|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **RSP19 Comment Form** | | | | |
| **Page Number** | **RSP Section** | **Commenter (Name/Organization)** | **Comment** | **Initial ISO Response** |
| p.1 | Executive Summary, Introduction | Conservation Law Foundation | Comment 1: In third bullet, ISO-NE suggests that it “cannot observe or control” distributed resources (DERs) “like traditional resources.”  This is misleading with respect to DERs, as ISO-NE’s current inability to observe or control them is largely due not to anything inherent in DERs, but instead to ISO-NE’s markets and interconnection rules. So “does not currently observe or control” would be more appropriate than “cannot[.]”  It is important that this long-range planning document accurately frame issues and also identifies actions that ISO-NE can and will take to address them. Activities to increase ISO/RTO visibility and control of DERs are underway in other areas, e.g., CAISO:   * Distributed energy resource provider (<http://www.caiso.com/participate/Pages/DistributedEnergyResourceProvider/Default.aspx>) over which CAISO has full visibility and control. * *Coordination of Transmission and Distribution Operations in a High Distributed Energy Resource Electric Grid* effort to increase visibility and control (<https://www.caiso.com/Documents/MoreThanSmartReport-CoordinatingTransmission_DistributionGridOperations.pdf>) |  |
| p.1 | Executive Summary, Introduction | Conservation Law Foundation | Comment 2: Para. Following bulleted text: ISO-NE asserts “New England is currently fuel constrained, which remains the greatest reliability risk to the region.”  We have increasingly seen that term used in public ISO-NE presentation, but it is not accurate and as-yet unsupported by data. We recommend that it be struck or meaningfully qualified throughout the draft RSP.  The OFSA made no such conclusion, instead framing a range of possible futures, to which ISO-NE refused to assign any probability, only for the coldest of winters.  This statement states without any qualification that ISO-NE is in fact is generally “fuel constrained” which is not at all the case.  Again, accuracy in this document regarding problem/issue definition – and subsequent planned action to address – is important. The RSP is/should not be used as not a PR document.  See CLF Comment 12 below. |  |
| p.1 | Executive Summary, Introduction | Conservation Law Foundation | Comment 3: Related to CLF Comment 2 immediately above: VERs are not analogous to non-firm pipeline gas-fired generators and should not be included in the same sentence, following ISO-NE’s overbroad assertion regarding “fuel constrain[ts].”  Non-firm pipeline gas-fired generators are unique in the region for being granted 356-day/year CSOs without having proven the ability to provide electricity 365 days each year. By contrast, ISO-NE de-rates VERs to account for their variability when granting CSOs such that VER performance is aligned with system expectations, such that real-world performance errs on over-production rather than constraint.  VERs are not “fuel constrained” as they burn no fuel; suggesting they are is misleading and fails to meaningfully ID real system issues ISO-NE should be focused on in the RSP regarding VER integration.  (Mischaracterizing VERs as “fuel constrained” is a category error, analogous to critiquing automobiles during the transition from horse-powered transport for “not eating hay” or for their inability to gallop! As autos and horses were each a qualitatively different form of transport – each with their own performance metrics, but both providing the same/similar social service – so to VERs and fossil-fueled plants are qualitatively different ways to generate electrons and other system services.)  See CLF Comment 13 below. |  |
| p.10 | Sec. 1.1.5 | Conservation Law Foundation | Comment 4: First sentence again asserts without evidence (or definition: what is energy security vs. energy insecurity?) that “[energy-security] risks can occur . . . regardless of season.”  ISO-NE has assured the region that it will be able to adequately meet summer demand and has to our knowledge not ID’d any forecast shortfall in any season except for during the occasional long and deep winter cold-snap (per the OFSA).  All such unsupported assertions should be revised or removed throughout. |  |
| p.10 | Sec. 1.1.5.1 | Conservation Law Foundation | Comment 5: Second paragraph – delete reference to the now historical retirement of Pilgrim.  That retirement is now a known, status-quo, steady-state system condition that is unrelated to “[f]urther retirements of coal and oil generators . . . expected over the next 10 years” or anything else in the subsection (discussing a regional “dependence” on gas as “the Primary Fuel.” |  |
| p.10 | Sec. 1.1.5.2 | Conservation Law Foundation | Comment 6: Delete suggestion that “Pipelines can be constrained at any time of the year” as irrelevant and/or inaccurate.  What evidence does ISO-NE have of any such meaningful constraint in, for example, mid-summer? If such evidence exists, what is ISO-NE doing to mitigate summer pipeline constraints on the electricity system. |  |
