Our ref: 7B7D08A106-EA74-4DF7-A5D1-9E5782FD7582
Contact: Chris King

22 August 2025

Economic Regulatory Authority
Level 4, Albert Facey House
469-489 Wellington Street
Perth WA 6000

Dear Irina Stankov,

Re: Limit Advice and Constraint Equation Review 2025

Western Power has reviewed the Draft Report published by the ERA on 31 July 2025 and provides feedback for consideration in Appendix 1.

Yours sincerely,

Chris King
Senior Compliance Specialist

363 Wellington Street Perth 6000
GPO Box L921 Perth WA 6842
westernpower.com.au

t 13 10 87
f (08) 9225 2660
TTY 1800 13 13 51
TIS 13 14 50
Electricity Networks Corporation
ABN: 18 540 492 861

Appendix 1

Section 4.1.1

Current Paragraph:

When Western Power calculates transformer thermal ratings, the process is not automated due to the higher complexity of that equipment. Developing thermal limits for a transformer is a manual process that requires the active involvement of an engineer in terms of undertaking research and studies before defining the limits. The engineer undertakes calculations to determine short- and long-term emergency limits and normal cyclic loading levels, which are required before the transformer rating studies are completed. Overall, a minimum of five different studies are undertaken before the transformer thermal limits are determined.

Suggested Edit:

When Western Power calculates transformer thermal ratings, the process is not automated due to the higher complexity of that equipment. Developing thermal limits for a transformer requires the involvement of an engineer in terms of undertaking research and studies before defining the input parameters. The engineer then undertakes calculations to determine short- and long-term emergency limits and normal cyclic loading level limits. Competed studies are recorded in a master file, and a study report is prepared for review and approval. Western Power has a standardised approval protocol for transformer limit calculations. Study reports are reviewed by more senior level engineers before approved by the group leader. Once approved, the limits are then applied into the ratings system for operational use or provided as an extract for use in the RCM process.

Dynamic Line Ratings (page 14 of draft Report)

Current Paragraph:

Western Power is sourcing data from the Bureau of Meteorology (BOM), who has a large set of weather information around wind speed and provide access to sophisticated wind speed analysis. BOM has received funding from the federal government under the 'Rewiring the Nation' initiative to support network providers in the introduction of dynamic line ratings. One of the goals of this initiative is to ensure that existing networks are utilised to a maximum, before new transmission lines are built.

Suggested Edit:

Western Power is sourcing data from the Bureau of Meteorology (BOM), who has a large set of weather information around wind speed and can provide access to sophisticated wind speed analysis. BOM received funding from the federal government under the 'Rewiring the Nation' (RTN) initiative to engage Transmission Network Service Providers (including Western Power) to produce a Blueprint to look at the benefits to the nation of dynamic line ratings. The recommendations and next steps from this Blueprint are currently under discussion between BOM and the Department of Climate Change, Energy, the Environment and Water (DCCEEW), with BOM remaining committed to supporting the nation's service providers to maximise the efficient use of their transmission assets.

Western Power is applying for 'Grid Enhancing Technologies' funding from the federal government under the RTN initiative to assist in the development of dynamic line ratings. One of the goals of the Rewiring the Nation initiative is to ensure that existing networks are utilised to a maximum, before new transmission lines are built.