Contrast & Compare Planning Process
NCStakeholders - PWG

CALENDAR			
	Duke	**Progress**	**Comments**
Planning Calendar			
Modeling/ Assessment/ Solutions/ Budget	Dec-Jan: Finalize models Feb-Mar: Perform screen Apr-Jun: Develop solutions Jul-Aug: Prioritize projects & develop budget September: Finalize budget Oct-Nov: Compile input data & develop models	Dec-Jan: Finalize models Feb-Mar: Perform Near-term(NT) project review Apr-Jun: Prioritize projects & submit budget Jul-Aug: Perform Long-term(LT) screen Sep-Nov: Develop solutions Oct-Nov: Compile input data & develop models Oct-Mar: Develope estimates for LT projects Dec: Budget approved - plan released	

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CASE DEVELOPMENT			
	Duke	**Progress**	**Comments**
Reduced External Area Model			
Database cycle	January to June (VSTE Data Bank Process) Companies within VSTE combine new reduced models of their areas coordinating data within VSTE areas. June to December (MMWG Process) Regions combine reduced models of their areas to develop an eastern interconnection model. SERC provides the VSTE Data Bank Cases to the MMWG for this effort. Data is coordinated among regions.	January to June (VSTE Data Bank Process) Companies within VSTE combine new reduced models of their areas coordinating data within VSTE areas. June to December (MMWG Process) Regions combine reduced models of their areas to develop an eastern interconnection model. SERC provides the VSTE Data Bank Cases to the MMWG for this effort. Data is coordinated among regions.	
Assumptions	Model long-term firm transmission in model. No partial path reservations modeled.	Model long-term firm transmission in model. No partial path reservations modeled.	
Detailed Internal Model ("on-the-shelf cases")			
Cases developed	Summer Peak (for current and next 10 years) Winter Peak (for current and next 10 years) Fall Peak(for current and next 2 years) Spring Valley (for current and next 3 years)	Summer Peak (for current and next 10 years) Winter Peak (for current and next 10 years)	
Loads	Loads plus losses at the transmissin level will be scaled to match the system forecast for each load level. If conditions warrant, additional cases may be generated to examine the impact of other load levels.	Corporate provides PEC East & West load forecast data. Distribution organization provides NCPs for all PEC substations for model. Obtains Network Customer's forecasts via Network Operating Agreement. Scales PEC area to meet annual forecast without scaling Network Customer data.	
Interchange		Models all firm transmission reservations on its OASIS including partial path reservations. Model imports and exports . (i.e net interchange)	
Duke/PEC Generation	Modeled in detail. Dispatched economically .	Modeled in detail. Dispatched economically .	
Non-Duke/PEC Generation	Modeled in detail. Dispatched at full load. IPPs must have an LGIA executed to be in model and approved transmission service to be dispatched.	Modeled in detail. Dispatched at full load. IPPs must have an LGIA executed to be in model and approved transmission service to be dispatched.	
Future Generation	Uses dummy generation in future cases only when additional load serving resources are needed. Models based on generator interconnection queue locations.	Uses dummy generation in future cases only when additional load serving resources are needed. Typically puts on Wake 500 kV bus and named DUMGEN so others that use the case can see its presence.	
Ratings	Use several different continuous and time-limited emergency line ratings. Some transformer ratings based on special loss of life studies.	Lines modeld at continuous rating unless ground clearence limited. Utilize most limiting facility criteria. Transformers modeled at 55 deg rise rating.	

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ASSESSMENT PRACTICES			
	Duke	**Progress**	**Comments**
Limits Voltage			
500kV	Maintain minimum of 100%	Maintain minimum of 100%	
230kV	Maintain minimum of 95%	Maintain minimum of 90%	
Allowed Contingency Drop	5%	8%	
Limits Thermal			
Lines	Do not exceed 100 % .	Do not exceed 100 % . Do not exceed 100 % unless 65 degree rise rating is available. Will allow 109% loading if a 65 degree rise rating is available and the bank is in good condition.	
Transformers			
Equipment	Manufacture rating.	Manufacture rating.	
Cases Developed			
	Screen 3 years out	Screen 6 years out	
Years	Assess projects.	Assess projects.	
	Generation up case		
	Generator maintenance case.	Generation Up case.	
Cases	Generator maintenance + Generator outage cases.	Generator outage cases.	
Dispatch	Generator maintenance case is redispatched economically.	Generation Up case is dispatched economically.	
	Generator outages replaced using off system import of TRM from interfaces.	Generator outages replaced using off system import of TRM from interfaces.	
Interchange	Imports are divided equally among the 6 interfaces.	Imports are divided proportionally by TRM ratios.	
		Reserves approximatley 1820 MW.	
TRM		PEC interconnects with all VACAR utilities and studies the import of the full reserved amount on top of other import obgliations.	
CBM	none reserved	none reserved	
NERC Table I			
Cat A	Generation up	Generation up	
	Gm + generator outage with TRM		
	Gm + line outage		
	Gm + transformer outage	Generation up + line outage	
Cat B	Gm + capacitor outage	Generator outage with TRM	
		Generation up + common tower outages	
		Generator outage with TRM + line or transformer outage	
Cat C		Generator outage with TRM + common tower line outages	
Cat D	Coordinated region studies choose scenarios.	Coordinated region studies choose scenarios.	