| p.11 | Sec. 1.1.5.2 | Conservation Law Foundation | Comment 7: Add to third paragraph mention/description of ISO-NE analysis conducted for MassCEC regarding the impact OWS would have had if operating during the 2017-18 cold-snap.  That analysis shows not a “limited” role for renewables in “offsetting natural gas consumption . . . during extreme weather conditions,” but instead that VERs, and OSW in particular, can be reasonably expected to directly contribute to fuel and energy diversity during the main “extreme weather” of concern in the region, that is, winter cold-snaps. |  |
| pp.16-17 | Sec. 1.2 | Conservation Law Foundation | Comment 8: Revise to list only “system needs, and plans for meeting those needs, for 2019 through 2028” that is, *future* needs and current plans to meet them.  The 2nd (“reserves are provided”), 3rd (expansion . . . has improved”), 4th (“processes now reflect”), 5th (“organizations assessed . . . ISO took” action), and 9th (“ISO has improved”) findings and conclusions listed are all observations about current or past system performance, changes, or activities rather than about future needs and plans for meeting them. |  |
| p.24 | Sec. 2.1.4 | Conservation Law Foundation | Comment 9: Bullet one and note 51 – see CLF Comment 3: VERs are not “fuel constrained” and are not “subject to variations” in their fuel supply – the do not use or burn fuel (as ISO-NE’s use of quotes in n.51 recognize).  Delete throughout all references to VERs as fuel constrained or using “fuel” when in fact they do not use or burn fuel. |  |
| p.35 | Sec. 3.1 Intro | Conservation Law Foundation | Comment 10: “A top priority of five of the six New England states (representing approximately 90% of regional load) is combatting climate change, and related state policies in place significantly impact regional electric energy demand and consumption.”  ME, MA, CT, RI, and VT have existing laws and policies that are unambiguous regarding each state’s commitment to mitigating climate-damaging emissions. |  |
| p.47 | Sec. 3.5 Summary | Conservation Law Foundation | Comment 11: Existing policies and reports (e.g., MA EV goals and incentives; Gov. Baker’s Transportation of the Future Commissions Report) offer sufficient numerical assessments and goals such that this issue demands more detail. Those goals and policies speak to and will drive electrification expressly during the RSP19 study period. They should be quantified (even if only estimated “high”/”low”) and studied for their potential impact on the system and resulting future/10-yr. needs for which ISO should begin concrete system planning efforts (even if only to assess and determine, e.g., no resulting need for related TX during the study period, if that is the case). |  |
| p.62 | Sec. 4.3.2 | Conservation Law Foundation | Comment 12: Recommend discussing here the connection to ISO-NE’s fuel and energy security concerns, including CSOs granted to fuel insecure plants at effectively their full nameplate capacity. Particularly relevant given FCA 12’s clearing of the Killingly plant. |  |
| p.62 | Sec. 4.3.2 | Conservation Law Foundation | Comment 13: re: CLF Comments 2 and 3 -- this paragraph more accurately describes which units are “fuel insecure” (gas-fired) in New England and when (winter). This is the technically correct message that should be sent in, e.g., the ES Introduction.  Accord p. 61 at bottom, forecasting a “change in the operable-capacity margin beyond 2024/2025 results from t*he assumption that future capacity additions consist of generating resources without fuel constraints*” that is, state-sponsored VERs. |  |
| p.113 | Sec. 7.1 Intro | Conservation Law Foundation | Comment 14: After the bulleted text, delete: “New England’s energy-security risks are not limited to the winter period. Energy from solar and wind generators is weather dependent and not always available (i.e., such as after the sun sets).”  See CLF Comments 2 and 3 above. ISO-NE has presented no evidence that New England faces meaningful (if any) “energy-security risks” outside of its coldest winter periods. Energy production from solar PV and wind generators is highly predictable over the full period of ISO-NE’s existing and under-development energy dispatch markets (RT and DA now; possibly in the future, a 3-6 day ahead MDAM.) Observing that solar PV does not generate power “after the sun sets” is comparable to observing that gas-fired plants do not generate power “when shut-down” or when “fuel is un-available to burn in their turbines.” Such a comment about the obviously expected – but irrelevant to system operation – performance of “traditional” resources under those conditions would never be tolerated in an RSP; nor should this one regarding VERs. |  |
