UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

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Dated: September 10, 2026

Uttarakhand Electricity Regulatory Commission (Framework for Resource Adequacy) Regulations, 2026

Statement of Reasons

1. The Uttarakhand Electricity Regulatory Commission ("Commission") published the draft Uttarakhand Electricity Regulatory Commission (Framework for Resource Adequacy) Regulations, together with the Annexures and Formats thereto, inviting comments / objections / suggestions from stakeholders. The comments/objections/suggestions so received were duly analysed by the Commission.

2. The comments/objections/suggestions of the stakeholders have been considered by the Commission while finalising the Regulations, as discussed in this Statement of Reasons. A list of the stakeholders who submitted comments, is enclosed at **Annexure-I** to this Statement of Reasons.

3. This Statement of Reasons is being issued with the intent of explaining the rationale which went into finalisation of the Framework for Resource Adequacy Regulations, the stakeholder comments considered, and the Commission's reasoning. However, in case of any deviation/discrepancy between this Statement of Reasons and the provisions of the Framework for Resource Adequacy Regulations as finally notified, the provisions of the Framework for Resource Adequacy Regulations, 2026, as notified, shall prevail. The comments/suggestions/ objections received from the stakeholders and the Commission's views thereon, are discussed in the subsequent paragraphs.

4. The Commission has carried out resequencing of certain provisions in the final Regulations, as compared with the draft Regulations, to maintain consistency in the numbering and structure of the Regulations.

5. Suggestions and objections of the stakeholders and the Commission's views thereon:

5.1. Regulation 3.1 in respect of Scope and Applicability

The provision in the draft Regulations reads as under:

These Regulations shall apply to the Generating Companies, Distribution Licensee, State Load Despatch Centre, State Transmission Utility, Transmission Companies, other grid connected entities and stakeholders within the State of Uttarakhand."

Stakeholders' Comments/Suggestions

5.1.1. M/s NSEFI submitted that the wording is broad and may create ambiguity regarding scope and compliance obligations for entities that are not direct procurers or planners. They sought clarification on whether the Regulations apply only to entities having a direct role in RA planning and compliance, and whether captive users/open access consumers are covered only to the extent relevant to data sharing and forecasting.

Commission's View

5.1.2. The Commission has examined the suggestion of NSEFI. Regulation 3.1 identifies the categories of entities to which the Regulations apply by reference to their functional role (generation, distribution, transmission, load despatch) and by the residuary category of "other grid connected entities and stakeholders". The Commission is of the view that the obligations cast on each category of entity are, in any event, delineated with specificity in the substantive provisions of the Regulations, and that a general scope clause is not the appropriate place to carve out graded applicability. However, the Commission has slightly modified the Regulation 3.1 to textually align the same with the provisions of the Regulation. Further, the Commission at Regulation 24(27) of the final Regulations has now clarified that a separate Order would be issued annually by the Commission specifying the timelines for submission of relevant data by the grid connected entities and other obligated entities, having regard to the requirement of the Distribution Licensee for the purpose of undertaking Resource Adequacy Planning.

Accordingly, the Regulation 3.1 shall now read as under:

"3.1 These Regulations shall apply to the Generating Companies, Distribution Licensee(s), State Load Despatch Centre, State Transmission Utility, Transmission Licensee(s) and other grid connected entities within the State of Uttarakhand."

5.2. Regulation 4.1(d) in respect of the definition of Capacity Credit

5.2.1. The Commission has slightly modified the definition of Capacity Credit to textually align it with the provisions of the Regulations.

Accordingly, the Regulation 4.1(d) shall now read as under:

*"(d) **"Capacity Credit"** or **"CC"** means the firm capacity for meeting Resource Adequacy Requirements, expressed as a percentage of an installed nameplate capacity;"*

5.3. Regulation 4.1(l)/4.1(p) in respect of definitions of "Long-Term" and "Medium-Term", read with Regulation 5.4(a)/(b)

The provision in the draft Regulations reads as under:

*"(l) **"Long-Term"** means duration exceeding five years for development of demand forecasting and generation resource planning;*

*(p) **"Medium-Term"** means duration exceeding one year and up to five years for development of demand forecasting and generation resource planning;"*

Stakeholders' Comments/Suggestions

5.3.1. SLDC submitted that the definition of "Long-Term" under Regulation 4.1(l) is contradictory to Regulation 5.4(a). The two clauses must be aligned so that the same duration/definition is used consistently through the Regulations.

Commission's View

5.3.2. The Commission agrees that internal consistency between the definitions clause and the operative provisions on procurement-plan periods is necessary. This is also consistent with paragraphs A.2 and A.3 of the CEA Guidelines for Medium- and Long-Term Power Demand Forecast, which prescribe that the medium-term forecast should cover "more than 1 year and up to 5 years" and the long-term forecast should be "for the next 10 years at least".

Accordingly, in the final Regulations, Regulation 5.3 (a) and (b) [originally 5.4 (a) and (b) in the draft Regulations] has been modified, which shall now be read as under:

"(a) Long-term procurement plan for a period exceeding five years and up to ten years; and

(b) Medium-term procurement plan for a period exceeding one year and up to five years; and"

5.4. Regulation 4.1(z) in respect of definition of "Power Supply Agreement"

The provision in the draft Regulations reads as under:

*"**"Power Supply Agreement"** shall mean the agreement entered into between the Procurer(s) and the Seller pursuant to which the Seller shall supply power to the Procurer(s) as per the Ministry of Power Guidelines for long-term Procurement of Electricity from Thermal Power Stations set up on Design, Build, Finance, Own and Operate (DBFOO) basis and sourcing fuel as provided under Model Bidding Documents including allocation of coal under B(I), B(III) and B(IV) of SHAKTI (Scheme for Harnessing and Allocating Koyala (Coal) Transparently in India) Policy;"*

Stakeholders' Comments/Suggestions

5.4.1. UPCL proposed that the definition be amended to expressly cover subsequent amendments to the Ministry of Power Guidelines, Model Bidding Documents, and the SHAKTI Policy, by adding the words "and amendments thereof as applicable", to ensure the Agreement remains aligned with evolving Government of India policy.

Commission's View

5.4.2. The Commission is of the view that references in a Regulation to Government guidelines, policies and model documents ordinarily take their current, amended form unless a contrary intention appears, as a matter of general principle of statutory/regulatory interpretation and an express "and amendments thereof" qualifier is accordingly not strictly necessary for this purpose. The definition at Regulation 4.1(aa) [originally 4.1(z) in the draft Regulations] has, therefore, been retained without change in the final Regulations, and the suggestion of UPCL has not been accepted.

5.5. Insertion of new definition in respect of "OTC Platform" & "Banking of electricity/power" under Regulation 4, and insertion of new Sub-clause under Regulation 14.

Stakeholders' Comments/Suggestions

5.5.1. M/s New Age Markets in Electricity Pvt. Ltd. (M/s NAME), submitted that the draft Regulations do not define "OTC Platform". They proposed insertion of a definition referencing Power Market Regulations issued by the Central Electricity Regulatory

Commission, and submitted that inclusion of a definition will bring consistency, regulatory certainty and uniform interpretation.

M/s NAME further proposed defining "Banking" and mandating that Distribution Licensees list every banking requirement through an OTC Platform, together with a new Sub-regulation 14.11 requiring the Distribution Licensee to invite offers through an OTC Platform before finalising banking arrangements. They submitted that it shall bring transparent price discovery for banking arrangements.

Commission's View

5.5.2. The Commission has defined an OTC platform under Regulation 4 to ensure that any platform through which power, if any, will be procured by the distribution licensee and which falls within the scope of the Power Market Regulations issued by the CERC.

The newly introduced definition reads as follows:

> *"v)* ***'OTC Platform'*** *means an Over-The-Counter Platform operating in terms of Power Market Regulations issued by the Central Electricity Regulatory Commission."*

Further, the Commission finds that the suggestion by M/s NAME to define 'Banking' and exempt transactions through an OTC platform from Commission's approval is not justified. Furthermore, the proposal to make it mandatory for discoms to invite offers through an OTC platform before finalising any banking arrangement is restrictive and does not reflect fairness. Consequently, the suggestions made by M/s NAME in this regard are not being accepted.

5.6. Regulation 6.1 in respect of periphery of demand assessment and forecasting

The provision in the draft Regulations reads as under:

> *"The Distribution Licensee shall develop and prepare demand assessment and forecasting considering the guidelines for Long-term and Medium-term power demand forecast issued by Central Electricity Authority (CEA) from time to time."*

Stakeholders' Comments/Suggestions

5.6.1. SLDC submitted that the periphery of demand assessment and forecasting is not defined. The Distribution Licensee(s) should forecast demand at State Periphery including intra-State transmission losses, as the Distribution Licensee has to maintain its drawl and schedule at State periphery for inter-State Deviation Settlement.

Commission's View

5.6.2. The Commission accepts the suggestion of SLDC. Regulation 6.1 of the Modified Draft Regulation now requires the Distribution Licensee(s) to develop and prepare demand assessment and forecasting "at State periphery", and to do so "in accordance with" (rather than merely "considering") the CEA guidelines for Long-term and Medium-term power demand forecast. This is directly consistent with paragraph F.1 of the CEA Guidelines for Medium- and Long-Term Power Demand Forecast, which requires that "Electrical energy requirement of a State at its periphery should be worked out by summing up the T&D losses of its each DISCOM and adding it to the electrical energy consumption of the State".

Accordingly, the modified Regulation 6.1 shall be read as under:

"6.1 The Distribution Licensee(s) shall develop and prepare demand assessment and forecasting at State periphery in accordance with the guidelines for Long-term and Medium-term power demand forecast issued by Central Electricity Authority (CEA) from time to time."

5.7. Regulation 6.3 in respect of Deviation Settlement Mechanism (DSM) accounts

The provision in the draft Regulations reads as under:

"The SLDC shall be responsible for providing Deviation Settlement Mechanism (DSM) accounts to the Distribution Licensee of previous financial year latest by 21st April of each year."

Stakeholders' Comments/Suggestions

5.7.1. UPCL sought clarification on whether the State/Central DSM account has to be provided by SLDC, and whether/how UPCL is required to factor the same into the resource adequacy plan.

Further, SLDC submitted that the clause is not clear on whether it refers to intra-State or Inter-State DSM Accounts. If intra-State DSM accounts is to be provided, the provision for issuance of intra-State Accounts already exists under Clause 10(1) of the UERC (DSM) Regulations, 2017, and the timeline should align with that Regulation and its amendments rather than being independently prescribed.

Further, M/s NSEFI submitted that Resource Adequacy planning is time-sensitive and may require earlier access to provisional data, and suggested extending the timeline or clarifying that provisional DSM data may be shared by 21st April with final reconciled accounts to follow.

Commission's View

5.7.2. The Commission is of the view that the existing timeline of 21st April, being already specifically tailored to the resource adequacy planning cycle (which in turn feeds into the 30th April submission under Regulation 8.1), should be retained. The Commission is of the view that utilities may seek case-specific relaxation under the Power to Relax provision if genuine practical difficulty arises in a particular year.

