



The Australian  
Power Institute

# 2019 SUMMER SCHOOL

SUNDAY 17<sup>TH</sup> FEBRUARY - FRIDAY 1<sup>ST</sup> MARCH, 2019

## Theme

Agile – Innovative – Supportive  
Flexible and Sustainable Energy Supply - New Business  
Opportunities and Threats for the Industry.

## Why should employers send delegates?

- Delegates will broaden thinking, boost experience levels and develop strategic leadership skills associated with the development and implementation of technology
- Improved understanding of various technologies' economic, technical and customer value
- Gain access to a range of best practice solutions (through industry leaders sharing case studies and practical experiences)
- Establish a network of contacts across the industry/nation
- Increased understanding of the environment within which networks are managed - an understanding of the need for an adaptive and responsive network
- Energise delegates to take the learnings/knowledge gained to make a difference and to lead change in their organisation

## How will delegates personally benefit?

Through accelerated development in the only first class whole of industry program, this will reduce the need to attend multiple development activities. Delegates will:

- Broaden thinking and skills, increase network of professional contacts, & position participants well for advancement in the industry
- Improve global industry knowledge and position delegates for professional advancement
- Receive certificate of continuing professional development completion
- Advance Personal CV

## Venue

Potters Hotel & Conference Centre  
Wine Country Drive  
Nulkaba, Hunter Valley, NSW  
[www.lancemore.com.au](http://www.lancemore.com.au)

## Investment

Total investment for the summer school includes a first class residential program (including group activities and site visits), electronic copies of all presentations, accommodation and meals (including all group dinners and functions) and an attendance certificate for Continuing Professional Development (CPD) in accordance with EA CPD guidelines.

## Early Bird Registration

**Early Bird cut off date:**  
**November 30th, 2018**  
**(saving of \$1,000)**

Registration close date:  
January 18<sup>th</sup>, 2019

# "Survey statistics consistently prove that delegates consider it an honour to attend the API Summer School"



## AIM OF THE SUMMER SCHOOL

- Provide power engineers with 4-15 years of experience (can include para professionals) from all sectors of the industry (i.e. generation, renewables, transmission, distribution, consulting, manufacturing, end users) with an understanding of the industry drivers and key issues
- Provide experienced engineers from other industries, joining the power industry, with power engineering applied fundamentals and best practice
- Provide accelerated technical leadership skills and awareness of technology to enhance business performance through high performing power engineering staff
- Bring industry personal with diverse backgrounds together to share learnings and experiences in order to develop personal networks for ongoing future career development

## BENEFITS FOR THE DELEGATES

- Improved understanding of drivers and issues in all sectors including the need to be adaptive and responsive to meet customer and community expectations
- Accelerated development and sharing of learning through case studies, field/site visits and a practical industry syndicate project.
- Update on best practice, technology and industry solutions
- Development towards future positions of leadership of engineering teams and technical specialists.
- Established network of power engineering industry contacts + USB with delegate profiles.
- New thinking and skills ready to be applied in the workplace to "make a difference"

## BENEFITS FOR THE EMPLOYERS

- Delegates will enhance their leadership and technical thinking and overall business contribution
- Provide delegates with essential mix of resources in order to provide a smooth transition into future leader/manager roles
- Allows for all conference participants (delegates, presenters, syndicate leaders) from various levels and diverse backgrounds to interact and share knowledge
- Provides new insight to resolve industry issues and provide innovative solutions that will keep companies relevant and sustainable into the future

## UNIQUE DELIVERY OF THIS RESIDENTIAL PROGRAM INCLUDES:

- Residential, intensive two week program in a first class learning environment
- Each day's program will commence with an introduction to the Drivers, Key Issues and Fundamentals of the designated "daily theme" and then build towards options, solutions, and industry best practice. Each session will have ample question time to facilitate interaction between delegates and expert presenters
- Extensive use of case studies to share learnings and problems encountered
- Mix of expert presenters, panels/forums, site visits and syndicate work, to ensure maximum learning outcomes.
- Balance of presentations from industry and universities to ensure a sound understanding of fundamentals and practical application within industry
- Syndicate teams of 3-5 will be formed to work on a defined industry case study and/or problem which will be facilitated by a subject matter expert. Delegates are requested to select a topic/field that they are not currently working in so that they can widen their knowledge and broaden their outlook
- Networking with high performing technical staff identified as potential leaders in the industry (delegates consider it an honour to attend)
- Support by local universities
- Recognised as a Continuing Professional Development activity (refer to Engineers Australia Guidelines for recognition of CPD hours)
- Provision of a safe environment, particularly during site visits. (Delegates are responsible for providing their personal protective equipment (PPE))
- Opportunity to explore local attractions during limited leisure time
- To obtain maximum benefit from this program delegates should plan no other work commitments during the 2 week period