| p.114 | Sec. 7.2 | Conservation Law Foundation | Comment 15: Delete: “The region will continue to rely on natural gas to balance variable renewable resources.”  ISO-NE has produced no evidence of such “balancing” nor that it is a system need during the RSP study period. VERs currently require no balancing as they typically make-up only 3-4% of electricity generation. At such levels, their variation requires no active “balancing” and to the extent it does, such services may come from a range of resources including pumped hydro, imports, and battery storage. Moreover, the statement appears irrelevant to the discussion it is part of regarding the level of gas-fired capacity and generation ISO-NE expects during the RSP study period (none of which was added/maintained in order to provide VER “balancing.” |  |
| p.115 | Sec. 7.2 | Conservation Law Foundation | Comment 16: Delete as follows -- “The unavailability of fuel could result in operational issues.”  See CLF Comments 13 – 15 above. |  |
| p.124 | Sec. 7.5 | Conservation Law Foundation | Comment 17: Delete as follows – “The retirement of older non-gas facilities that store fuels (oil and nuclear) exacerbates the full-supply issue.”  See CLF Comments 2,3, 13 – 16 above re: VERs are not “fuel constrained” thus the comment is inapposite, particularly for Sec. 7.5 “Fuel Constraints in New England”. |  |
| p.125-6 | Sec. 7.5.2.1 | Conservation Law Foundation | Comment 18: Include here detailed discussion of ISO-NE analysis for MassCEC regarding the potential impact on system performance of OSW had it been operating during the 2017-18 cold snap. |  |
| p.126-7 | Sec. 7.6 | Conservation Law Foundation | Comment 19: This section is materially incomplete without discussion of the Joint Requester (and possibly other) stakeholder-requested follow-up scenarios. If not, ISO-NE should delete the section, or reference to/reliance on the OFSA, which it has since stated (in filings to FERC) that it is NOT relying on in the future in order to assess/determine fuel security risks or solutions (instead moving to its proposed “Chap. 3” solution set accompanied by new quantitative tools). |  |
| p.127 | Sec. 7.6 | Conservation Law Foundation | Comment 20: Include a fuller discussion of the analysis for MassCEC. |  |
| p.127 | Sec. 7.6 | Conservation Law Foundation | Comment 21: Amend as follows: “The peak wind profile and wind turbine production generally correlated to the coldest periods when the regional pipeline was most contrained. For relatively short periods during the cold spell, which generally correlated with periods when the regional pipeline was least stressed, the wind profile reduced to close to 0 MW.”  See slide 9 in ISO-NE’s July 15 Chapter 3 presentation to FERC. |  |
| p.128-9 | Sec. 7.7.2 | Conservation Law Foundation | Comment 22: This section should at least mention that smoother, fuller, and more rapid construction and integration into the regional system of OSW would materially contribute to creating the type of winter fuel and energy diversity ISO-NE is seeking. Even if it isn’t a solution ISO-NE is actively pursing in Chap. 3 it should here be listed as a potential viable “market or other” solution. |  |
| p.129-30 | Sec. 7.8 Summary | Conservation Law Foundation | Comment 23: Delete final paragraph beginning on p.129.  See CLF Comments 2, 3, 13 – 22 above.  VERs do not, for example “complicate [] fuel-availability” in the region – they add needed “fuel diversity” (because the don’t use scarce and expensive fossil fuels) to the region.  That the output of VERs “depends on the weather and time of day” is trivially obvious and also inapposite – load also “depends on the weather and the time of day” as does the availability of traditional generators which may not be able to rapidly start, have available fuel (due to time of day and weather variability in thermal loads) or which might be down for maintenance, planned or otherwise. The final comment on OSW fails to make the obvious correlation in ISO’s data that during the 2017-18 cold-snap, OSW would have peaked when the region was most stressed and lulled when it was least stressed. |  |
| p.130 | Sec. 7.8 | Conservation Law Foundation | Comment 24: Add to list of bullets listing ways in which energy-security could be improved: adding VERs/OSW. |  |
| p.143-44 | Sec. 8.2.2 | Conservation Law Foundation | Comment 25: See CLF Comment 11 above. |  |
| pp.165-69 | Sec. 9.6 | Conservation Law Foundation | Comment 26: See CLF Comment 8 above – this section similarly lists things that ISO has done in the past to address past needs rather than future system needs, and plans for meeting those needs, for 2019 through 2028.”  The RSP intimates in several places that a range of challenges exist re: VERs and inverter-based generation but here presents only past accomplishments, instead of a credible engineering plan to address known future issues and challenges. |  |
| p.178-80 | Sec. 11 | Conservation Law Foundation | Comment 27: Revise to incorporate all above comments. |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |