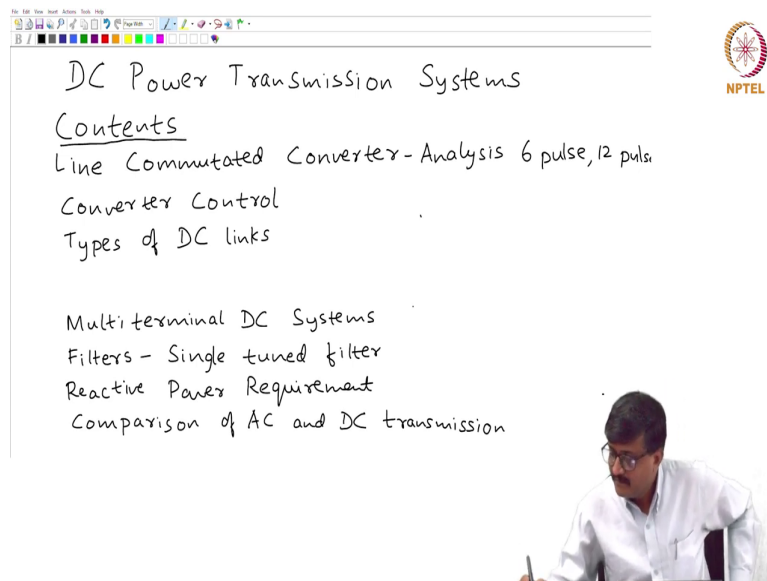


DC Power Transmission Systems
Prof. Krishna S
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Lecture - 01
Course Contents

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DC Power Transmission Systems

Contents

- Line Commutated Converter - Analysis 6 pulse, 12 pulse
- Converter Control
- Types of DC links

- Multi terminal DC Systems
- Filters - Single tuned filter
- Reactive Power Requirement
- Comparison of AC and DC transmission

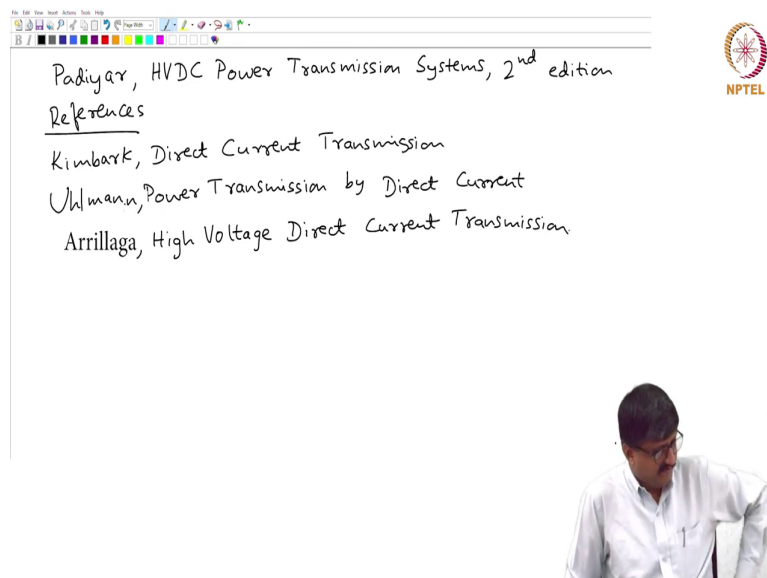
So, let us start the name of the course is DC Power Transmission Systems. My name is Krishna S. So, what I will do is, I will just try to give the contents of the course to start with and then list the references that we will be using. So, let me start with the Course Contents. So, we will start with what is known as line commutated converter.

So, we will try to do the analysis of a 6 pulse converter as well as a 12 pulse converter. Then we will see; how to control these converters, converter control then look at the types of DC links, then briefly talk about what is known as multi terminal DC systems. Then move on to

the topic of filters. So, we will see one particular filter in detail; that is single tuned filter. Then the next topic is reactive power requirement and towards the end; we will be able to appreciate the comparison between AC and DC transmission.

So, the comparison is actually discussed only at the end of the course. So, comparison of AC and DC transmission. So, these are the broad contents of this course DC power transmission systems ok. So, if you have gone throughs and I will go on list the some of the references.

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Padiyar, HVDC Power Transmission Systems, 2nd edition

References

KimbarK, Direct Current Transmission

Uhlmann, Power Transmission by Direct Current

Arrillaga, High Voltage Direct Current Transmission



So, the main reference that I will be using is the book by Padiyar, HVDC Power Transmission Systems. So, I am referring to the recent edition the second edition. So, this is the main book I will be using. There are other books which can be used as references, Kimbark; direct current transmission. So, I just list the references here, so you can just note downs. At least a few

copies are available in our library. So, these are the references that may give some additional information of something which is beyond the contents of this course if you are interested.