Further, regarding clarification sought by UPCL and SLDC on State/Central DSM account, the Commission would like to state that the DSM accounts as maintained by the concerned utility shall be provided to the Distribution Licensee in accordance with these Regulations. Similar query has been raised by the SLDC w.r.t. the Regulation 21.1 of the draft Regulation. In this regard, since Regulation 21.1 of the draft Regulation (now Regulation 24.1) is merely a re-iteration of the timelines specified in Regulation 6.3, therefore, the clarification given above applies to it in the same spirit.

Furthermore, regarding the submission made by M/s NSEFI for a provisional/ final two-stage disclosure, the Commission has not accepted it as it would lead to multiple data and multiple revisions of the forecasts based on the same thus defeating the intended outcome. Additionally, to address UPCL's query on the intended use of the data within the resource adequacy process, the Commission has modified Regulation 6.3 which shall now be read as follows:

"6.3 The SLDC shall be responsible for providing Deviation Settlement Mechanism (DSM) accounts to the Distribution Licensee(s) of previous financial year latest by 21st April of each year, and the Distribution Licensee(s) shall utilize the same for preparing its forecasts."

5.8. Regulation 6.7 in respect of demand forecasting scenarios.

The provision in the draft Regulation reads as under:

"The Distribution Licensee may use Electric Power Survey (EPS) projections as base and/or any methodology other than the above-mentioned methodologies after providing detailed justification for the methodology adopted for demand forecasting. The Distribution Licensee shall use the best fit of various methodologies for the purpose of demand/load forecast after taking into consideration various scenarios such as most probable, business as usual, and aggressive, as specified under Regulation 6.17 of these Regulations."

Stakeholders' Comments/Suggestions

5.8.1. UPCL submitted that more clarification is required regarding the different scenarios, and the Commission should define the scenarios (most probable, business as usual, and aggressive) for proper understanding.

Further, M/s WRI India and UPCL pointed out that the reference in the said Regulation should be to Regulation 6.16 (which actually specifies the three scenarios), and not Regulation 6.17.

Commission's View

5.8.2. The Commission accepts, in substance, the suggestion that the terminology of the scenarios be revisited. The three scenarios have been renamed as "optimistic", "business as usual", and "pessimistic" in place of "most probable", "business as usual", and "aggressive", wherever they occur in the Regulations, to align with paragraph A.10 of the CEA Guidelines for Medium and Long Term Power Demand Forecast, which requires the forecast to be carried out for "at least three scenarios – Optimistic scenario, Business As Usual (BAU) scenario & Pessimistic scenario". While UPCL's request for illustrative definitions of each scenario to be mentioned in the Regulations has not been separately incorporated as regulatory text, the Commission notes that the parameter-wise construction of each scenario is already addressed, for the Distribution Licensee's guidance, in Annexure-IV of the CEA Demand Forecast Guidelines, which the Distribution Licensee is required to follow under Regulation 6.1. Further, the Commission accepts the cross-reference correction in Regulation 6.7, and also under other Regulations as pointed out by the stakeholders and has corrected the same in the final Regulations. For the sake of maintaining uniformity across the provisions of the Regulations, the Commission has renamed the scenarios as "optimistic", "business as usual", and "pessimistic", in place of "most probable", "business as usual", and "aggressive" across the different provisions of the Regulations.

Accordingly, the Regulation 6.7 shall now be read as under:

"6.7 The Distribution Licensee(s) may use Electric Power Survey (EPS) projections as base and/or any methodology other than the above-mentioned methodologies after providing detailed justification for the methodology adopted for demand forecasting. The Distribution Licensee(s) shall use the best fit of various methodologies for the purpose of demand/load forecast after taking into consideration various scenarios such as optimistic, business as usual, and pessimistic, as specified under Regulation 6.16 of these Regulations."

5.9. Regulation 6.10(n) in respect of Policy-influence trajectories

The provision in the draft Regulations reads as under:

"Policy influences such as 24x7 supply to all consumers, LED penetration, efficient use of agriculture pumps, fans/ACs/ appliances, increased use of appliances for cooking/ heating/cooling applications, electrification policies, distributive energy resources, storage, policies which can impact econometric parameters, impact of national hydrogen mission, energy efficiency measures, energy saving and conservation interventions, etc. For each policy, a separate trajectory should be developed for each consumer category."

Stakeholders' Comments/Suggestions

5.9.1. UPCL submitted that developing separate consumer-category-wise trajectories for each individual policy may not be practically feasible due to non-availability of reliable historical data, measurable indicators and future implementation trajectories. The requirement should apply only to the extent reliable and verifiable data is available.

Commission's View

5.9.2. The Commission has considered the submission of UPCL. The intent of the provision is to ensure that the demand forecast is not based merely on historical trends, but also captures the likely impact of policy interventions, technological developments and changing consumption patterns across consumer categories. Policy measures such as

24x7 supply, energy efficiency interventions, electrification, distributed energy resources, storage, and other emerging initiatives may have differential impacts on various consumer categories, and, therefore, category-wise assessment is necessary for preparing a robust and realistic demand forecast. The Commission is of the view that accepting the suggestion to apply the requirement only where reliable and verifiable data is available would dilute the objectives of the Regulation and may result in omission of material policy impacts from the forecast. The absence of complete historical data cannot be a ground for excluding policy influences altogether. The Licensee is expected to use the best available information, policy documents, implementation plans, scheme targets, consumer-category data, field inputs and reasonable assumptions, duly supported by justification, while developing such trajectories. Accordingly, the Commission does not find merit in the proposed change suggested by UPCL. Hence, no modification is required in the draft Regulation.

5.10. Regulation 6.12 in respect of Load research and smart-metering linkage

The provision in the draft Regulations reads as under:

"The long and medium-term load profiles of the consumer categories for which load research has been conducted may be refined on the basis of load research analysis using smart meter infrastructure. The load research shall include monitoring, collecting, and analyzing electrical usage, including consumption patterns, socio-economic factors, and peak load timing. This data is essential for long/medium term and short-term forecasting to avoid capacity shortages. A detailed explanation for refinement conducted must be properly documented by the Distribution Licensee."

Stakeholders' Comments/Suggestions

5.10.1. UPCL submitted that mandatory linkage of load research with smart meter infrastructure may create implementation challenges given the current state of partial smart-meter installation. The historical load data for at least 2 years on a smart-metering basis will not be available with UPCL at present. UPCL requested that load-research outputs based on currently available MU data be considered for historical years and sought deferment of complete smart-meter-based methodology to FY 2029-30.

Commission's View

5.10.2. The Commission has considered the submission made by UPCL. Load research provides granular data on how specific customer classes use electricity across different times and seasons. This empirical foundation improves demand forecasting accuracy by revealing distinct behavioural patterns, peak contributions, and load shapes that aggregate meter data masks. Hence, the Commission is of the view that the requirement of undertaking load research on an annual basis is necessary for preparation of realistic long-term and medium-term load profiles and for ensuring progressive improvement in demand forecasting and system planning. Accordingly, the Regulation has been suitably modified to mandate annual load research by the Distribution Licensee, while enabling refinement of load profiles through smart meter infrastructure as and when such data becomes available.

The specific proposal of UPCL to defer or dilute the said requirement is, therefore, not accepted.

In view of the above, and for removal of ambiguity, the modified Regulation 6.12 shall be read as under:

"The Distribution Licensee(s) shall annually conduct Load Research for consumer categories and the long and medium-term load profiles of the consumer categories for which load research has been conducted may be refined on the basis of load research analysis using smart meter infrastructure. The load research shall include monitoring, collecting, and analyzing electrical usage, including consumption patterns, socio-economic factors, and peak load timing. This data is essential for long/medium term and short-term forecasting to avoid capacity shortages. A detailed explanation for refinement conducted must be properly documented by the Distribution Licensee(s)."

5.11. Regulation 6.14 in respect of Distribution/Transmission loss trajectory for energy forecast.

The provision in the draft Regulations reads as under:

"The Distribution Licensee shall calculate the energy forecast (MUs) of the State by considering distribution losses and Intra/Inter-State transmission losses as per realistic loss trajectory proposed by the Licensee or approved by the Commission:

Provided that for the purposes of estimating Aggregate Revenue Requirement (ARR) for *ensuing years and approval of true-up of previous years, Distribution/Aggregate Technical and Commercial (AT&C) Losses trajectory as specified by the Commission from time to time shall be considered."*

Stakeholders' Comments/Suggestions

5.11.1. Shri Hardeep Rajput submitted that the use of the word "or" between "loss trajectory proposed by the Distribution Licensee" and "approved by the Commission" creates ambiguity as to which trajectory is applicable, since the two may not be identical. He suggested that the Commission approved trajectory be treated as the primary basis, with the Licensee's proposed trajectory usable only on a provisional basis where no approved trajectory exists, subject to subsequent alignment.

Commission's View

5.11.2. The Commission has considered this comment. The Commission agrees entirely with the rationale advanced and has modified Regulation 6.14 to expressly establish the Commission-approved loss trajectory as the primary basis for energy forecasting, with the Distribution Licensee's own proposed trajectory to be used only as a fallback where no Commission approved trajectory is available for the relevant future years. This modification removes the ambiguity and ensures consistency between the loss trajectory used for RA planning and that used for ARR/ true-up purposes.

Accordingly, the Regulation 6.14 shall be read as under:

"6.14 The Distribution Licensee(s) shall calculate the energy forecast (MUs) of the State by considering distribution losses and Intra/Inter-State transmission loss trajectory approved by the Commission, and in case where no trajectory is approved for future years, as per realistic loss trajectory proposed by the Licensee(s) :

Provided that for the purposes of estimating Aggregate Revenue Requirement (ARR) for ensuing years and approval of true-up of previous years, Distribution/Aggregate Technical and Commercial (AT&C) Losses trajectory as specified by the Commission from time to time shall be considered."

5.12. Regulations 6.16, 6.7 and 12.4 in respect of scenario/sensitivity methodology

Stakeholders' Comments/Suggestions

5.12.1. M/s WRI India submitted that the Regulations mandate scenario development and sensitivity/probability analysis but do not prescribe the underlying assumptions, parameter ranges or methodological framework, which may reduce robustness and comparability across planning cycles. WRI India sought a requirement for detailed sensitivity analysis varying demand growth, RE penetration, hydrology/fuel availability and policy drivers; use of feeder-level/DT metering data; integration of load-research results into forecasts with Commission guidelines on sampling; granular rooftop-solar datasets; and structured climate-risk assessment.

Commission's View

5.12.2. The Commission considers that detailed parameter-level guidance such as sensitivity ranges, sampling methodology for load research and climate-risk factoring is more appropriately addressed through the CEA's Guidelines for Medium- and Long-Term Power Demand Forecast. The Guidelines already provide indicative parameters for the Optimistic/BAU/Pessimistic scenarios (Government policies, weather factoring, T&D-loss trajectory and GDP/GSDP assumptions) and a structured Heating/Cooling Degree Day methodology for factoring weather into forecasts. This guidance is provided through subordinate CEA/Commission guidance rather than amendment of the Regulations. Accordingly, WRI India's suggestion has not been incorporated as regulatory text at this stage.

5.13. Regulation 7.1 in respect of periphery for short-term/hourly demand forecasting

The provision in the draft Regulations reads as under:

"The Distribution Licensee shall develop a methodology for hourly or sub-hourly demand forecasting and shall maintain a historical database."

Stakeholders' Comments/Suggestions

5.13.1. SLDC submitted that the periphery for demand forecast is not defined, the Distribution Licensee(s) should forecast demand at State Periphery including intra-State transmission losses.

Commission's View

5.13.2. The Commission accepts SLDC's suggestion, and Regulation 7.1 of the Regulation now requires the Distribution Licensee(s) to develop the hourly/sub-hourly forecasting methodology "at State periphery".

Accordingly, the Regulation 7.1 shall now be read as under:

"7.1 The Distribution Licensee shall develop a methodology for hourly or sub-hourly demand forecasting at State periphery and shall maintain a historical database."

5.14. Regulation 7.2 in respect of Load research and "inputs from SLDC"

The provision in the draft Regulations reads as under:

"For the purpose of ascertaining hourly load profile and assessment of contribution of various consumer categories to peak demand, load research analysis shall be conducted, and influence of demand response, load shift measures, time of use shall be factored in by the Distribution Licensee with inputs from State Load Despatch Centre (SLDC). A detailed explanation for methodology adopted must be properly documented by the Distribution Licensee."

Stakeholders' Comments/Suggestions

5.14.1. SLDC submitted that "inputs from SLDC" is undefined, and the clause should specify what such inputs comprise.

Commission's View

5.14.2. The Commission has considered the comment made by SLDC and modified the Regulation 7.2, which shall now require that the analysis to be carried out "taking into consideration the inputs from State Load Despatch Centre (SLDC), based on the relevant data available", which qualifies the nature of SLDC's inputs as relevant data available.

Accordingly, the Regulation 7.2 shall now be read as under:

"7.2 For the purpose of ascertaining hourly load profile and for assessment of contribution of various consumer categories to peak demand, load research analysis shall be conducted, and influence of demand response, load shift measures, time of use shall be factored in by the Distribution Licensee(s) taking into consideration the inputs from State Load Despatch Centre (SLDC), based on the relevant data available. A detailed explanation for methodology adopted must be properly documented by the Distribution Licensee(s)."

5.15. Regulation 8.1 in respect of State periphery, multiple Distribution Licensee(s), and submission timeline

The provision in the draft Regulations reads as under:

"The Distribution Licensee shall prepare hourly or sub-hourly 1-year Short-term (ST), 5-year Medium-term (MT) and 10-year Long-term (LT) demand forecasts on a rolling basis and submit the same to SLDC by 30th April of each year for the ensuing year(s)."

Stakeholders' Comments/Suggestions

5.15.1. SLDC submitted that the periphery of demand forecast is not defined and the forecasts should be prepared at State periphery incorporating intra-State transmission losses. Further, Shri Hardeep Rajput submitted that the prescribed 30th April timeline may pose practical challenges in ensuring accuracy/completeness of underlying demand data, and the Commission may consider permitting submission of a provisional forecast by 30th April followed by a final updated forecast upon completion of the annual billing/data-reconciliation process.

Commission's View

5.15.2. The Commission accepts SLDC's suggestion regarding demand forecasting at the State periphery. However, as previously discussed, the relaxation in the timeline and the use of provisional data as suggested by Shri Hardeep Rajput have not been accepted. This is because multiplicity of data may pose implementation and operational challenges, thereby defeating the intended objective.

Accordingly, the Regulation 8.1 shall now be read as under:

"8.1 The Distribution Licensee(s) shall estimate and prepare hourly or sub-hourly 1-year Short-term (ST), 5-year Medium-term (MT) and 10-year Long-term (LT) demand forecasts at State Periphery on a rolling basis and submit the same to SLDC by 30th April of each year for the ensuing year(s)."

5.16. Regulation 8.2 in respect of SLDC's role in aggregation of demand forecast

The provision in the draft Regulations reads as under:

"SLDC shall aggregate the demand forecasted by the Distribution Licensee, duly considering the diversity of the State, congruency, seasonal variation aspects and shall prepare the monthly 1-year Short-Term (ST), 5-year Medium-Term (MT) and 10-years Long-Term (LT) forecasts for the entire State after considering the Intra state transmission loss as approved by the Commission in the Business Plan of the STU from time to time and the transmission loss figure available for the last year of the Business plan shall be

considered for assessment of demand for the future years."

Stakeholders' Comments/Suggestions

5.16.1. SLDC submitted that its role is limited to short-term planning and operational purposes, and preparation of the 5-year MT and 10-year LT forecasts is the role of the Distribution Licensees, and therefore, these forecasts should instead be shared with STU and other designated entities for planning purposes.

Commission's View

5.16.2. The Commission has considered the submission of SLDC. The modified Regulation 8.2 clarifies that the demand forecasts are to be prepared by the respective Distribution Licensee(s), and that SLDC's role is to aggregate such forecasts at the State level after duly considering diversity, congruency, seasonal variation and the applicable intra-State transmission loss. The Commission is of the view that, while Distribution Licensee(s) remain responsible for furnishing their respective demand forecasts, a consolidated State-level forecast is necessary for coordinated system planning and operational preparedness. Therefore, SLDC's responsibility to prepare the monthly aggregated 1-year Short-Term, 5-year Medium-Term and 10-year Long-Term forecasts for the entire State has been retained in the modified Regulations. Accordingly, the Regulation 8.2 shall now be read as under:

"8.2 SLDC shall aggregate the respective demand forecasted by the Distribution Licensee(s), duly considering the diversity of the State, congruency, seasonal variation aspects and shall prepare the monthly 1-year Short-Term (ST), 5-year Medium-Term (MT) and 10-years Long-Term (LT) forecasts for the entire State after considering the Intra state transmission loss as approved by the Commission in the Business Plan of the STU from time to time and the transmission loss figure available for the last year of the Business plan shall be considered for assessment of demand for the future years."

5.17. Regulation 8.3 in respect of estimation of demand for the entire State

The provision in the draft Regulations reads as under:

"The Distribution Licensee shall with inputs from SLDC, estimate, in different time periods, namely Long-term, Medium-term, and Short-term, the demand for the entire State duly considering the load diversity of the State."

Stakeholders' Comments/Suggestions

5.17.1. SLDC submitted that this clause is consistent only in the case of a single Distribution Licensee, and in case of multiple Distribution Licensees, it would be null and void, as a Distribution Licensee can only estimate demand for its own control area. SLDC proposed that SLDC (not the Distribution Licensee) estimates demand for the entire State, using AI/ML-based forecasting tools, with Distribution Licensees having the option of accepting SLDC's forecast for their own planning without commercial impact on SLDC.

Commission's View

5.17.2. The Commission has considered SLDC's submission and is of the view that the responsibility of forecasting demand should remain with the Distribution Licensee(s). Consequently, the modification suggested by SLDC is not being accepted by the Commission. Further, the Commission observes that Regulation 8.1 (Distribution Licensee-level forecasting) and Regulation 8.2 (SLDC aggregation) already provides for State-level demand estimation through the aggregation of Distribution Licensee-level forecasts. Therefore, the standalone Regulation 8.3 of the draft Regulations has been deleted as it is redundant.

5.18. Regulation 8.4 in respect of SLDC's submission of state-level aggregate demand forecasts

The provision in the draft Regulations reads as under:

"SLDC shall submit the state-level aggregate demand forecasts (MW and MUs) for Long-Term, Medium-Term and Short-Term to the Authority, NLDC, NRLDC, STU by 31st May of each year for the ensuing year(s)."

Stakeholders' Comments/Suggestions

5.18.1. SLDC submitted that its role should be limited to Short-Term demand forecast only; and the reference to "Long-Term, Medium-Term and" should be deleted.

Commission's View

5.18.2. The Commission has not accepted this suggestion. This provision has been retained without change, continuing to require SLDC to submit the State-level aggregate LT, MT and ST demand forecasts to the Authority, NLDC, NRLDC and STU by 31st May of each year. This is also consistent with Section 3.3 of the MoP RA Planning Framework Guidelines, which states that the STU/SLDC, on behalf of the Distribution Licensee(s) in the State shall provide to CEA and NLDC the details regarding demand forecasts, assessment of existing generation resources and such other details as may be required for the LT-NRAP and ST-NRAP. Further, as discussed above, Regulation 8.3 of the draft Regulations was deleted by the Commission, consequent to which "Regulation 8.4" of the draft Regulations shall now be read as "Regulation 8.3".

5.19. Regulation 9.3 in respect of Resource mapping

The provision in the draft Regulations reads as under:

"The Distribution Licensee shall map all its existing resources, upcoming resources, and retiring resources to develop the existing resource map in MW for the Long-term and Medium-term power procurement plan."

Stakeholders' Comments/Suggestions

5.19.1. The SLDC submitted that the clause should specify 'Licensee(s)' rather than 'Distribution Licensee' and that the second use of the word 'existing' in 'develop the existing resource map' is confusing as it duplicates and conflicts with 'upcoming resources'.

Commission's View

5.19.2. The Commission accepts SLDC's suggestion in substance. In the modified Regulations, the second occurrence of the word "existing" has been deleted, and the modified Regulation 9.3 shall now be read as under:

"9.3 The Distribution Licensee(s) shall map all its existing resources, upcoming resources, and retiring resources to develop the resource map in MW for the Long-term and Medium-term power procurement plan."

5.20. Regulations 9.4(l)/(m) and 12.6(m), read with Annexure-I in respect of Transmission-generation integration

The provision in the draft Regulations reads as under:

"9.4(l) Transmission expansion plans with timelines;

9.4(m) Evacuation arrangements with timelines for RE generation resources;

12.6(m) The Distribution Licensee while formulating the LT-DRAP shall also consider the constraints mentioned in Annexure-I of these Regulations."

Stakeholders' Comments/Suggestions

5.20.1. WRI India submitted that while the Regulations require consideration of transmission expansion plans, evacuation arrangements and resource adequacy assessments, they do not explicitly require disclosure of renewable energy curtailment, transmission congestion, and resource deliverability assessments. WRI India sought express requirements to evaluate and disclose these, and to place such assessments in the public domain, along with explicit provision for coordinated planning between the Distribution Licensee, STU and SLDC.

Commission's View

5.20.2. The Commission has not made a specific amendment to Regulations 9.4(l)/(m) or 12.6(m) in response to this comment, as the matters highlighted by the stakeholder, including transmission congestion, deliverability of resources and potential curtailment, are inherent planning considerations and are expected to be assessed by the Distribution Licensee in coordination with the STU and SLDC, wherever applicable, in accordance with the prevailing statutory and regulatory framework. Accordingly, the Commission does not consider it necessary to introduce a separate or additional amendment in the Regulations at this stage. However, the Distribution Licensee shall ensure that such assessments are duly reflected, to the extent relevant, in the LT-DRAP and supporting documentation placed before the Commission.

5.21. Regulation 10.1 in respect of "Licensee" to "Licensee(s)"

Stakeholders' Comments/Suggestions

5.21.1. SLDC submitted that the word "Licensee" should be plural ("Licensees") for consistency with usage elsewhere and to reflect multiple Distribution Licensees.

