

Time	Monday, 04 November 2019	Tuesday, 05 November 2019
09.00 - 10.30	Check-in, project overview and socio-economic co-benefit assessment for South Africa	Deep Dive: Advanced power system planning methodology
	<ul style="list-style-type: none"> ▪ Introduction round / Ice-breaker ▪ The Co-benefits project (consortium, team, approach) ▪ Overview: climate/economic /environmental/ social co-benefits ▪ Co-benefits priorities in South Africa: employment, health, rural development, etc. ▪ What to expect from the training? 	<p><i>Refresh the main results from previous day</i></p> <p><i>Intro (20 min)</i></p> <ul style="list-style-type: none"> ▪ AIPSP objectives and co-benefits ▪ AIPSP methodology <p><i>Discussion on opportunities using AIPSP in South Africa</i></p>
Lecturer	David Jacobs (IET- International Energy Transition)	Dr. Atom Mirakyan (Tractebel Engineering)
10.30 - 10.45	<i>coffee break</i>	<i>coffee break</i>
10.45 - 12.15	Deep Dive: Integrated power system, its transition and planning	Planning tools for integrated power system planning
	<p><i>Intro (30 min):</i></p> <ul style="list-style-type: none"> ▪ Integrated power system ▪ Power system in South Africa ▪ Power system transition and planning in South Africa ▪ The IRP process and the use of the PLEXOS model <p><i>Group work and discussion about power system transition in South Africa</i></p> <ul style="list-style-type: none"> ▪ Participants split in 3 groups: ▪ Each group develops their own possible power system development paths in South Africa <p><i>Presentation:</i></p>	<p><i>Refresh the main results from previous day</i></p> <p><i>Intro (20 min)</i></p> <ul style="list-style-type: none"> ▪ Planning tools implemented in the integrated power system planning ▪ Consideration of co-benefits in the planning tools <p><i>Demonstration and use of selected planning tools</i></p>

	All 3 groups present their perspective about possible power system development paths in South Africa	
Lecturer	Jarrad Wright (CSIR) Dr. Atom Mirakyan (Tractebel Engineering)	Dr. Atom Mirakyan (Tractebel Engineering)
12.15 - 13.45	<i>lunch break</i>	<i>lunch break</i>
Time	Monday, 04 November 2019	Tuesday, 05 November 2019
13.45 - 15.15	Deep Dive: Indicators and co-benefits in power system planning	International practices in power system planning
	<ul style="list-style-type: none"> ▪ Energizer (RENAC) <p><i>Intro (20 min)</i></p> <ul style="list-style-type: none"> ▪ Indicators and co-benefits ▪ International praxis using indicators <p><i>Group work on building an expected set of indicators and co-benefits for South Africa</i></p> <ul style="list-style-type: none"> ▪ Participants split in 3 groups: ▪ Each group develops their own possible set of indicators and co-benefits for South Africa <p><i>Presentation:</i></p> <ul style="list-style-type: none"> ▪ All 3 groups present and discuss their developed set of indicators 	<ul style="list-style-type: none"> ▪ Energizer (RENAC) <p><i>Refresh the main results from previous day</i></p> <p><i>Intro (20 min)</i></p> <ul style="list-style-type: none"> ▪ Consideration of co-objectives in the international planning studies ▪ Methodological steps and implemented tools ▪ Results of some studies and comments <p><i>Detailed analysis of selected international studies</i></p>
Lecturer	Dr. Atom Mirakyan (Tractebel Engineering)	Dr. Atom Mirakyan (Tractebel Engineering)
15.15 - 15.30	<i>coffee break</i>	<i>coffee break</i>

15.30 - 17.00	Traditional power system planning (TIPSP) methodology	Wrap-up, outlook and evaluation
	<p><i>Refresh the main results from previous day</i></p> <p><i>Intro (20 min)</i></p> <ul style="list-style-type: none"> ▪ TIPSP objectives and co-benefits ▪ TIPSP methodology <p><i>Review and discussion on TIPSP in South Africa</i></p>	<ul style="list-style-type: none"> ▪ Summary of training and next steps <p>Key take aways / learnings</p> <ul style="list-style-type: none"> ▪ Next steps: Outlook of forthcoming activities: studies, round tables, online, trainings and conference ▪ Seminar evaluation and certificates
Lecturer	Dr. Atom Mirakyan (Tractebel Engineering)	David Jacobs (IET- International Energy Transition)
17.00	End of day 1	<u>End of training: 16:30</u>