



WHAT IS A DIGITAL TWIN AND WHY SHOULD I CARE

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CONVENTION EDUCATION

This session is eligible for 1 Continuing Education Hour.

For these hours to appear on your certificate, you must:

- Have your badge scanned at the door
- Attend 90% of this presentation
- Fill out the online evaluation for this session



Case Studies - What is the level of involvement of the electrical industry sector in Digital Twin implementation?

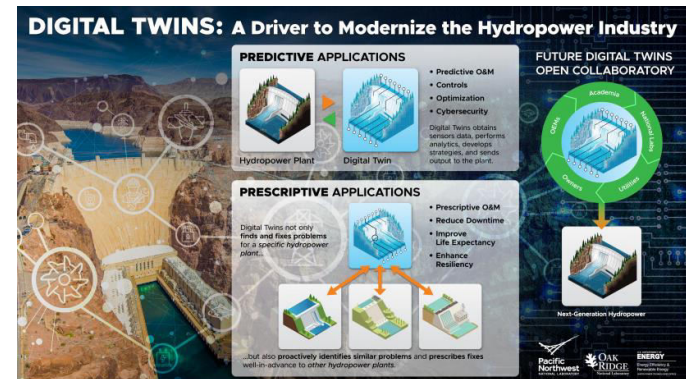
Potential case studies from Task Force members:

- Schneider
- Hospital project with Schneider to monitor patient rooms.
- GSA
- Willow (Thyssenkrupp)

Possible Interview Questions

- Q1. How do you define a digital twin?
- Q2. What are the current challenges that the industry is facing and how DT can overcome them?
- Q3. As an end user what benefits digital twin provides to the owners?
- Q4. If you look at the overall cost of the project including the cost of implementing and supporting digital twin what kind of benefits the owner is looking at in future?
- Q5. What does the future of digital twin look like in the electrical industry?
- Q6. What can owners do to support the current and future implementation of digital twins?
- Q7. What are the challenges being faced in implementing digital twins?

Case Study C2.3: Digital Twins for Hydropower



Example Implementation

Va Tech: Classroom Building: 01549 Location: Roof Serves: Classrooms 1st, 2nd, & 3rd Outside Air Temp: 65.40 Deg F Humidity: 20.20% RH Date:06/06/2022 Time:1:30:00 PM

Dashboard No. 8A

Va Tech: Classroom Building: 01549 Location: Roof Serves: Classrooms 1st, 2nd, and 3rd Outside Air Temp: 65.40 Deg F Humidity: 20.20% RH Date:06/06/2022 Time:1:30:00 PM

Name: Suffix	Data Point	Value
B015501ACWV	Chill Water NC Valve	1.41
B015501AD03	Duct Static	1.15
B015501AD03	Duct Static	1.15
B015501AD03	Duct Static Setpoint	1.15
B015501AEF1S	Exhaust Fan 1 Status	ON
B015501AEF2S	Exhaust Fan 2 Status	ON
B015501AEF3S	Exhaust Fan 3 Status	ON
B015501AEF4S	Exhaust Fan 4 Status	ON
B015501AEFSPEED	Exhaust Fan Speed	0
B015501AHWWT	Heat Wheel Exit Temp	70.71
B015501AHWSPEED	Heat Wheel Speed Signal	0
B015501AHWS	Heat Wheel Status	OFF
B015501APHV	Low Pressure Steam NO 1/3 PH Valve	10
B015501APHV2	Low Pressure Steam NO 2/3 PH Valve	10
B015501ACAT	Outside Air Temp	71.32
B015501APH	Pre-Heat Temp	72.4
B015501APH	Pre-Heat Temp Setpoint	45
B015501APH	Return Air Temp	69.11
B015501ASAT	Supply Air Temp	55.05
B015501ASAS	Supply Air Temp Setpoint	55
B015501ASF1S	Supply Fan 1 Status	ON
B015501ASF2S	Supply Fan 2 Status	ON
B015501ASF3S	Supply Fan 3 Status	ON
B015501ASF4S	Supply Fan 4 Status	ON
B015501ASFSPPEED	Supply Fan Speed	41.27
B015501AECM	System Economizer Point	OFF
B015501AOC	System Occupancy Point	ON

Complete the Online Evaluation