Commission's View

5.21.2. The Commission has examined the suggestion of SLDC and finds merit in the same. Considering that the Regulations may apply to more than one Distribution Licensee in the State, the use of the expression "Licensee(s)" is appropriate for ensuring textual consistency and regulatory clarity across the framework. Accordingly, the

Commission has accepted the suggestion and has suitably modified Regulation 10.1, as well as other relevant provisions of this Regulation, wherever necessary, to reflect the applicability of the Regulations to multiple Licensees.

5.22. Regulation 10.2(a) and (e) in respect of CC factor formula

The provision in the draft Regulations reads as under:

"(a) For each year, the hourly recorded Gross Load (in MW) for 8760 hours (8784 hours for leap year) (or sub-hourly time-blocks) shall be arranged in descending order;

…

(e) Total generation from solar generation (in MUs) corresponding to these top 250 load hours shall be summed up;"

<u>Stakeholders' Comments/Suggestions</u>

5.22.1. SLDC submitted that in clause (a), "recorded Gross Load" should be defined and the periphery should also be clarified. SLDC further stated that the purpose of clause (e) is unclear.

<u>Commission's View</u>

5.22.2. The Commission considering the submission of SLDC has modified the sub-regulation (a) to provide clarity on the " Gross Load", which shall be the 'total demand at State Periphery', thus clarifying both the meaning of "Gross Load" and the periphery at which it is to be recorded. Further, in relation to clauses (e), the Commission has consolidated the clauses (e) and (f) of the draft Regulations into a single clause (e), thus making it consistent with the RA Planning Framework Guidelines. Accordingly, the modified Regulation 10.2 (a) and (e) shall now be read as under:

"a) For each year, the hourly recorded Gross Load, i.e. total demand at State Periphery (in MW) for 8760 hours (8784 hours for leap year) (or sub-hourly time-blocks) shall be arranged in descending order;

…

e) Resultant CC factor shall be as per formula below:

CC factor = Sum of Solar Generation (MW) for top 250 load hours / Sum of Installed Solar Capacity (MW) for top 250 load hours."

5.23. Regulation 10 in respect of Capacity Crediting of Generation Resources

<u>Stakeholders' Comments/Suggestions</u>

5.23.1. WRI India submitted that the top-250-net-load-hour approach may not fully capture dynamics affecting capacity value of different technologies. WRI India suggested applying the top net-load hours methodology with differentiation across solar/non-solar and monsoon/non-monsoon seasons, considering CEA's "Critical Days" methodology, and over the time specifying trial exercises for determination of capacity credits based on Effective Load Carrying Capability (ELCC).

<u>Commission's View</u>

5.23.2. The Commission has carefully considered the suggestion of WRI India. At this stage, the Commission does not consider it appropriate to amend Regulation 10 to prescribe either seasonal differentiation in the top-load-hour methodology or an Effective Load Carrying Capability (ELCC)-based framework. The methodology incorporated in the Regulations provides a transparent, administratively workable and data-replicable basis for determining capacity credit, having regard to the present level of data availability, institutional readiness and implementation capability within the State. The Commission is also guided by Annexure C of the MoP Resource Adequacy Planning Framework Guidelines, which recognises a phased approach and specifically contemplates that ELCC may be adopted subsequently, once the requisite analytical capacity, historical data sets and modelling capability are available with the State utilities. Accordingly, the Commission has decided not to incorporate the suggested amendment at this stage, however, the matter may be revisited in future reviews of the Regulations as data availability, modelling capability and sectoral experience mature.

5.24. Regulation 10.4 in respect of Capacity Credit basis for thermal resources

5.24.1. The Commission has modified Regulation 10.4 of the draft Regulations to include all type of 'fuel availability' in case of thermal resources, in place of existing mention of only 'coal availability' in the draft Regulations, to maintain inclusiveness in the Regulations.

Accordingly, the Regulation 10.4 shall now be read as under:

"10.4 CC factor for thermal resources shall be computed based on fuel availability and planned/ forced outages."

5.25. Reference of SLDC/STU, like in Regulations 11.2, 11.4, 12.9, 20.1 and other clauses of the Regulations

<u>Stakeholders' Comments/Suggestions</u>

5.25.1. SLDC submitted that STU/SLDC has been mentioned jointly under various clauses in the Regulations without clear demarcation of their respective responsibilities, and such demarcation should be made clear.

<u>Commission's View</u>

5.25.2. The Commission has examined the submission of SLDC. The duties and responsibilities of STU/SLDC are clearly laid down in the Electricity Act, 2003.The Commission does not consider it necessary to introduce a separate demarcation clause distinguishing the responsibilities of STU and SLDC in the Regulations at this stage. The provisions referring to STU/SLDC are intended to ensure coordinated consideration of transmission planning, system operation, load despatch, data sharing and State-level aggregation functions, all of which are closely interlinked for the purposes of the Regulations. The Commission is, therefore, of the view that the existing formulation is legally sufficient and operationally appropriate.

5.26. Regulation 11.3 in respect of Higher Planning Reserve Margin

The provision in the draft Regulations reads as under:

"11.3. The Distribution Licensee may consider higher planning reserve margins, subject to prior approval from the Commission."

<u>Stakeholders' Comments/Suggestions</u>

5.26.1. Shri Hardeep Rajput submitted that the provision does not specify any upper limit, guiding principles, or criteria for determination of a higher PRM. Before permitting procurement based on a higher-than-standard PRM, the Distribution Licensee should undertake a detailed cost-benefit assessment demonstrating necessity and tariff impact. The Commission may also consider prescribing an indicative range or ceiling for PRM.

Commission's View

5.26.2. The Commission has not amended Regulation 11.3 to specify a numerical ceiling or a mandatory cost-benefit-assessment template, as the said Regulation already has a condition that any higher PRM shall be subject to approval of the Commission. The same is also consistent with Section 3.7.3 of the MoP RA Planning Framework Guidelines, which similarly leaves Distribution Licensees "free to consider higher planning reserve margins, subject to approval from the SERC/JERC" without prescribing a fixed ceiling.

5.27. Regulation 12.6(d) in respect of tie-up requirement

The provision in the draft Regulations reads as under:

"12.6(d) The Distribution Licensee shall demonstrate to the Commission 100% tie-up for the first year and a minimum 90% tie-up for the second year to meet the requirement of their contribution towards meeting national peak.

Stakeholders' Comments/Suggestions

5.27.1. M/s NSEFI submitted that a rigid tie-up requirement may not be practical in all cases, especially where procurement is subject to competitive bidding timelines and market conditions. NSEFI sought review of the rigidity of the tie-up thresholds and flexibility where market availability, transmission constraints, or competitive procurement outcomes justify deviation.

Commission's View

5.27.2. The Commission has carefully considered the submission of M/s NSEFI. The requirement under Regulation 12.6(d) for demonstrating 100% tie-up for the first year and a minimum 90% tie-up for the second year is not an isolated or discretionary prescription but is in consonance with Section 3.6 of the Resource Adequacy Planning Framework Guidelines issued by the Ministry of Power, Government of India, which envisages equivalent demonstration before the concerned State Commission/Joint Commission. The purpose of the said requirement is to ensure that near-term resource adequacy is backed by firm and demonstrable arrangements, particularly for meeting the licensee's contribution towards national peak demand and is not left dependent upon uncertain future market availability or procurement processes. The

Commission is of the view that diluting the specified threshold by introducing a general flexibility clause, without a case-specific regulatory scrutiny mechanism, may weaken the enforceability of the Resource Adequacy framework and could adversely affect reliability planning. Accordingly, the Commission does not find any reason to modify Regulation 12.6(d), and the provision has been retained without change.

5.28. Regulation 12.6(g) in respect of Long-term/Medium-term contract mix

The provision in the draft Regulations reads as under:

"12.6(g) The Distribution Licensee shall keep the share of Long-term contracts in the range of 80-85% of the RAR and Medium-term contracts in the range of 10%-15% of the RAR, while the balance of RAR shall be met through Short-term contracts.
Provided that power procurement through exchange, shall not be considered towards the contribution for meeting RAR."

Stakeholders' Comments/Suggestions

5.28.1. UPCL submitted that the prescribed procurement mix should serve as a planning benchmark rather than a mandatory requirement. UPCL while referring to the Section 3.6 of the MoP Guidelines for Resource Adequacy Planning Framework for India (Long-term suggested 75-80%, Medium-term 10-20% of supply-side RAR) and SERC practice followed across States, requested the range be revised to 75-85% Long-term with the balance flexibly met through Medium/Short-term contracts.

Further, M/s NSEFI submitted that the procurement mix should remain flexible to reflect demand profile, resource availability and cost optimisation. The further, w.r.t. the proviso to the said Regulation, submitted that exchanges are an important balancing and portfolio-management tool and may contribute to short-term adequacy, and sought reconsideration of the blanket exclusion, or at least limited recognition for exchange procurement meeting defined reliability criteria.

Additionally, M/s WRI India submitted that a high mandated Long-term share (80-85%) may reduce flexibility and increase the risk of stranded capacity/ avoidable fixed-cost burden. They suggested to consider a flexible mix, with calibrated inclusion of market-based procurement. They further submitted that the provisos to Regulations 12.6(g) (and also 14.4) exclude all power procured through power exchanges from RAR contribution, while Regulation 14.10 permits short-

/medium-term procurement through DEEP, PUShP and OTC platform. They submitted that the Term-Ahead Market (TAM) contracts, unlike OTC-platform transactions, offer firm delivery with the exchange bearing counterparty risk, and sought calibrated recognition of TAM contracts towards RAR.

Commission's View

The Commission has considered the submissions of UPCL, M/s NSEFI and WRI India. The Commission is of the view that the procurement mix prescribed under Regulation 12.6(g) is intended to provide a balanced procurement portfolio, ensuring adequate firmness through Long-term arrangements while retaining sufficient flexibility through Medium-term and Short-term procurement to address variation in demand, market conditions and resource availability. Having regard to Sections 3.6 and 3.8 of the MoP Resource Adequacy Planning Framework Guidelines, the Commission has revised the Long-term contract share from 80%-85% of the RAR to 75%-80% of the RAR and the Medium-term contract share from 10%-15% of the RAR to 10%-20% of the RAR. The said revision appropriately aligns the Regulations with the national Resource Adequacy framework while retaining a defined Medium-term band, which is necessary to preserve portfolio discipline and avoid an entirely open-ended residual procurement structure.

With regard to the request for recognition of procurement through power exchanges, including Term-Ahead Market contracts, towards RAR contribution, the Commission is of the considered view that procurement through power exchanges, despite its utility for balancing and portfolio optimisation, does not possess the same degree of assuredness as firm contracted capacity for the purpose of demonstrating Resource Adequacy Requirement. Resource Adequacy planning is premised on anticipated availability of demonstrable and enforceable capacity arrangements, whereas exchange-based procurement is inherently dependent upon market liquidity, price discovery and availability at the relevant time. Accordingly, the Commission does not consider it appropriate to recognise power procurement through exchanges towards contribution for meeting RAR at this stage, and the proviso excluding such procurement has been retained.

