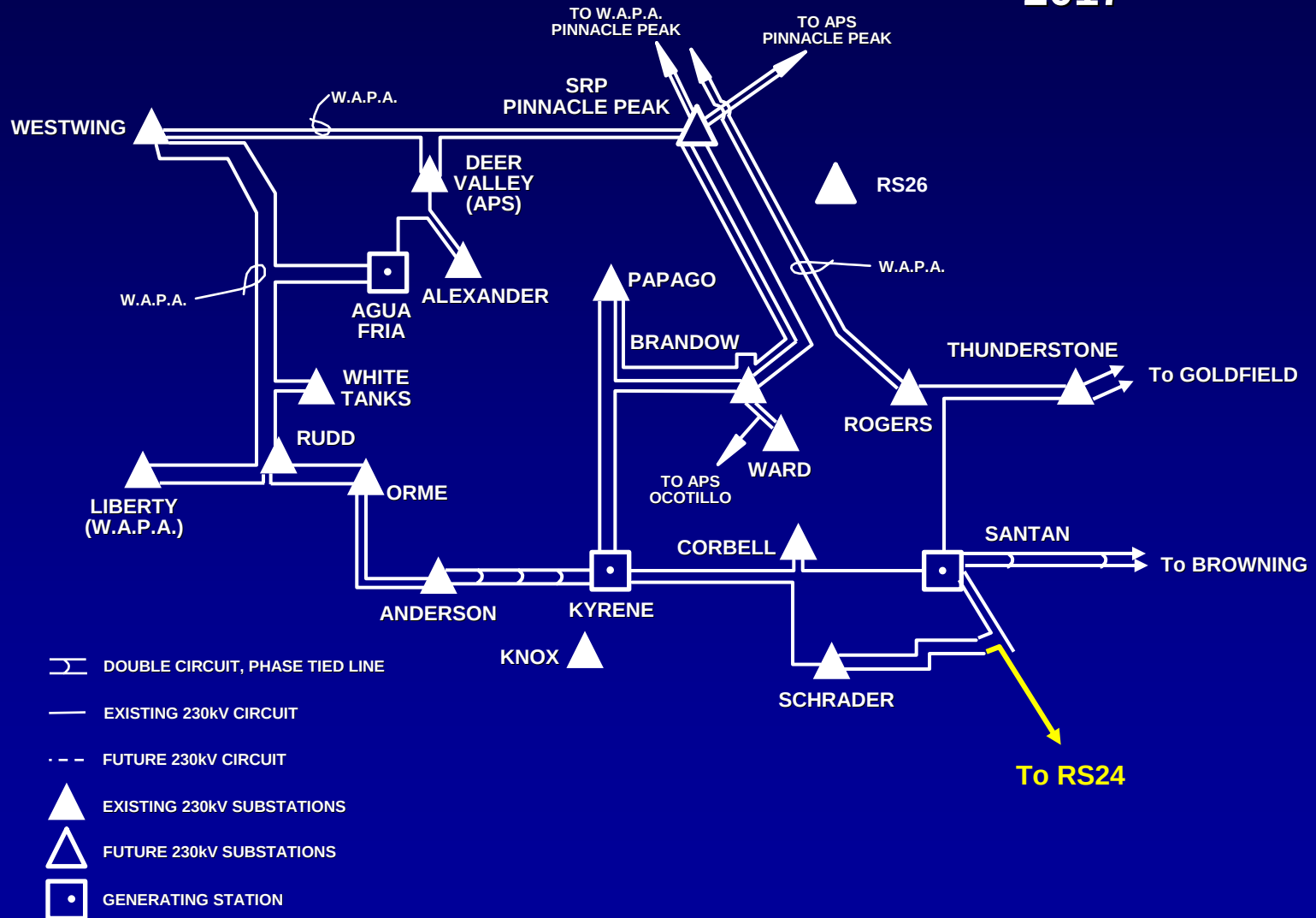
EXISTING 230kV SUBSTATIONS

FUTURE 230kV SUBSTATIONS

GENERATING STATION

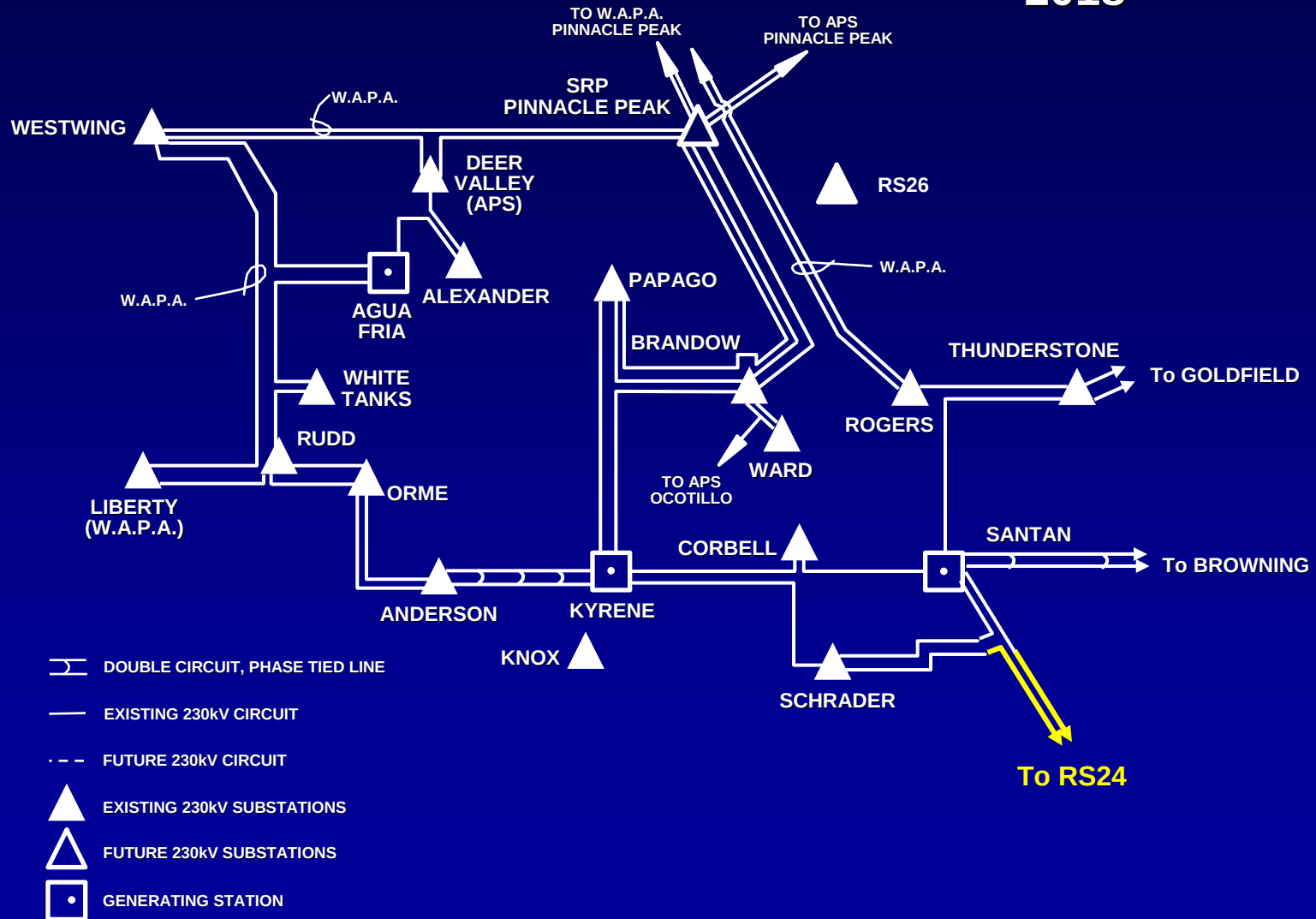
SALT RIVER PROJECT
WESTERN 230kV SYSTEM

2017

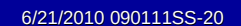


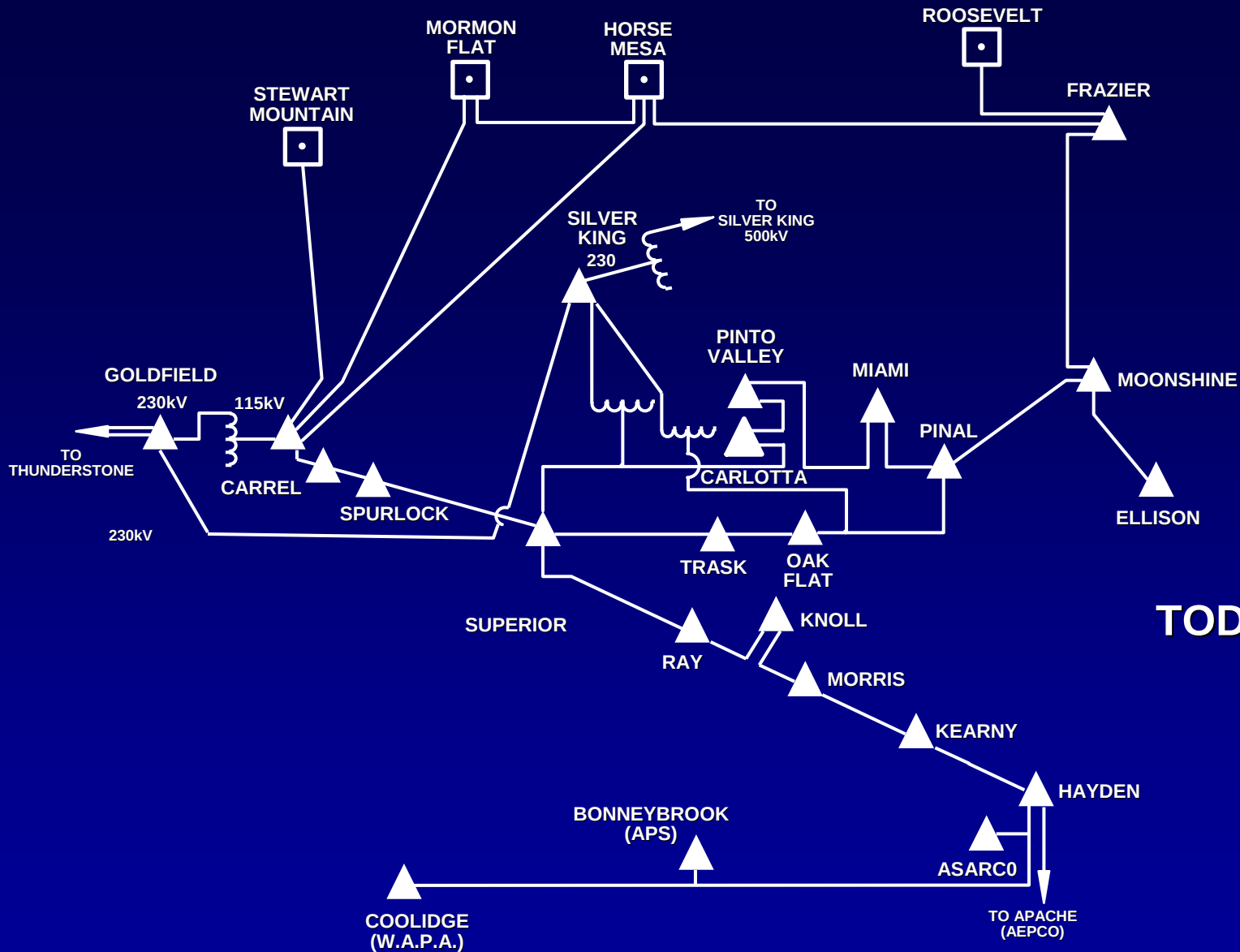
SALT RIVER PROJECT
WESTERN 230kV SYSTEM

2018



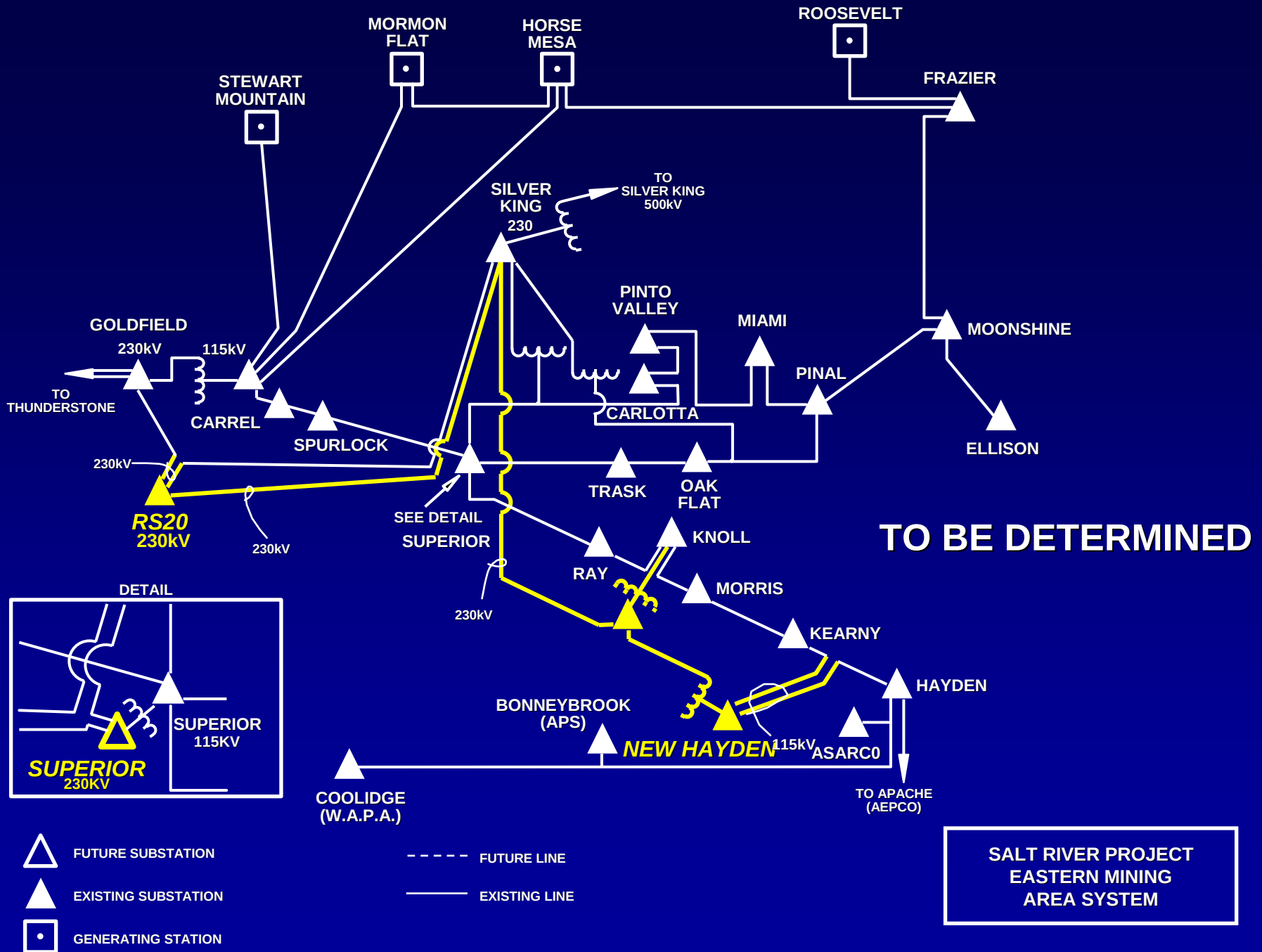
TO BE DETERMINED





TODAY

**SALT RIVER PROJECT
EASTERN MINING
AREA SYSTEM**



Summary Status

Project	I/S	Status	Study Forum
Pinal West – Pinal Central 500kV	2014	Design / ROW	Yes CATS/CATS HV/WATS/SEV E&O/ WECC SRWG, TSS
Pinal Central – Randolph 500kV	2014	Design / ROW	Yes same as above
Randolph – Abel 500kV	2011/14	Const	Yes same as above
Abel – Browning 500kV	2011/14	Const	Yes same as above
Desert Basin – Pinal South 230kV	2014	Design	Yes CATS HV/WECC SRWG, TSS
Pinal South – Randolph 230kV	2014	Design	Yes CATS HV
Randolph – Abel 230kV	2011	Const	
RS24 230kV Transmission Project	2017	ROW	Yes
RS26 Transmission Project	2014	Pre Siting	Yes

Summary Status

Types of studies performed for the various projects:

N-0, N-1, N-2 contingency studies

Transient and Post Transient voltage analyses

Stability analyses

Short circuit analyses

Reports where these projects may be found:

**CATS, CATS HV, CATS EHV, SWAT, WestConnect, WATS,
WECC Annual Study Plan Report**

SRP Changes from 5th BTA to 6th BTA

Completed Projects

Hassayampa – Pinal West 500kV

Sugarloaf Loop in of Coronado - Cholla

Carlotta 115kV Station Addition

SRP Changes from 5th BTA to 6th BTA

500kV Projects

2010 Raceway – Pinnacle Peak

Now Morgan – Pinnacle Peak

2009 Palo Verde – TS5

Now Palo Verde – Delany (2012) and Delany – Sun Valley (2014)

2011 Pinal West – Pinal South

Now Pinal West – Pinal Central (2014), Pinal Central – Randolph (2014), Randolph – Abel (2011/2014), and Abel – Browning (2011/2014)

2012 Palo Verde – North Gila 2

Now 2014

2012 TS5 – TS9

Now Sun Valley – Morgan (2016)

SRP Changes from 5th BTA to 6th BTA

500kV Projects, con't

New Pinal Central – Tortolita (TEP) (2014)

New New Mexico – Pinal Central (SunZia) (2013/2014)

New Pinal Central – Abel (2020)

New Abel – RS20 – Coronado (TBD)

230kV Projects

2011 Dinosaur – Southeast Valley – Pinal South – Desert Basin

*Now Dinosaur – Abel – Randolph (2011), Randolph – Pinal
Central – Desert Basin (2014)*

2012 Southeast Valley – RS24 – Santan/Schrader

Now Abel – Schrader (2017), Abel – RS24 – Santan (2018)