From: **Vahab Rostampour** v.rostampour@tudelft.nl
Subject: Re: Literature colloquium
Date: 18 May 2016 at 11:22
To: Ole ter Haar ole.terhaar@gmail.com

Thanks.

Regarding the Wind model code here is some explanations:
You need to work with create_wind.m file. here is some notes:

```
% Load data for the test power system:
sys = getSystemData('threebus');    Here you could fix your system model. However, this not important, I will explain here later.
save('sys','sys');                   keep here as it is ..
% Names of the wind prediction form:
% da24 -> 1, mh01 ->2, mh04 ->3, mh08 ->4
wind = 1;                            keep here as it is ..


%% Numerical data
Nsim = 1; % number of simulations    if you need to have different set of simulation. for example two set of Ns number of wind scenarios
N_t = 24; % control horizon of each problem
Nstep = 24; % opimization horizon
```

if you use the sys variable above, then the following part play the role. Otherwise keep them as it is. They used to determine number os decision variables n_x later here for the theorem if you remember : Ns = ceil((2/epsilon)*(log(1/beta) + n_x))

```
N_B = sys.N_B; % buses n=1...N_B
N_G = sys.N_G; % generators i=1...N_G
N_L = sys.N_L; % loads j=1...N_L
N_l = sys.N_l; % lines nl=1…N_l


n_x = 3*N_G + 2*N_L + N_B; % Number of states    this number of variables refer to something else. please modify this if you use the sys variable

%%
% percentage of wind power integration
WP_perc = 20                         keep here as it is ..

% load profile
load_prof = [sys.load_prof_day];               keep here as it is ..

% wind power base
load WP_data_DA_24h
P_b = (WP_perc/100) * max(load_prof) * getScaleWP(wind,Nsim);
```

If you need to change regarding the violation level and confidence level, you is the place. Otherwise just change the n_x if you do not use the sys variable. finally the output of this simulation will be stored in variables: Psim_case0f (I think this shoudl forecast)   Psim_case0 (this should be real)   Psim_case1 (and this should scenarios)

```
% define number of scenarios
Eps_perc = 10;
beta = 1e-3; % confidence level
epsilon = Eps_perc/100; % violation parameter
N_w = ceil((2/epsilon)*(log(1/beta) + n_x)); % number of wind scenarios
```

I hope this makes everything clear for you. Let me know if you have any other questions,

By the way, please also send a kind of report to Tamas now (whatever you have now in single PDF).

Best, Vahab

On 18 May 2016, at 10:27, Ole ter Haar <ole.terhaar@gmail.com> wrote:

Hi Vahab,

No problem, I did not realize this. I will move the presentation to September. I will let you know as soon as I have a new date set.

Best regards,
Ole

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On 18 May 2016, at 10:23, Vahab Rostampour - 3ME <V.Rostampour@tudelft.nl> wrote:

Hi Ole,

Actually one of the important reason of having this presentation (you might know this) is to give you some feedbacks from one of the supervisors (at least) and some anonymous expertise and as I said in our meeting, I have to present there sorry for this. Therefore, yes please move the date of presentation to somewhere in August or September.

Just to keep you update that I would be away weeks 37, 38 in September and on 8th September.

Best regards,
Vahab

On 18 May 2016, at 10:07, Ole ter Haar <ole.terhaar@gmail.com> wrote:

Hi Vahab,

The date for my literature presentation is now set at June 29, because June 17 was unavailable. I know you will not be able to attend then, but I would like to finish the literature part of my thesis before the summer, so we can start moving forward with the research in July and from Sept on. Let me know if this is OK with you. If it isn't, I could also move the presentation to September.

Best regards,
Ole

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