Further, the Regulation 14.10 of the draft Regulations, which separately referred to procurement through DEEP, PUShP portal and OTC Platform, has been deleted in the final Regulations. The deletion is considered appropriate since Regulation 14.9 already contains a broad enabling provision permitting the Distribution Licensee to contract power through specified sources, including Power Exchanges, Bilateral Agreements and Banking Arrangements, as well as "any other sources as may be approved by the Commission". The said residuary approval mechanism is, in the Commission's view, sufficient to cater to any future or case-specific procurement requirement, including any emerging procurement channel, subject to regulatory scrutiny and approval by the Commission. Therefore, a separate provision under Regulation 14.10 is neither necessary nor desirable, as it may create avoidable duplication or interpretational overlap with Regulation 14.9.

Accordingly, the modified Regulation 12.6(g) shall now be read as under:

"12.6(g) The Distribution Licensee(s) shall keep the share of Long-term contracts in the range of 75-80% of the RAR and Medium–term contracts in the range of 10% - 20% of the RAR, while the balance of RAR shall be met through Short-term contracts:

Provided that power procurement through exchange, shall not be considered towards the contribution for meeting RAR."

5.29. Regulation 12.8(a) in respect of ST-DRAP review frequency

The provision in the draft Regulations reads as under:

12.8(a) SLDC shall prepare one-year look ahead ST-DRAP (Short-term Distribution Resource Adequacy Plan) on an annual basis for operational planning, at the State level based on the LT-DRAP study results. The SLDC shall review the ST-DRAP on a daily, monthly and quarterly basis based on actual availability of generation resources.

<u>Stakeholders' Comments/Suggestions</u>

5.29.1. SLDC submitted that the word "weekly" should be inserted between "daily" and "monthly".

<u>Commission's View</u>

5.29.2. The Commission accepts SLDC's suggestion, and accordingly, the modified Regulation 12.8(a) shall now be read as under.

"12.8(a) SLDC shall prepare one-year look ahead ST-DRAP (Short-term Distribution Resource Adequacy Plan) on an annual basis for operational planning, at the State level based on the LT-DRAP study results. The SLDC shall review the ST-DRAP on a daily, weekly, monthly and quarterly basis based on actual availability of generation resources."

5.30. Regulation 12.9 in respect of timeline for Commission's approval of Resource Adequacy Plans

The provision in the draft Regulations reads as under:

"12.9. The Commission shall approve Resource Adequacy Plan (LT-DRAP, MT-DRAP, ST-DRAP) of the Distribution Licensee within 60 days of submission by the Distribution Licensee of the duly vetted Resource Adequacy Plan (LT-DRAP, MT-DRAP, ST-DRAP) by CEA for the ensuing year(s) including annual rolling plans, as the case may be, upon taking into consideration various scenarios as well as allocation of Resource Adequacy requirement allocated to the State/Distribution Licensee based on its contribution to the National/state peak respectively as determined by Authority/NLDC/RLDC and STU/SLDC, as the case may be."

Stakeholders' Comments/Suggestions

5.30.1. M/s WRI India submitted that the Regulation 12.9 provides for Commission approval within 60 days, and Regulation 24 requires consultation with generating companies, transmission companies, load despatch centres and CEA, but the Regulations do not provide for public consultation in the approval process despite power purchase costs being the dominant share of licensee expenses. WRI India sought a transparent public hearing process, alignment of RA assumptions with the ARR/tariff process, and pre-approval presentation before the State Advisory Committee.

Commission's View

5.30.2. The Commission has considered the submission of M/s WRI India. The Commission is of the view that Resource Adequacy Plans are technical planning documents which are required to be prepared by the Distribution Licensee(s) in consultation with the concerned generating companies, transmission utilities, load despatch centres and the Central Electricity Authority, as envisaged under the Regulations. The process of approval of such plans is intended to ensure regulatory scrutiny of demand forecasts, resource mapping, planning reserve margin, procurement adequacy and related assumptions, while maintaining alignment with the national Resource Adequacy framework. The Commission does not consider it necessary to prescribe a separate public hearing or State Advisory Committee presentation as a mandatory step within the approval process under Regulation 12.9, since the Resource Adequacy Plan is itself a planning and compliance instrument and the consequential power purchase cost implications, if any, would be examined in the appropriate tariff or power procurement proceedings in accordance with the applicable Regulations.

At the same time, the Commission recognises that approval of the Resource Adequacy Plan involves examination of multi-year demand forecasts, scenario-wise assumptions, CEA-vetted study results, resource adequacy allocations, procurement implications and comments/inputs of the concerned agencies. To provide adequate time for meaningful regulatory scrutiny and to avoid a mechanical approval process within an unduly compressed period, the timeline for approval by the Commission has been revised from 60 days to 120 days from the date of submission of the duly vetted Resource Adequacy Plan by the Distribution Licensee.

Accordingly, Regulation 12.9 has been modified and shall now be read as under:

"12.9. The Commission shall approve Resource Adequacy Plan (LT-DRAP, MT-DRAP, ST-DRAP) of the Distribution Licensee(s) within 120 days of submission by the Distribution Licensee(s) of the duly vetted Resource Adequacy Plan (LT-DRAP, MT-DRAP, ST-DRAP) by CEA for the ensuing year(s) including annual rolling plans, as the case may be, upon taking into consideration various scenarios as well as allocation of Resource Adequacy requirement allocated to the State/Distribution Licensee(s) based on its contribution to the National/state peak respectively as determined by Authority/ NLDC/RLDC and STU/SLDC, as the case may be."

5.31. Regulation 13 in respect of procurement planning

The provision in the draft Regulations reads as under:

"Procurement planning shall consist of: (a) Determining the optimal power procurement resource mix; (b) Deciding on the modalities of procurement type and tenure; and (c) Engaging in the capacity trading or sharing of capacity to minimize risk of resource shortfall and to maximize rewards of avoiding stranded capacity or contracted generation."

<u>Stakeholders' Comments/Suggestions</u>

5.31.1. M/s NSEFI submitted that the clause is broad but does not expressly link procurement planning to the approved RA plans or clearly recognise all practical procurement channels used for balancing, reliability and optimisation.

Commission's View

5.31.2. Procurement planning under Regulation 13 is not an independent exercise and necessarily flows from the approved Resource Adequacy Plan prepared and approved under Regulation 12. The activities contemplated under Regulation 13 are intended to operationalise the approved Resource Adequacy Plan and to ensure that procurement decisions remain aligned with the assessed Resource Adequacy Requirement, therefore, the Commission is of the view that no amendment is required in Regulation 13 for inserting an express reference to the approved LT-DRAP, MT-DRAP or ST-DRAP..

5.32. Regulation 14.2 in respect of least-cost modelling and optimisation

The provision in the draft Regulations reads as under:

"For identification of the optimal generation procurement resource mix, optimization techniques and least-cost modelling shall be employed by the Distribution Licensee in order to avoid stranded capacity. The Distribution Licensee shall engage in adoption of least cost modelling and optimization techniques and shall demonstrate the same in its overall power procurement planning exercise to be submitted to Commission for approval by 30th April of each Financial Year."

Stakeholders' Comments/Suggestions

5.32.1. M/s WRI India submitted that the Regulations do not provide specific guidance on acceptable modelling approaches, input/assumption templates, or validation/ benchmarking criteria. WRI India sought guiding principles for least-cost modelling and 15-minute block-wise granularity for production cost simulation in line with scheduling/dispatch practice.

Commission's View

5.32.2. Regulation 14.2, as framed, is consistent with and derives its foundation from Annexure E of the MoP Resource Adequacy (RA) Planning Framework Guidelines issued in this regard, which prescribes that the generation expansion planning model adopted "shall be capable of simulating on an hourly chronological resolution." The said Guidelines, being the governing national framework on resource planning, do not themselves mandate sub-hourly (i.e., 15-minute block-wise) simulation as a baseline requirement. Rather, the adoption of finer temporal granularity has been envisaged therein as a function of the availability, quality, and robustness of the underlying data, and not as an unconditional or immediate obligation upon the Distribution Licensees.

The Commission is of the considered opinion that prescribing a higher resolution than what is mandated under the governing framework, without corresponding assurance of data readiness, would risk introducing inconsistency, modelling inaccuracies, and avoidable implementation challenges, rather than enhancing the robustness of least-cost planning. Regulation 14.2 already casts a clear and enforceable obligation upon the Distribution Licensee to adopt least-cost modelling and optimisation techniques and to demonstrate the same in its power procurement planning submitted for the Commission's approval annually. This provides adequate regulatory oversight and a mechanism for the Commission to review and, if necessary, direct refinements to the modelling approach on a case-to-case basis. Accordingly, the Commission does not consider it necessary to carry out any modification to Regulation 14.2.

5.33. Regulation 14.8 in respect of storage contracting

The provision in the draft Regulations reads as under:

"The Distribution Licensee shall contract storage capacity corresponding to the results of LT-DRAP capacity addition requirement for future years from Battery Energy Storage System (BESS) or Pumped Storage Projects (PSP) or any other storage technology as per the guidelines for tariff based competitive bidding process notified by the Ministry of Power."

Stakeholders' Comments/Suggestions

5.33.1. M/s NSEFI submitted that a mandatory obligation to contract storage may be disproportionate where cost, technology maturity or system needs do not justify immediate procurement and suggested changing the terminology "shall contract" to "shall evaluate and, where commercially and operationally justified, contract".

Commission's View

5.33.2. The Commission notes that the storage requirement under Regulation 14.8 is not an isolated obligation but flows directly from the LT-DRAP process, wherein the necessity, quantum, timing, and cost-effectiveness of storage capacity are already assessed on techno-economic principles. Introducing discretion at the contracting stage would amount to re-opening a determination already arrived at through LT-DRAP, causing avoidable delay and uncertainty, which is undesirable given the long gestation period of storage projects.

The Commission further notes that storage capacity tied up under this Regulation will also serve towards meeting the Distribution Licensee's Renewable Purchase Obligation/Energy Storage Obligation (RPO/ESO), compliance with which is itself mandatory and time-bound. Accordingly, tie-up of storage capacity cannot be left to discretionary evaluation and must be undertaken mandatorily to avoid shortfall in RPO/ESO compliance. Further, the concern regarding imprudent procurement is adequately addressed, as contracting is required to be carried out through the tariff-based competitive bidding guidelines notified by the Ministry of Power, ensuring competitive price discovery and prudence check at the PPA/PSA approval stage. Accordingly, no modification has been carried out in this respect.

5.34. Regulations 14.9 and 14.10 in respect of procurement of short-term power through various sources

The provision in the draft Regulations reads as under:

"14.9 The Distribution Licensee may contract power through State Generating Stations/ Central Generating Stations/ Independent Power Producers (IPPs)/ Captive Power Plants (CPPs)/ Renewable Power Plants including Co-Generation Plants/Central Agencies /State Agencies/ Intermediaries / Traders / Aggregators / Power Exchanges or through Bilateral Agreements / Banking Arrangements with other Distribution Licensee and any other sources as may be approved by the Commission.

14.10 The Distribution Licensee may procure power on Short-term and Medium-term basis through DEEP and PUShP portal and OTC Platform."

Stakeholders' Comments/Suggestions

5.34.1. M/s IEX submitted that the Ministry of Power mandates short-term procurement through Short Term Bidding Guidelines under Section 63 of the Act, and these guidelines do not recognise the OTC platform as a mode for purchasing short-term power. Moreover, under CERC (Power Market) Regulations 2021, Regulation 46 ("Obligations of the OTC Platform") provides that the OTC Platform shall not engage in negotiation, execution, clearance or settlement of contracts. IEX proposed that in the Regulation 14.10, the terminology "OTC platform" be substituted with the "Term-Ahead Markets (TAM)".

