

NEW NUCLEAR UNITS DEVELOPMENT

CONTRACT WITH STATE AND EUROPEAN COMMISSION NOTIFICATION

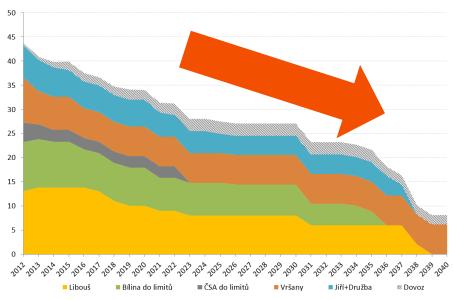
Ing. Martin Uhlíř MBA
Executive Director and Vice-Chairman of the Board
Elektrárna Dukovany II, stock company

6th November 2019

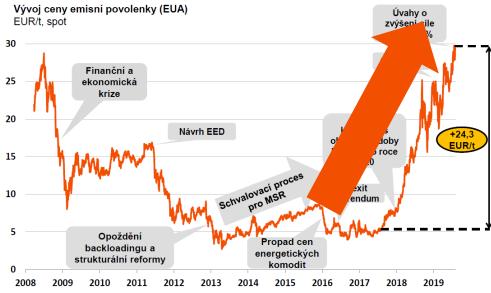
ENERGY SECTOR IS CHANGING



Czech mines capacity is going down



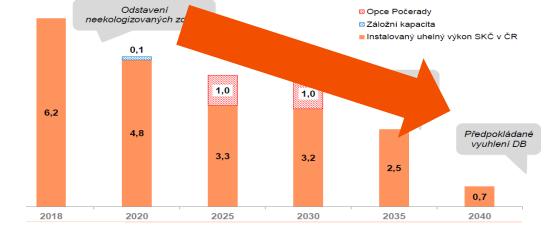
CO₂ allowances price grows up



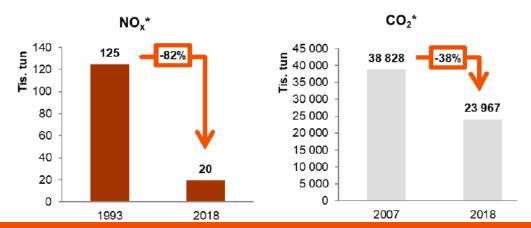
ENERGY SECTOR IS CHANGING



 Coal units are at the end of production life, it is not economical to operate it longer



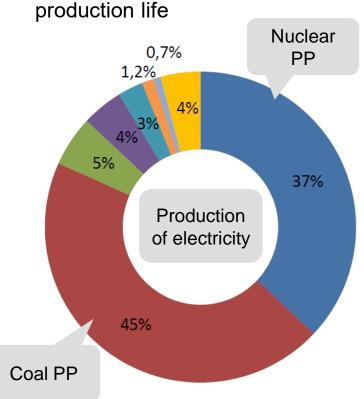
 ČEZ invested 111 billions CZK to decrease emissions



ENERGY SECTOR IS CHANGING



It is necessary to replace coal and nuclear units at the end of its



3

 ...because it will be nowhere to import from in 2040



NEW NUCLEAR UNIT AT DUKOVANY SITE



- 1. Long Term Operation of existing units #1 4 at least till 2035, ideally till 2045 (60 y.)
- 2. One new nuclear unit construction as extension of current capacity by 2035 (2040)
- 3. Possible additional nuclear unit after end of operation of units #1 4



Positive Invents



21st Feb. 2019 – Forum in Chamber of Deputies

- Energy situation is good now, but we will need 1 3 new units soon
- Czech gov. announced intention to build new nuclear units
- It is a restart of nuclear renaissance
- Contract with State Czech energy security, protection of consumers, low price of electricity
- Contract with State allows:
 - Control of State (possible NPP project takeover)
 - Risks reduction for CEZ (minor stakeholders)





Positive Invents



New State Envoy for Nuclear Development was established

State Standing Committee for Construction of New Nuclear Units:

- Prime Minister is a chairman, the Envoy is vice-chairman,
- The Committee works on a ministry level
- All member of parliament parties has its own member in the committee