## PLEASE NOTE:

*\* Delegates are advised that partners and/or families should NOT JOIN in attendance due to the intensive nature of the program and schedule*

# PROGRAM

WEEK ONE	Mon 18 Feb	Tues 19 Feb	Weds 20 Feb	Thur 21 Feb	Fri 22 Feb	Sat 23 Feb
	<b>Supporting the Changing Needs of Customers &amp; Community</b>	<b>An Agile, Innovative Generation Sector</b>	<b>Field/Site Visits</b>	<b>An Agile, Innovative Energy Delivery Sector</b>	<b>Electricity Markets - Journey to the Future</b>	<b>Field/Site Visits</b>
7:00 - 8:30	<i>Breakfast</i>	<i>Breakfast</i>	<i>Breakfast</i>	<i>Breakfast</i>	<i>Breakfast</i>	<i>Breakfast</i>
8:30-9:30	Australian Energy Consumers Current & Future Expectations & Drivers	Virtual Power Plants	Site Tours	Energy Delivery Drivers, Key Issues and Future Evolution	Energy Market Policy to Address Customer Expectations and Role of Energy Market Commission	Site Tours
9:30-10:30	Australia's Electricity Markets – Some Strategy and Policy	Customer Distributed Generation Sources and Integration to the		Innovative Asset Management – The Journey	The Energy Revolution	
10:30-10:45	<i>Morning Tea</i>	<i>Morning Tea</i>		<i>Morning Tea</i>	<i>Morning Tea</i>	
10:45-11:45	Industry Disruption – Implications and Potential Strategies Driven by Customers.	Identifying and Addressing Future Power System Security Challenges		Designing our Networks for High DER Penetration	Energy Regulation to Support Finding the Balance between Rules, Prices, Customer Expectations and Network Investment	
11:45-12:45	Customer Demand Response and Demand Management	Renewable Generation – Wind Case Studies		Analytics and Big Data – Facilitating Agile, Innovative Energy Networks	Australian Energy Market Operator Role in the Journey to the Future	
12:45-1:30	<i>Lunch</i>	<i>Lunch</i>		<i>Lunch</i>	<i>Lunch</i>	
1:30-2:00	Delegate Presentations	Delegate Presentations		Delegate Presentations	Delegate Presentations	
2:00-3:00	Residential and Small Business Energy Customers Interests re Price, Quality, Safety, Reliability and Security	Australia Solar and Storage – Transitioning to the Future		Distribution Voltage Management with Increasing DER	Syndicate Work	
3:00-4:00	Syndicate Briefings with Facilitators	High Penetration Renewables towards a 50% Renewable Portfolio Standard – US Experience		Integrated Planning – Innovation and Agility in Planning	Syndicate Work	
4:00-4:15	<i>Afternoon Tea</i>	<i>Afternoon Tea</i>		<i>Afternoon Tea</i>	<i>Afternoon Tea</i>	
4:15-5:30	Continue Syndicate Briefings with Facilitators	Gas Generation; and Large Scale Community Battery Storage - Case Studies	Engineering to Management – How Can You Do Both.	Syndicate Work		
Evening	The Australian Power Institute			Evening Meal - Offsite	Evening Meal - Offsite	