M/s NAME sought to harmonise Regulation 14.9 with 14.10 by including OTC Platforms as a recognised source under 14.9 as well, and sought inclusion of OTC Platforms among the modes used by the dedicated cell under Regulation 23.2.

Commission's View

5.34.2. As discussed in previous paras, the Commission has deleted Regulation 14.10 of the draft Regulations, which separately referred to procurement through DEEP, PUShP portal and OTC Platform, in the final Regulations. The deletion has been considered appropriate since Regulation 14.9 already contains a broad enabling provision permitting the Distribution Licensee to contract power through specified sources, including Power Exchanges, Bilateral Agreements and Banking Arrangements, as well as "any other sources as may be approved by the Commission". The said residuary approval mechanism is, in the Commission's view, sufficient to cater to any future or case-specific procurement requirement, including any emerging procurement channel, subject to regulatory scrutiny and approval by the Commission. Therefore, a separate provision under Regulation 14.10 is neither necessary nor desirable, as it may create avoidable duplication or interpretational overlap with Regulation 14.9. Accordingly, no modification has been carried out in Regulation 14.9 by the Commission.

5.35. Regulations 16.1 and 16.3 in respect of approval of Power Purchase Agreement

The provision in the draft Regulations reads as under:

"16.1 Any new Capacity agreement / tie-up shall be subject to the prior approval of the Commission in view of necessity, reasonableness of cost of power purchase and promotion of working in an efficient, economical and equitable manner.

16.3 Any new power purchase agreement for Long/Medium-term or amendments to existing

Long/Medium-Term Power Purchase Agreement (PPA)/ Power Sale Agreement (PSA) entered into by the distribution licensee shall be subject to the prior approval of the Commission in respect of: (i) Necessity; (ii) Reasonability of cost; ...”

Stakeholders' Comments/Suggestions

5.35.1. M/s NSEFI submitted that not all the amendments require the same level of scrutiny, and requiring prior approval for every new PPA/PSA will create unnecessary regulatory burden. NSEFI suggested excluding routine amendments from prior approval, subject to post-facto intimation.

M/s NAME (New Age Markets in Electricity Pvt. Ltd.) sought exemption of Short-term transactions executed through CERC-regulated OTC Platforms from the requirement of Commission’s prior approval under Regulation 16.1.

Commission's View

5.35.2. The Commission is of the view that the requirement of prior approval is an essential regulatory safeguard to ensure that any new capacity arrangement, power purchase agreement, power sale agreement, or material amendment thereto is examined having regard to necessity, reasonableness of cost, prudence of procurement, and its likely impact on consumers. The Commission does not consider it appropriate to create a general materiality-based carve-out for amendments to Long/Medium-Term PPA/PSA arrangements, since even amendments described as routine may, depending upon their terms, affect tariff, risk allocation, scheduling, supply security, or other commercial/operational obligations and hence require prior approval of the Commission. Similarly, the suggestion of M/s NAME to exempt Short-term transactions executed through CERC-regulated OTC Platforms from prior approval cannot be accepted.

The Commission has deleted the clause 16.1 of the draft Regulations and merged the same with the PPA/PSA approval framework under the Regulation 16.3 of the draft Regulations (now Regulation 16.2 in the final Regulations), thereby keeping the substantive requirement of prior approval intact.

Accordingly, the Regulation 16.2 of the final Regulations shall now be read as under:

"16.2. Any new capacity/ power purchase agreement for Long/Medium-term or amendments to existing Long/Medium-Term Power Purchase Agreement (PPA)/ Power Sale Agreement (PSA) entered into by the Distribution Licensee(s) shall be subject to the prior approval of the Commission. The Petition seeking approval shall demonstrate the following: i. Necessity; ii. Reasonability of cost; ..."

5.36. Regulation 18(a) in respect of additional power procurement during the year

The provision in the draft Regulations reads as under:

"The Distribution Licensee may undertake additional power procurement during the year with prior approval of the Commission, over and above the approved resource adequacy procurement plan, where there has been an unanticipated increase in the demand for electricity or a shortfall or failure in the supply of electricity from any approved source of supply during the year or when the sourcing of power from existing tied-up sources becomes costlier than other available alternative sources."

Stakeholders' Comments/Suggestions

5.36.1. UPCL submitted that the requirement of prior approval of the Commission before undertaking additional procurement may create operational challenges in emergent conditions requiring immediate procurement. UPCL sought permission to procure without prior approval under genuine emergency/unforeseen circumstances, subject to subsequent reporting.

M/s IEX submitted that the Clause 18 does not prescribe that additional procurement happens on a competitive basis, and any additional procurement must be through a competitive route to safeguard consumer interests.

Commission's View

5.36.2. The requirement of prior approval of the Commission is an essential regulatory safeguard to ensure that any additional procurement is examined with reference to necessity, prudence, reasonableness of cost, availability of alternatives and the circumstances justifying deviation from the approved plan. The Commission does not find merit in UPCL's suggestion to create a general approval-free route for additional procurement merely on the ground of emergent or unforeseen circumstances. At the same time, the Commission notes that the concern sought to be addressed by UPCL is already specifically catered to under Regulation 18(b), which permits the Distribution Licensee to enter into Short-term arrangements for procurement of power when faced with emergency conditions threatening grid stability, or when directed by SLDC/RLDC, or for Short-term banking with other States, without prior approval of the Commission, subject to post-facto reporting within 45 days. Thus, genuine emergency procurement situations have already been separately provided for under the Regulations, and it is neither necessary nor desirable to duplicate or expand such exemption under Regulation 18(a). Further, with regard to the submission of M/s IEX, the Commission is of the view that competitive price discovery and prudence of procurement are matters that can be examined by the Commission while considering approval under Regulation 18(a), having regard to the facts of each case and the applicable procurement framework. Therefore, a separate mandatory competitive-bidding stipulation has not been codified in Regulation 18(a). However, for greater clarity, the expression "unanticipated increase in demand" has been suitably refined to "increase in demand due to unforeseen circumstances", and accordingly, the Regulation 18(a) shall now read as under:

"18(a). The Distribution Licensee(s) may undertake additional power procurement during the year with prior approval of the Commission , over and above the approved resource adequacy procurement plan, where there has been an increase in the demand for electricity or a shortfall or failure in the supply of electricity from any approved source of supply during the year due to unforeseen circumstances or when the sourcing of power from existing tied-up sources becomes costlier than other available alternative sources.

5.37. Regulation 18(b) in respect of Short-term emergency procurement / banking without prior approval

The provision in the draft Regulations reads as under:

"The Distribution Licensee may enter into a Short-term arrangement or agreement for procurement of power when faced with emergency conditions that threaten the stability of the grid, or when directed to do so by the SLDC/RLDC to prevent grid failure or during exigency conditions and for banking with other States on Short-term basis without prior approval of the Commission:

Provided that the details of such Short-term procurement shall be submitted to the

Commission within 45 days from date of procurement of power with proper justification substantiating the emergency / exigency conditions."

<u>Stakeholders' Comments/Suggestions</u>

5.37.1. SLDC submitted that the stability of the intra-State grid is not much improved by procurements from outside the State, and the term "Short-term" for the purpose of this clause may be separately defined. Further, M/s NAME sought express recognition of OTC Platforms as the mechanism for banking with other States under this clause.

<u>Commission's View</u>

5.37.2. The expression "Short-term" has been used in its ordinary regulatory sense and in the context of the nature and duration of the arrangement contemplated under the Regulations, and therefore, the Commission is of the view that prescribing a separate definition of "Short-term" only for Regulation 18(b) is neither necessary nor desirable, as it may create avoidable interpretational inconsistency with the broader regulatory framework governing power procurement. Further, Regulation 18(b) is not confined only to procurement for physical support to the intra-State network, as it also covers exigency procurement, directions of the load despatch centres, and Short-term banking arrangements, all of which may be relevant for maintaining demand-supply balance, system security, scheduling discipline and reliable supply to consumers in emergency situations. Further, M/s NAME's suggestion to expressly recognise OTC Platforms as the mechanism for banking with other States is not accepted in view of the Commission's treatment of OTC Platform-related suggestions discussed in the preceding paragraphs.

5.38. Regulations 19 in respect of Monitoring and Compliance

The provision in the draft Regulations reads as under:

"19.1 The Distribution Licensee shall comply with the Resource Adequacy requirement in accordance with the timelines specified under Regulation 21 of these Regulations. In case of non-compliance, appropriate non-compliance charges as may be determined by the Commission, shall be applicable.

19.2 The Distribution Licensee shall not be allowed to recover such non-compliance charges as part of its ARR.

19.3 Based on the MT-DRAP and ST-DRAP, STU and SLDC shall communicate the state-aggregated capacity shortfall to the State Commission within 15 days of the receipt of approved Resource Adequacy Plan from the Distribution Licensee of each year for the ensuing year(s) and advise the Distribution Licensee to commit additional capacities.

At the end of each Financial Year, SLDC shall submit the deviation in RAR plan from actual demand profile during that financial year to the Commission and also upload such details on its website."

Stakeholders' Comments/Suggestions

5.38.1. M/s NSEFI submitted that the penalty provisions should distinguish between avoidable non-compliance and events outside the licensee's control, and non-compliance charges should be imposed only after notice and opportunity of hearing, with exemption/relaxation where shortfall is attributable to force majeure or factors beyond the licensee's control.

Further, M/s WRI India submitted that the Regulation 19.1 does not specify the methodology or frequency for determining non-compliance charges. WRI India sought a framework linking charges to reliability indices (LOLP/NENS) with transparent computation, a sliding scale proportional to severity, and a learning period before penalties are phased in.

Further, SLDC submitted that in Regulation 19.3 "LT-DRAP" should be inserted before "MT-DRAP", since it currently omits reference to the LT-DRAP.

Commission's View

5.38.2. The Commission is of the view that compliance with the Resource Adequacy Requirement is central to maintaining supply reliability, adequacy of contracted capacity and consumer interest, and, therefore, the monitoring and compliance framework under Regulation 19 cannot be diluted by creating a broad exemption from consequences for non-compliance. However, the draft Regulations referring to automatic applicability of non-compliance charges has been suitably modified to provide that, in case of non-compliance, appropriate proceedings may be initiated against the Licensee under the Act and penalty may be imposed. This modification adequately addresses the concern of M/s NSEFI, since any penalty would be imposed only through due process, after consideration of the facts and circumstances of the case, including whether the alleged shortfall was attributable to factors beyond the control of the Distribution Licensee or not. Further, the Commission does not consider it necessary at this stage to codify a separate methodology, sliding scale, reliability-index-linked computation or learning-period mechanism for non-compliance charges as suggested by M/s WRI India. The nature, gravity and consequences of non-compliance may vary materially depending upon the planning year, quantum of shortfall, reasons for deviation, impact on reliability and conduct of the Licensee, and, therefore, such matters are more appropriately examined in the proceedings under the Act rather than through an inflexible formula in the Regulations. The Commission also considers it appropriate to retain the principle that any penalty imposed due to non-compliance shall not be recoverable as part of the ARR, since allowing recovery of such penalty from consumers would defeat the deterrent purpose of the compliance framework. With regard to SLDC's submission, the Commission finds merit in the suggestion that Regulation 19.3 should also refer to LT-DRAP, since capacity shortfall assessment and communication may arise from the Long-term, Medium-term and Short-term Resource Adequacy Plans. Accordingly, Regulation 19.3 has been modified to refer to LT-DRAP, MT-DRAP and ST-DRAP. In view of the above, Regulation 19 has been modified, which shall now be read as under:

"19. Monitoring and Compliance

19.1 The Distribution Licensee(s) shall comply with the Resource Adequacy requirement in accordance with the timelines specified under Regulation 24 of these Regulations. In case of non-compliance, appropriate proceeding may be initiated against the Licensee(s) under the Act and penalty may be imposed.