Investor model for NPP construction

- The Investor is EDUII comp. fully owned by CEZ (it means current situation)
- General Contract + Executing Contract for each phase of the project (5 phases)
- The Financing will be covered by Investor, the Contract will allow competitive conditions for bank loans and stability for legislation requirements and possible compensation if legislation will change in future

Dukovany and Temelin Sites:

- Enough human capacity and financial sources shall be used for licensing and preparation of NPP in Dukovany, Dukovany site is a priority site, one unit with capacity up to 1200MW with possible expansion to two units
- Temelin site is back-up site, possible quick restart shall be kept

Current status of the Project



2016 - 2019 process EIA - finished

- Positive statement of Ministry of Environment
- EIA conditions

2019 - 2021 Nuclear Authority Site Approval

- Document Preparation
- Temelin experience Safety Report is publicized at ČEZ website
- Application submission May/2020

2019 – 2021 Site Decision

- Document Preparation
- Envelope approach (similar as EIA approach)
- Beginning of the process 06/2021



Current status of the Project



Transport of Heavy and Large Components

- Preparation of routes improvements
- Cooperation with municipalities
- It will be future Vendor responsibility



Schéma siti 400 a 220 kV ROFITSONA PEUNÉRON READAN RAPAGE POSITION NOCIDE NOCIDE NOCIDE NOCIDE POSITION NOCIDE Solomica Presence Nocide Presence Nocide Prosence SK SK SILIPANE SILIPANE

Czech electric grid improvements

- Contract for Future Contract with Czech TSO company signed
- Plan of Actions is agreed

Delivery models - Examples



model EPC 3

model Multi 2

model Multi 3a

Architekt Engineer
Procurement Management
Construction Management
Commissionig Management

NI TI BOP

I&C I&C Lot 1

Electric Electric Lot 2

Civil Civil Lot 3

Assembly Assembly Lot x

Architekt Engineer
Procurement Management
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<u>NI</u>	<u>II</u>	<u>BOP</u>
I&C	I&C	Lot 1
Electric	Electric	Lot 2
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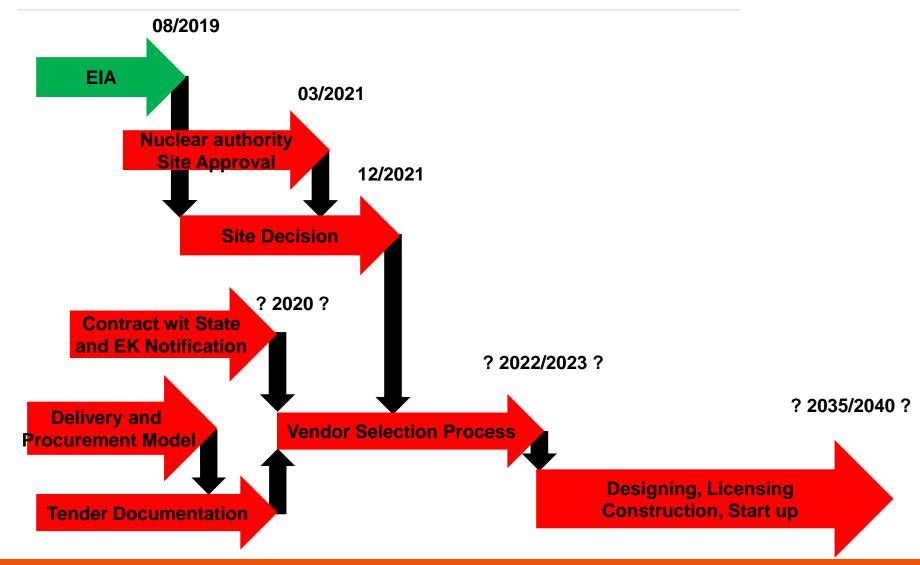
- Delivery Model Selection at the end of 2019
- Discussion with potential Vendors 2019/2020

Vendor Responsibility

Investor Responsibility

Next steps – what to do





THANK YOU FOR YOUR ATTENTION



