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Courses » Computer Aided Power System Analysis

Announcements **Course** Ask a Question Progress FAQ

Unit 4 - Week 3

Register for Certification exam

Course outline

How to access the portal

Week 1

Week 2

Week 3

- Basics of Newton Raphson Numerical Method
- Newton - Raphson Load Flow (NRLF) in Polar Co-Ordinate
- NRLF in polar co-ordinate (contd.)
- NRLF in polar co-ordinate (contd.)
- NRLF (Polar) Algorithm and Example
- Quiz : Assignment 3

Week 4

Assignment 3

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment. **Due on 2019-02-20, 23:59 IST.**

1) **Note: For solving this assignment, a computer program for implementing Newton-Raphson (Polar) load flow program needs to be developed.** Consider the bus data and line data of the small 5 bus example system given in lecture 10. In this system, the real power load at bus 4 is changed to 150 MW (instead of 115 MW as given in the example). All other data of this system are same as given in lecture 10. Assume that there is no reactive power limit on any of the generators. Assume ϵ (convergence threshold) = $1.0e-12$. Upon computing the power flow program using Newton-Raphson (Polar) method, the following quantities are obtained (after convergence):

1) Active Power Injected at bus 1 is:

No, the answer is incorrect.
Score: 0

Accepted Answers:
(Type: Range) 94.00,97.00

2 points

2) The element **J1(2,2)** is :

No, the answer is incorrect.
Score: 0

Accepted Answers:
(Type: Range) 18.0,18.1

2 points

3) The element **J4(2,2)** is :

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Week 9	ce De	4) Angle of bus 3 voltage (in degree) is:	<input type="text"/>	
Week 10		No, the answer is incorrect.		
Week 11		Score: 0		
Week 12		Accepted Answers:		
DOWNLOAD VIDEOS		(Type: Range) -4.0,-3.5		 2 points
Interaction Session		5) Angle of bus 2 voltage (in degree) is:	<input type="text"/>	
		No, the answer is incorrect.		
		Score: 0		
		Accepted Answers:		
		(Type: Range) 0.05,0.1		 2 points

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