

TTWG Studies Update

September 11, 2019

| Study | Description | Stage / Next steps |
|--------------------------------|--|--|
| P1 – System Planning | <ul style="list-style-type: none"> • Overview of costs, drivers and transmission planning in Alberta • Includes past and future system project costs | Report sent on September 10 th TTWG |
| F1 – Tariff Design Overview | <ul style="list-style-type: none"> • Historical ISO tariff design overview • Other industry pricing and tariffs review • Jurisdictional review including functionalization, classification, allocation and opportunity services review. | Navigant selected Kicking off this week |
| F2 – Line Correlation Analysis | <ul style="list-style-type: none"> • Correlation analysis of line power flow versus system load and regional load • First Stage: 240kV or greater lines or line segments | Data compiled. Analysis in progress |

| Study | Description | Stage / next steps |
|--|---|---|
| A1 – Historical and Forecast Load, Historical Generation | <ul style="list-style-type: none"> Hourly historical and forecast load, historical generation by market participant category, type and region | Data posted on AESO website on September 11th |
| C1 – Classification – Average & Excess | <ul style="list-style-type: none"> Cost classification can be achieved through analyzing line loading and determining average and excess line loading to create fixed, volumetric and variable classifications | Deferred TTWG offer to lead? |
| C2 – Classification – Minimum System | <ul style="list-style-type: none"> Cost classification can be achieved through analyzing minimum system and optimum system to create fixed, volumetric and variable classifications | Deferred TTWG offer to lead? |
| C3 – Classification – Fixed and Variable | <ul style="list-style-type: none"> Cost classification can be achieved through analyzing fixed and variable costs to create fixed, volumetric and variable classifications | Deferred TTWG offer to lead? |

| Study | Description | Stage / next steps |
|--|--|--------------------------------|
| R1 – Value of Service | <ul style="list-style-type: none"> Review the value of electricity service to customers and their potential responses | Engage external consultant |
| A2 – Rate Classes | <ul style="list-style-type: none"> Alberta legislative and regulatory review of barriers and hurdles for new rates or rate classes | In progress |
| R3 – Bonbright Review and Report | <ul style="list-style-type: none"> Bonbright’s criteria of rate design and applicability to the transmission tariff | Review complete Next steps? |
| R4 – Historical Coincident Peak Response | <ul style="list-style-type: none"> Review past market participant response to monthly coincident peak pricing signal – monthly MWs and monthly dollars. | In progress |

- Finalize identified studies and circulate to TTWG for discussion and next steps
- TTWG homework
- Meeting schedule options

Thank you