19.1The Distribution Licensee(s) shall not be allowed to recover, as part of its ARR, any penalty imposed due to the non-compliance.

19.3 Based on the LT-DRAP, MT-DRAP and ST-DRAP, STU and SLDC shall communicate the state-aggregated capacity shortfall to the State Commission within 15 days of the receipt of approved Resource Adequacy Plan from the Distribution Licensee(s) of each year for the ensuing year(s) and advise the Distribution Licensee(s) to commit additional capacities.

At the end of each Financial Year, SLDC shall submit the deviation in RAR plan from actual demand profile during that financial year to the Commission and also upload such details on its website."

5.39. Regulation 20 read with Regulation 22 in respect of data-sharing (including formats given at Annexure II to the draft Regulations)

Stakeholders' Comments/Suggestions

5.39.1. M/s WRI India submitted that Formats 1 to 13 of Annexure-II to the Regulations are largely annual/monthly summary statements, whereas the Regulations require hourly/sub-hourly demand forecasting and resource maps at 15-minute-to-hourly resolution. They further submitted that the approved LT-DRAP, MT-DRAP and ST-DRAP, key modelling outputs and underlying data and tools used for RA studies should also form part of the disclosures, preferably in spread sheet format, to enable independent verification. Further, each entity should be mandated to maintain a dedicated website section for RA studies with archived, accessible data.

Shri Hardeep Rajput submitted that since consumer/demand-related data forms the foundation of RA planning, key datasets, assumptions, demand forecasts and RA plans submitted to CEA, excluding commercially sensitive/consumer-specific confidential information, may be placed in the public domain and subjected to stakeholder consultation.

Commission's View

5.39.2. The Commission has considered the submissions of M/s WRI India and Shri Hardeep Rajput. The Commission is of the view that the data-sharing framework under Regulation 20, read with the disclosure obligations under Regulation 22 of the draft Regulations, and the formats prescribed in Annexure-II, already provides a structured mechanism for collection, sharing and publication of relevant information required for Resource Adequacy planning. The Commission does not consider it appropriate to mandate, at this stage, publication of the entire RA reports, modelling outputs, underlying time-series datasets, modelling tools, spreadsheets, assumptions or commercially sensitive procurement inputs in the public domain as a regulatory requirement. Resource Adequacy studies involve technical and operational datasets, including demand patterns, procurement portfolio details, scheduling information, grid-related data and commercially sensitive inputs, and indiscriminate disclosure of such information may not be consistent with commercial prudence, system security or confidentiality obligations. Further, the level of data granularity required for internal planning and modelling may differ from the level of information appropriate for public disclosure. The Regulations already require the concerned entities to maintain and share relevant data for demand assessment, forecasting, resource mapping and compliance monitoring, and require specified information regarding procurement/sale and scheduling to be placed on the websites of the Distribution Licensee and SLDC. However, in case any specific information is sought by the Stakeholders, which is beyond the scope of disclosure under these Regulations, the concerned utility shall seek prior approval of the Commission before disseminating any such information. Further, Regulation 22 of the draft Regulations, as originally numbered, has been renumbered as Regulation 21 pursuant to the resequencing carried out by the Commission for the purpose of maintaining consistency in the numbering and structure of these Regulations.

5.40. Regulation 20.1 and 20.2 in respect of maintenance and sharing of data by the Distribution Licensee(s) with STU/SLDC

The provision in the draft Regulations reads as under:

"20.1: Distribution Licensee shall maintain and share all data related to demand assessment and forecasting with the STU/SLDC, such as: (a) Consumer data; (b) Historical demand data; (c) Weather data ...

20.2 Distribution Licensee shall maintain and share all statistics and database pertaining to policies and drivers with SLDC, such as:- (a) LED penetration, efficient fan/ ACs penetration, appliance penetration, increased usage of electrical appliances for cooking, heating, cooling, etc., in households; …"

<u>Stakeholders' Comments/Suggestions</u>

5.40.1. UPCL submitted that the expression "Weather data" appearing in Regulation 20.1 requires clarification and suggested that the same may be termed as "Historical and best available forecasted weather data (pertaining to major load centres)". UPCL also suggested changing "shall maintain and share all data" to "may maintain and share available data" in the opening para of Regulation 20.1.

UPCL further submitted that several parameters specified under Regulation 20.2, particularly household appliance penetration and usage patterns, may not be readily available, and where actual data is unavailable, the Distribution Licensee should be permitted to use reasonable assumptions based on representative surveys, Government publications, or nationally recognised studies, if available. UPCL, accordingly sought revision of proviso to Regulation 20.2 to accommodate the same.

Commission's View

5.40.2. The Commission has considered the submissions made by UPCL and does not find merit in the suggested modifications. The expression "weather data" as appearing in Regulation 20.1 is self-explanatory and does not warrant further qualification. The Distribution Licensee, being the entity closest to the consumer and possessing access to relevant data sources, is well placed to maintain and furnish such data, including historical and forecasted weather data pertaining to major load centres, as may be required.

As regards the suggestion to substitute "shall maintain and share all data" with "may maintain and share available data" in Regulation 20.1, the Commission is of the view that the obligation to maintain and share data is fundamental to accurate demand assessment and forecasting, which is essential for system planning and reliability. Diluting this obligation from a mandatory to a discretionary one would defeat the very purpose of the provision and cannot be accepted. Similarly, with respect to Regulation 20.2, the Commission is of the view that the Distribution Licensee having direct interface with consumers, is best positioned to collect and maintain data pertaining to its area of supply. The Regulation does not preclude the Distribution Licensee from relying on representative surveys, Government publications, or nationally recognised studies in the absence of actual metered/surveyed data, however, the obligation to maintain and share such data/statistics, based on best available means, cannot be diluted or made optional. Accordingly, no modification in this respect has been carried out by the Commission.

5.41. Regulation 21 in respect of Timelines

Stakeholders' Comments/Suggestions

5.41.1. Shri Hardeep Rajput submitted that the dispersed presentation of timelines across various provisions may make compliance monitoring and implementation challenging, and the Commission should publish a consolidated schedule in tabular-matrix form.

Commission's View

5.41.2. The Commission taking note of the suggestion made by Shri Hardeep Rajput has tabulated the timelines under Annexure IV to the Regulations. Further, Regulation 21 of the draft regulations, as originally numbered, has been renumbered as Regulation 24 pursuant to the resequencing carried out by the Commission for the purpose of maintaining consistency in the numbering and structure of these regulations.

5.42. Regulation 21.11 of the draft Regulations in respect of methodology for allocation of national-peak share

The provision in the draft Regulations reads as under:

"SLDC shall allocate each Distribution Licensee's share in the national peak within 15 days of the publication of LT-NRAP report of each year for the ensuing year(s)."

Stakeholders' Comments/Suggestions

5.42.1. SLDC submitted that the methodology for allocation of the share of each Distribution Licensee in the National Peak is not defined, and the Commission may define the same for the sake of clarity.

Commission's View

5.42.2. The Commission has considered the submission of SLDC. The allocation of each Distribution Licensee's share in the national peak would be an exercise which shall be required in case of a multiple distribution licensee. At present the State has only one distribution licensee and its share in the national peak (or coincident peak contribution) shall be its specific electricity demand measured or allocated at the exact time of the national grid's peak. The SLDC will be required to break down the national allocations from the Central Electricity Authority (CEA) / Long-Term

National Resource Adequacy Plan (LT-NRAP) down to individual distribution licensees based on coincident and non-coincident peak demands. The Commission is of the view that it is neither necessary nor appropriate to prescribe a rigid formula in the Regulations, as such allocation may require consideration of the methodology, assumptions and data adopted in the LT-NRAP and the prevailing system conditions. SLDC shall, while making such allocation, adopt a transparent, reasonable and consistently applied methodology, duly supported by data and recorded assumptions, and shall communicate the same to the concerned Distribution Licensee(s) and the Commission. Further, Regulation 21.11 of the draft Regulations has been renumbered as 24.24 owing to re-sequencing done by the Commission to maintain consistency.

5.43. Timelines for data submission by grid-connected/obligated entities

Stakeholders' Comments/Suggestions

5.43.1. UPCL submitted that preparation of the RA Plan requires collection and validation of a large quantum of data from multiple stakeholders. The timelines specified for preparation/submission of RA plans may also include corresponding timelines and responsibilities for data submission by such entities.

Commission's View

5.43.2. The Commission accepts UPCL's suggestion. A new Sub-regulation 24(27) has been inserted under Regulation 24 (formerly Regulation 21), thus operationalising UPCL's request for a mechanism to bind third-party data providers to defined submission timelines, without requiring to individually amend each substantive Regulation.

The newly inserted Sub-regulation (27) shall be read as follows:

"24.27. The Commission shall, by a separate Order, annually specify the timelines for submission of relevant data by grid-connected entities and obligated entities, having regard to the requirements of the Distribution Licensee(s) for the purpose of undertaking Resource Adequacy Planning:

Provided that this clause shall not apply to such entities in respect of whom specific timelines have already been prescribed under any other clause of these Regulations."

5.44. Regulation 24 of the final Regulations (numbered as Regulation 21 in the draft Regulations) primarily reiterates the timelines prescribed under the various clauses of the Regulations. Accordingly, the various clauses of the said Regulation have been suitably revised to correctly cross-reference the relevant clauses of the Regulation.

5.45. Regulation 22.1 of the draft Regulation in respect of placing of information on website

The provision in the draft Regulations reads as under:

"The monthly/weekly/day-ahead/intra-day power procurements/sale by the Distribution Licensee and generator schedule shall be made available on the websites of the Distribution Licensee and SLDC within 15 days of such procurements/sale with ease of access to the current as well as archived data."

Stakeholders' Comments/Suggestions

5.45.1. UPCL submitted that mandatory publication of monthly/weekly/day-ahead/intra-day power procurement and sale transactions within 15 days may create operational challenges and involve disclosure of commercially sensitive information; other SERCs' RA Regulations generally allow up to 45 days. UPCL requested the timeline be relaxed to "within last day of succeeding month".

WRI India submitted that Regulation 22 of the draft Regulations is a strongly supported transparency provision, and may be strengthened further by specifying standardised formats, data granularity (ideally 15-minute basis), and reporting templates.

