

Enhancing Consistency in Regional Planning

NPCC Regulatory/Governmental Affairs Advisory Group

New England States Committee on Electricity

December 3, 2013

New England States Committee on Electricity

New England's Regional State Committee governed by a Board of Managers appointed by each of the New England Governors to represent the collective views of the six New England states on regional electricity matters

- **Focus:** Resource Adequacy, System Planning & Expansion
- **Resources:** 6 full-time staff with diverse disciplines & experience. Consultants, enabling independent analysis & studies
- **More information:** including all filings & comments at www.nescoe.com

New England States: Active in Transmission Planning

- Participate in regional stakeholder planning committee (PAC)
- Conduct siting proceedings in each state
- Keenly aware of the difficulties associated with planning in uncertain environments
 - Effect of public policies (EE, DG, VER)
 - Resource retirements
- Seek to effectively collaborate with ISO-NE, stakeholders on these issues

Enhancing Consistency, Increasing Efficiency

- **ISO-NE PAC meetings *and* subsequent state siting council proceedings** on transmission needs assessments often involve lengthy discussion of initial conditions, or the base case
- **In both**, discussion usually centers on the probability of occurrence of particular base case scenarios and words such as “credible” or “reasonable” stress

Consistency & clarity would increase efficiency of regional planning and state siting processes

Enhancing Consistency: Illustrative Analysis

- In 2013, state analysis examined the probabilities of the 19 base case sensitivities used in one transmission needs assessment
- The calculated probabilities seemed low
 - By itself, this finding was not disturbing
- But, the difference in probability between *the most and least likely* sensitivities was as great as 4×10^{17}
 - This does not seem “reasonable” or “credible”

	Case ID	Study Area Capacity Out	Capacity Out Rest of Pool	Total Capacity Out	Dispatch Probability	Rank (Most to Least)	Ratio to Lowest
East - West, ME-NH	ew_gm2	1,754	1,016	2,770	1.62295E-22	6	1.73E+13
	ew_m1m2	1,178	2,466	3,644	7.1578E-34	17	7.64E+01
	ew_vygr_v	1,375	1,894	3,269	9.36282E-36	19	1.00E+00
West-East, ME-NH	we_grm2_v	1,095	2,091	3,186	7.43517E-24	9	7.94E+11
	we_grmn_v	791	2,627	3,418	4.37188E-25	13	4.67E+10
	we_nesb_v	1,875	1,981	3,856	2.71838E-25	14	2.90E+10
	we_s4s6_v	152	2,676	2,828	4.99114E-27	16	5.33E+08
	we_grm2	1,737	2,091	3,828	3.71759E-24	10	3.97E+11
	we_vygr_v	1,375	1,894	3,269	1.72462E-35	18	1.84E+00
	we_vymn_v	761	2,943	3,705	1.20933E-23	8	1.29E+12
	we_bgmn	799	3,137	3,936	1.25201E-25	15	1.34E+10
	we_bgmn_v	157	2,038	2,195	9.14784E-25	11	9.77E+10
Bost. Import	we_grm8_v	1,431	1,652	3,082	1.33152E-22	7	1.42E+13
	we_nem8_v	1,275	2,130	3,406	4.455E-25	12	4.76E+10
West - East, NH-ME	nhme_gr_v	733	1,715	2,448	1.95991E-18	2	2.09E+17
	nhme_sb_vp	1,359	1,986	3,344	3.95065E-18	1	4.22E+17
	nhme_gr	1,375	1,715	3,090	9.79954E-19	3	1.05E+17
	nhme_sb_vp	2,001	1,430	3,430	2.21231E-19	4	2.36E+16
	nhme_lb_v	137	1,186	1,323	1.12774E-19	5	1.20E+16

Enhancing Consistency: New England State Proposal

- The New England states proposed to stakeholders that the region consider developing a *numeric definition* for what our regional planning standard means by “reasonable stress”
- The proposal contemplates setting a probability value or range of values for base cases
- Planner would be free to vary any of the variables contemplated in TPL-001-4 (R2.1.4) so long as their joint probability falls within the “reasonable” range

Enhancing Consistency: Advantages

- Streamline regional planning & state siting reviews
- Enhance consistency *within a study* between scenarios
- Enhance consistency *within the region* between studies
- Identify priority issues
- Increase transparency
- Increase confidence: safety in numbers

Current Status: ISO-NE agreed the proposal has merit and committed to create a technical task force for further exploration

Enhancing Consistency: Transmission Planning Manual

At states' request, ISO-NE developed two draft *Planning Manuals* documenting Process & Assumptions

- After this important first step, states expect stakeholder process to determine whether assumptions are reasonable and necessary
- Planning Manual work fits with the work of developing a numeric definition of “reasonable”
- Manuals should streamline stakeholder review process & benefit state siting proceedings

Similar Interest Across the Eastern Interconnection

Through the EISPC, states from the Rockies to the Eastern Seaboard are examining the use of Probabilistic Risk Assessment in transmission planning

To date:

- Issued RFP for case studies
- Selected EPRI as primary contractor

The work product:

- Will conduct 4 case studies
- Issue Whitepaper explaining results
- End date: September 2014

Thanks.

Questions?

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