WEEK TWO	Mon 25 Feb	Tues 26 Feb	Weds 27 Feb	Thur 28 Feb	Fri 1 Mar	
	<b>Journey to the Future with Energy Storage</b>	<b>Innovation and Agility in Asset Management</b>	<b>Evolution of New Businesses – an Agile, Innovative Industry</b>	<b>Syndicate Presentations Day</b>	<b>Industry Senior Leaders Outlook for Transitioning to the Future</b>	
7:00 - 8:30	<i>Breakfast</i>	<i>Breakfast</i>	<i>Breakfast</i>	<i>Breakfast</i>	<i>Breakfast</i>	
8:30-9:30	Energy Storage Fundamentals	API & ENA Initiated Innovation Project	Future Workforce Skills and Competencies	Syndicate Presentations	Industry Chief/Senior Executive Officer Forum	
9:30-10:30	Battery Storage and Energy Transformation in South Australia	Overhead Networks Design and Innovation	Network Transformation Program – Outcomes and		Q&A Panel Session	
10:30-10:45	<i>Morning Tea</i>	<i>Morning Tea</i>	<i>Morning Tea</i>		<i>Morning Tea</i>	
10:45-11:45	Battery of the Nation	IEC61850 Implementation and Derived Asset Management Benefits	Collaborative Innovation Framework between API & ENA		Delegate Feedback	
11:45-12:45	Syndicate Work	Moving Beyond the Substation – Changes Needed in the Operational Technology Environment	The Redback Technologies Journey – Fundamentals and Challenges of a Start Up		Summer School Certificate Presentations	
12:45-1:30	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>		<i>Lunch</i>	
1:30-2:30	Syndicate Work	Network Visualisation	Syndicate Work		Syndicate Presentations	Airport Transfers
2:30-3:30		Best Practice Bushfire Risk Management				
3:30-4:00	<i>Afternoon Tea</i>	<i>Afternoon Tea</i>	<i>Afternoon Tea</i>		<i>Afternoon Tea</i>	
4:00-5:00	Syndicate Work	Power Transformer Design and Lifecycle Management	Syndicate Work		KEYNOTE PRESENTATION	
Evening	Delegates Voluntary "Special Interest	CIGRE NGN Presentation		Summer School Celebration Dinner		



100% of attendees said they would recommend this program to their colleagues.

## INVESTMENT (GST INCLUDED)

	Early Bird	Standard
Governor Member	\$9,900	\$11,000
Principal Member	\$11,000	\$13,200
Industry Member	\$13,200	\$14,300
Non Member	\$14,300	\$15,400

\*A discount applies for early bird registrations before 30th November 2018. The closing date for standard registration is 18 January 2019.

## ACCOMMODATION - Potters Hotel & Conference Centre - Approx. 50 minutes from Newcastle Airport

Venue Facilities:

- Serviced/Air Conditioned Guest Rooms
- Free High-Speed Internet Access in conference areas and rooms
- Stunning Regional Setting
- Purpose Built Meeting Facilities & Spacious Break Out Rooms
- Tennis, Boules, & Pool Table
- Outdoor Swimming Pool
- Airport transfers will be provided to/from venue & local Airport

## WHAT DELEGATES HAD TO SAY ABOUT THE 2018 SUMMER SCHOOL

*"I thought I new what my industry did and how our customers thought about us. This was not only idealistic but misinformed. The API summer school reintroduced me to the industry and provided me with an opportunity to make professional alliances that I will leverage off my entire career."*

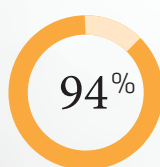
*"A holistic approach, networking and work-life balance. These three important things are required to be successful in order to succeed in this fast changing industry. If you value these skill sets then API is the perfect venue for you to develop and grow in these areas."*

*"An unparalleled opportunity to meet ask learn give back and refresh your self and your career direction not only in the technical but in the industry... The intensity equals the benefits."*

*"Wow, what an amazing opportunity to get updated and learn with amazing peers from industry leaders to new starters, well worth the investment."*

*"Undoubtedly, the most impressive and engaging array of presentations and speakers that I will see during my career, at a fascinating time in the industry."*

## TESTIMONIAL FEEDBACK & STATISTICS



When asked "The amount of value added to your career development:" 88+% of attendees rated this experience **"Excellent/Good"** for a refresh and update of knowledge and to broaden understanding of best practice in power engineering.

Overall evaluation; 86+% rated the Summer School **"Excellent"**, with 14+% rating it **"Good Value"** and 100% of delegates responding they are prepared to **recommend** the Program/Summer School to their colleagues/managers.



## REGISTRATION & FURTHER INFORMATION

To register, please visit <https://australianpowerinstitute.currinda.com/register/profile/964c0409f438> or contact Kendall Klingaman, API Marketing & Communications Coordinator. Technical inquiries may be addressed to API Chief Executive, Mike Griffin: [mccgriffin@caloundra.net](mailto:mccgriffin@caloundra.net)

## ABOUT THE AUSTRALIAN POWER INSTITUTE Connects, Collaborates, Contributes.

### VISION:

Be the leading National Organisation in Australia's energy sector facilitating the delivery of high quality industry professionals.

### PURPOSE:

To add value to our member organization by supplying a sustainable level of innovative and agile industry professionals with contemporary skills to transform and sustain Australia's energy future.

### STRATEGIC OBJECTIVES:

- Provide a sustainable supply of quality engineering and technology graduates to the energy Industry;
- Facilitate a strong energy focussed engineering and technology education platform for undergraduate students and existing industry professionals;
- Strengthen academic quality and industry experience to enhance student university education;
- Membership expansion, diversity and value.