Commission's View

5.45.2. The Commission accepts UPCL's timeline suggestion in substance. Regulation 22.1 of the draft Regulation (now Regulation 21.1) has been modified to require publication "latest by the end of ensuing month" in place of "within 15 days", broadly consistent with UPCL's proposed formulation. Further, WRI India's suggestions for standardised 15-minute-granularity formats have not been separately specified in the Regulation and may be reviewed subsequently based on the experience gained over the period.

Accordingly, the Regulation 21.1 shall be read as under:

"21.1 The monthly/weekly/day-ahead/intra-day power procurements/sale by the Distribution Licensee(s) and generator schedule shall be made available on the websites of the Distribution Licensee(s) and SLDC latest by the end of ensuing month of such procurements/sale with ease of access to the current as well as archived data."

5.46. Regulation 22.2 of the draft Regulation in respect of Merit Order Despatch (MoD) stack publication basis

The provision in the draft Regulations reads as under:

"SLDC shall also publish the monthly Merit Order Dispatch (MoD) stack along with per unit variable cost of each generating station on its website."

Stakeholders' Comments/Suggestions

5.46.1. SLDC submitted that the clause should specify that the MoD stack is published based on the information provided by the Distribution Licensee(s).

Commission's View

5.46.2. The Commission accepts SLDC's suggestion. Regulation 22.2 of the draft Regulations (now Regulation 21.2) has been modified to require SLDC to prepare and publish the MoD stack, on the basis of information provided by the Distribution Licensee(s).

Accordingly, Regulation 21.2 shall be read as under:

"21.2 SLDC shall prepare and also publish the monthly Merit Order Despatch (MoD) stack along with per unit variable cost of each generating station on its website, on the basis of the information provided by Distribution Licensee(s)."

5.47. Regulation 23 of the draft Regulations in respect of the Constitution of dedicated cells

The provision in the draft Regulations reads as under:

"23.1 The Distribution Licensee shall establish a planning cell for Resource Adequacy within three months of these Regulations coming into force. The cell shall have the requisite capability and tools for demand forecast, capacity, RE integration, etc.

23.2 Another round the clock dedicated cell shall also be constituted by the Distribution Licensee for power purchase/sale of power on real-time basis and to also undertake intra-day, day-ahead, week-ahead power procurement through Power Exchanges or any other means.

The Distribution Licensee shall frame suitable guidelines for the modus operandi of the dedicated cells in line with the spirit of these Regulations and shall apprise the Commission of the same within 45 days from the date of coming into force of these Regulations."

Stakeholders' Comments/Suggestions

5.47.1. Shri Hardeep Rajput w.r.t. the Regulation 23.1 of the draft Regulations submitted that while the requirement reflects the Commission's intent to strengthen institutional capacity, the prescribed 3-month timeline is relatively short for the specialised nature of RA studies. Further, the assumptions, methodologies, forecasts and outputs generated by the Cell should be subjected to adequate scrutiny and stakeholder review.

Further, M/s NAME sought explicit inclusion of OTC Platforms among the means of procurement handled by the dedicated real-time cell under Regulation 23.2 of the draft Regulations.

Commission's View

5.47.2. The three-month timeline is meant only for institutional setting up of the Cell (constitution, staffing, basic tools), not for achieving full technical maturity in RA studies, which will develop progressively. The timeline is, therefore, reasonable and retained. On stakeholder's comments regarding scrutiny of assumptions, methodologies, and outputs, the Commission agrees that the same is important but notes that the Regulations already provide for stakeholder consultation at appropriate stages of the RA process, which adequately addresses the concern.

Further, w.r.t. the submission made by M/s NAME, as discussed in previous paras, the OTC specific inclusion in the Regulation has not been considered by the Commission as the Regulation sufficiently caters to all the available means of procurement available to Licensee(s). However, the Commission has slightly modified the Regulation 23 of the draft Regulations (now Regulation 22) to insert Sub-regulation (3) for separating the requirement of framing of guidelines for modus operandi of the dedicated cells which was earlier specified under Regulation 23(2) of the draft Regulations.

Accordingly, the Regulation 22 shall be read as under:

"22. Constitution of dedicated cells

22.1 The Distribution Licensee(s) shall establish a planning cell for Resource Adequacy within three months of these Regulations coming into force. The cell shall have the requisite capability and tools for demand forecast, capacity, RE integration, etc.

22.2 Another round the clock dedicated cell shall also be constituted by the Distribution Licensee(s) for power purchase/sale of power on real-time basis and to also undertake intra-day, day-ahead, week-ahead power procurement through Power Exchanges or any other means.

22.3 The Distribution Licensee(s) shall frame suitable guidelines for the modus operandi of the dedicated cells required under Sub-regulation (1) and (2) above, in line with the spirit of these Regulations and shall get the same approved by the Commission within 45 days from the date of coming into force of these Regulations."

5.48. Regulation 24.1 of the draft Regulations in respect of assessment to involve consultation

The provision in the draft Regulations reads as under:

"The Distribution Licensee shall make the Resource Adequacy Plan in consultation with State Sector Generating Companies, Distribution Licensee, Central Sector Generating Companies, Transmission Companies, National / Regional /State Load Despatch Centre, and Central Electricity Authority. It shall also make enquiries with the Trading Companies and States with surplus power to estimate the likely availability and price of power across the country for peak, off-peak and normal periods. The Distribution Licensee may also consult with research agencies with relevant experience."

Stakeholders' Comments/Suggestions

5.48.1. M/s WRI India submitted that the consultation with research agencies is presently optional ("may") under Regulation 24.1 of the draft Regulations, and it should be made mandatory, together with technical validation sessions with empanelled researchers and civil society organisations.

Commission's View

5.48.2. The Regulation 24.1 of the draft Regulation (now Regulation 23.1) already provides for a broad and inclusive consultative process involving generating companies, distribution licensee(s), transmission companies, load despatch centres, the Central

Electricity Authority, trading companies, States having surplus power and, where considered appropriate, research agencies possessing relevant experience. The purpose of the provision is to ensure that the Resource Adequacy Plan is prepared based on relevant technical, operational and market inputs, while preserving the responsibility of the Distribution Licensee(s) to undertake the planning exercise and of the Commission to subject the same to regulatory scrutiny.

The Commission does not consider it necessary or appropriate to convert the enabling expression "may consult with research agencies" into a mandatory requirement. Resource Adequacy planning is a technical and time-bound statutory/ regulatory exercise, and the nature of consultation required may vary depending upon the stage of planning, availability of data, complexity of issues, adequacy of institutional expertise, and the specific subject matter under consideration. A blanket obligation to mandatorily consult research agencies in every planning cycle, irrespective of necessity, may introduce avoidable procedural rigidity, delay and uncertainty, without necessarily improving the quality of the Plan in all cases. Accordingly, no modification is being carried out in this regard.

5.49. Format-1 of Annexure-II in respect of demand forecast

<u>Stakeholders' Comments/Suggestions</u>

5.49.1. M/s Clean Max Enviro Energy Solutions Limited (CMES) submitted that for the further betterment of micro-level planning and efficient distribution system design, the RA report should also capture voltage- and consumer-category-wise, contracted load of all sets of consumers, with 5 years of data, to help identify category-wise load growth, plan network development, and aid tariff determination.

<u>Commission's View</u>

5.49.2. The Commission, based on the suggestion given by M/s CMES, has introduced Format-1A under Annexure-II of the Regulations to capture data related to Contracted Load of the consumers alongside Licensee's demand.

5.50. General submission regarding transmission adequacy

<u>Stakeholders' Comments/Suggestions</u>

5.50.1. Shri Hardeep Rajput submitted that the Resource Adequacy cannot be achieved solely through availability of generation capacity, and the adequacy and availability of transmission infrastructure are equally critical. He further submitted that this is particularly significant for Uttarakhand, owing to its geography and substantial hydroelectric capacity, the State is often capable of producing electricity in excess of its own consumption, but transmission infrastructure/corridor constraints may limit evacuation and sale of surplus power. He suggested that the Regulations should explicitly recognise the interdependence of generation and transmission planning.

Commission's View

5.50.2. The Commission has considered the submission of Shri Hardeep Rajput. The Commission agrees, as a matter of principle, that Resource Adequacy cannot be viewed in isolation from the adequacy, availability and deliverability of the transmission network. Adequate generation capacity, unless supported by commensurate transmission evacuation capability and corridor availability, may not by itself ensure reliable supply to consumers or optimal utilisation of surplus generation. This consideration assumes particular relevance in the State of Uttarakhand, where the geographical profile of the State, the location of hydro generating stations and the seasonal nature of hydro surplus may, in appropriate cases, require due examination of power transmission & evacuation system for sale/banking of surplus power, transmission constraints and deliverability of contracted or available capacity from within & outside the State.

At the same time, the Commission notes that the draft Regulations already incorporate transmission-related considerations within the Resource Adequacy planning framework. The Distribution Licensee(s), while preparing the Resource Adequacy Plan, are required to consider transmission expansion plans, evacuation arrangements with timelines, system constraints, inputs of STU/SLDC and other relevant system-planning parameters. Transmission planning and augmentation are covered under transmission resource adequacy plan being prepared by CEA. However, intra state transmission planning is also governed by the statutory and regulatory framework applicable to the State Transmission Utility, Transmission Licensee(s) and Load Despatch Centre, and are examined by the Commission in appropriate proceedings relating to business plans, capital investment, tariff determination and system-strengthening proposals. Therefore, the issue raised by the stakeholder is not outside the regulatory framework, rather, it is already capable of being examined through the combined operation of the Resource Adequacy Regulations and the existing transmission-planning and development mechanism.

By the order of the Commission

(Neeraj Sati)
Secretary

Annexure-1

List of Stakeholders

Sr. No.	Name	Designation	Organisation	Address
1.	Sh. Ashwini Chitnis	Program Head - Clean Energy Supply	WRI India	1st Floor, Godrej and Boyce Premises, Gas Works Lane, Lalbaug, Parel, Mumbai-400012.
2.	Sh. Gaurav Maheshwari	Vice President – Regulatory Affairs	Indian Energy Exchange	9th Floor, Max Towers, Sector-16B, Noida-201301.
3.	Sh. Ashu Gupta	Vice President (Regulatory & Policy)	M/s Clean Max	4th Floor, The International, 16-Maharshi Karve Road, New Marines Lines Cross Road No. 1, Churchgate, Mumbai-400020.
4.	Sh. M.R. Arya	Director (Distribution & Projects)	Uttarakhand Power Corporation Ltd.	Victoria Cross Vijeta Gabar Singh Bhawan, Kanwali Road, Dehradun.
5.	Sh. Nitesh Jha	Dy. Manager (Operations)	New Age Markets in Electricity Pvt. Ltd.	A-Wing, Sixth Floor, Statesman House, Connaught Place, New Delhi–110001.
6.	Sh. Hardeep Rajput	-	-	Ward No.: 3, Near Barkot Puliya, Barkot Mafi, P.O.-Dandi–248145, Dehradun.
7.	Sh. Subrahmanyam Pulipaka	Chief Executive Officer	NSEFI Sustainable Energy Federation of Industry	Office-G-009, Rectangle-1, Saket District Center, New Delhi–110017.
8.	Sh. Illa Chandra	Chief Engineer	SLDC	132 kV Sub-station, H/Q Bldg., Majra, Dehradun.