# Alliance for an Energy Efficient Economy's (AEEE) Comments on the Proposed Changes to the CEA Portal

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## About AEEE

Alliance for an Energy Efficient Economy (AEEE), is one of the leading organizations in India that works on creating awareness about energy efficiency as a resource. It is a policy advocacy and energy efficiency market enabler with a not-for-profit motive. We advocate for data-driven and evidence-based energy efficiency policies and research.

We foster a culture of energy efficiency in India, working with industry, government and civil society organizations. AEEE advocates for Thermal Comfort for All, and a Lean-Mean-Green philosophy to design and construct net-zero energy-water-waste built environments, Sustainable Transportation and robust Energy Data Framework for better policy-making and implementation, to build a culture of energy efficiency in India. We are committed to achieve India's energy transition for a climate-resilient and energy secure future and meet India's commitments to the 2030 nationally determined goals (NDC) and UN sustainable development goals (SDG).

# Introduction

Central Electricity Authority (CEA), Ministry of Power, is revamping the CEA website to make it more user friendly. Alliance for an Energy Efficient Economy (AEEE) has reviewed the demo version of the new CEA website. We have listed our comments in this document.

# Type of data on the portal

1. **Consumption Data**: There is a lop-sided emphasis on generation data, with **consumption data** still being available only in the annual General Review report. The portal should include monthly and quarterly reports on **consumption**, at state and sector level, especially since such data is already available with the various DISCOMs and can, therefore, be made available at more frequent intervals. Analysing **consumption data** is crucial to managing peak demand and implementing energy efficiency to reduce demand. Being able to download the General Review in XLS and PDF format is a positive addition. However, it would be useful to present the following data from the General Review in dashboards as well, for all available years to see the trend over the years
   » consumption data - state-wise and sector-wise
   » T&D losses -state-wise
   » AT&C losses –state-wise
   » Number of consumers - state-wise and sector-wise
   » Per-capita electricity consumption - state-wise and sector-wise

2. Include information on the categorisation of consumers in the portal, for easy reference. The different consumer categories followed by CEA are not explicitly defined. Further, the categories used by DISCOMs vary across states, as they are dependent on the tariff structure - for example, the government hospitals are under the domestic category in Delhi, but the same is under Public Institutions category in case of Kanpur and in Public Services (government) category in case of Pune. Therefore, to avoid any confusions CEA should include the definitions on each category of consumers on their portal.

3. Limited information is available in terms of graphs or downloadable data. The following data could be available for download and presented in the dashboard:
   » Average cost of supply
   » Sector-wise target vs achievement of electricity generation
   » Coal consumption for power generation
   » Information from LGBR report which provides forecast as well and its comparison with actual power supply position, forecast of demand pattern etc.

4. EV Charging Data
   » CEA has been entrusted with the responsibility to maintain a database of public charging infrastructure. The current CEA portal hosts the information related to EV Charging in a relatively difficult to find web location (Home > Wings > Planning > RPM > EV Charging). It will be beneficial for the stakeholders of EV if the upcoming portal hosts this data in a location which is easier to findlocation.

» The current CEA portal disseminates the data on EV Charging stations locations in the form of a PDF report. The upcoming CEA portal should publish the data in the xls/csv format for analysis purpose. The xls format should have the following headers:

| India Public Electric Vehicle Charging Stations (PCS) Locations | State/ UT | Discom | Type of Charger | No. of Chargers |
|---|---|---|---|---|
| | | | | |

# Presentation and Periodicity of Data

5. Dashboard: It would be better to have at least three dashboards – 1) Generation; 2) Consumption, T&D losses, AT&C losses; and, 3) infrastructure development milestones. At present, there is no dashboard on consumption.

6. Dashboard: The Dashboard tab in the demo portal currently displays only one single graph showing "All India Power Supply Position – Peak Demand vs Peak Met". Typically, dashboards are designed such that it shows multiple infographics (including graphs and tables), which will give a snapshot of the major statistics related to energy consumption/ power demand in India. Some of the key indicators that can be displayed as default on the Dashboard are:
   » Peak Demand vs Peak Met (Daily update if feasible)
   » All India Generation, and daily consumption, monthly and annual
   » The dashboard for "Generation" should include the break-up of all generation sources, including thermal (coal, gas) and large hydro, in addition to RE. For the break-up view of generation, a surface chart will be a better option to display the trend.
   » The dashboard should display the value of last month and the percentage change from the corresponding month in the previous year.
   » Any specifics or indicators on carbon emissions is a welcome measure (CEA is the body that conducts grid emissions study)

7. Dashboard: There should be an option to compare data over the years and across states. Presently, month-wise comparison for states is possible and thus allows on only to download the month-wise data instead of over the years, which still makes it laborious to collate/extract data from the reports over the years.

8. Dashboard: When we select data for multiple states over a longer time period (more than one year), it is possible that the chart option becomes cluttered. It will be a good idea to combine data for few months (example – 3 months) for better visualisation. The charts have to be designed to be dynamic against the time period selected, to provide better visualisation.

9. The dashboard could also have daily load curves and options for comparison of monthly, weekend, weekday and other curves. Similarly, generation curves for renewables and other generation can also be made available.

10. Dashboard: The "Planwise Growth" graphs collate quite different types of data. It would be more useful to view these types of data separately – state-wise and year-wise.

11. The General Review report does not appear to be available for previous years. The same is true for some other reports.

12. Overall, the look & feel and the user experience of the dashboard can be improved.

13. Also, it would be good to consolidate data across similar MoP portals, such as Merit Order Despatch of Electricity for Rejuvenation of Income and Transparency (MERIT)