



AGENDA

GAS, POWER AND TELECOMMUNICATIONS COMMITTEE

July 16, 2020, 9:30 AM
IN THE COUNCIL CHAMBER

Members

Councillor S. Chu, Chair
Councillor D. Farrell, Vice-Chair
Councillor J. Davison
Councillor J. Magliocca
Chief Financial Officer C. Male

SPECIAL NOTES:

Public are encouraged to follow Council and Committee meetings using the live stream [Calgary.ca/WatchLive](https://calgary.ca/WatchLive)

Public wishing to make a written submission may do so using the public submission form at the following link: [Public Submission Form](#)

Members may be participating remotely.

1. CALL TO ORDER
2. OPENING REMARKS
3. CONFIRMATION OF AGENDA
4. CONFIRMATION OF MINUTES
 - 4.1 Minutes of the Regular Meeting of the Gas, Power and Telecommunications Committee, 2020 June 11
5. CONSENT AGENDA
 - 5.1 DEFERRALS AND PROCEDURAL REQUESTS
None

5.2 BRIEFINGS

5.2.1 Status of Outstanding Motions and Directions, GPT2020-0759

6. POSTPONED REPORTS

(including related/supplemental reports)

None

7. ITEMS FROM OFFICERS, ADMINISTRATION AND COMMITTEES

7.1 Industry Update on Electricity, Natural Gas and Telecommunications, GPT2020-0761

8. ITEMS DIRECTLY TO COMMITTEE

8.1 REFERRED REPORTS

None

8.2 NOTICE(S) OF MOTION

None

9. URGENT BUSINESS

None

10. CONFIDENTIAL ITEMS

10.1 ITEMS FROM OFFICERS, ADMINISTRATION AND COMMITTEES

None

10.2 URGENT BUSINESS

None

11. ADJOURNMENT



MINUTES

GAS, POWER AND TELECOMMUNICATIONS COMMITTEE

**June 11, 2020, 1:00 PM
IN THE COUNCIL CHAMBER**

PRESENT: Councillor S. Chu, Chair (Remote Participation)
Councillor D. Farrell, Vice-Chair (Remote Participation)
Councillor J. Davison (Remote Participation)
Councillor J. Magliocca (Remote Participation)
A/Chief Financial Officer J. Bradley (Remote Participation)

ALSO PRESENT: Deputy City Clerk J. Fraser
Legislative Advisor D. Williams

1. **CALL TO ORDER**

Councillor Chu called the Meeting to order at 1:13 p.m.

2. **OPENING REMARKS**

Councillor Chu provided opening remarks at today's Meeting.

3. **CONFIRMATION OF AGENDA**

Moved by Councillor Magliocca

That the Agenda for today's meeting be amended by adding an Item of Confidential Urgent Business, 10.2.1. Court of Appeal Legal Update - Municipal Rights of Way Bylaw, GPT2020-0705.

MOTION CARRIED

Moved by Councillor Davison

That the Agenda for the 2020 June 11 Regular Meeting of the Gas, Power and Telecommunications Committee be confirmed, **as amended**.

MOTION CARRIED

4. **CONFIRMATION OF MINUTES**

- 4.1 Minutes of the Regular Meeting of the Gas, Power and Telecommunications Committee, 2020 March 12

Moved by Councillor Farrell

That the Minutes of the 2020 March 12 Regular Meeting of the Gas, Power and Telecommunications Committee be confirmed.

MOTION CARRIED

5. CONSENT AGENDA

5.1 DEFERRALS AND PROCEDURAL REQUESTS

5.2 BRIEFINGS

Moved by Councillor Davison

That the Gas, Power, and Telecommunications Committee receive the following briefing for the Corporate Record:

5.2.1 Status of Outstanding Motions and Directions, GPT2020-0595

MOTION CARRIED

6. POSTPONED REPORTS

None

7. ITEMS FROM OFFICERS, ADMINISTRATION AND COMMITTEES

None

8. ITEMS DIRECTLY TO COMMITTEE

8.1 REFERRED REPORTS

None

8.2 NOTICE(S) OF MOTION

None

9. URGENT BUSINESS

None

10. CONFIDENTIAL ITEMS

Moved by Councillor Farrell

That pursuant to Sections 16 (Disclosure harmful to business interests of a third party), 23 (Local public body confidences), 24 (Advice from officials), 25 (Disclosure harmful to economic and other interests of a public body), and 27 (Privileged Information) of the *Freedom of Information and Protection of Privacy Act*, the Gas, Power, and Telecommunications Committee now move into Closed Meeting at 1:18 p.m., in the Council Boardroom, to discuss confidential matters with respect to the following Items:

- 10.1.1. Verbal Status update on agreement with ENMAX (ETSI) and City of Calgary, GPT2020-0668
- 10.1.2. Summary of Current Proceedings, GPT2020-0597
- 10.2.1. Court of Appeal Legal Update - Municipal Rights of Way Bylaw, GPT2020-0705

MOTION CARRIED

Committee moved into Public Meeting at 2:08 p.m. with Councillor Chu in the Chair (remotely)

Moved by Councillor Magliocca

That Committee rise and report.

MOTION CARRIED

10.1 ITEMS FROM OFFICERS, ADMINISTRATION AND COMMITTEES

10.1.1 Verbal Status update on agreement with ENMAX (ETSI) and City of Calgary, GPT2020-0668

Administration in attendance In Person and Remotely during the Closed Meeting discussions with respect to Report GPT2020-0668:

Clerks: J. Fraser and J. Palaschuk. Advice: B. Cullen. Law: L. Bonnett. Observer: J. Bradley, T. McLeod, K. Hess, B. Whyte, and L. Shannon.

Moved by Councillor Magliocca

That with respect to Report GPT2020-0668, the following be approved:

That the Gas, Power and Telecommunications Committee:

1. Receive the verbal status update for the Corporate Record; and
2. Direct that the report be held confidential pursuant to Section 16 (Disclosure harmful to business interests of a third party), Section 23 (Local public body confidences), and 24 (Advice from officials) of the *Freedom of Information and Protection of Privacy Act*, to be reviewed by 2023 June 11.

MOTION CARRIED

10.1.2 Summary of Current Proceedings, GPT2020-0597

Administration in attendance In Person and Remotely during the Closed Meeting discussions with respect to Report GPT2020-0597:

Clerks: J. Fraser and J. Palaschuk. Advice: B. Whyte and R. Holberton. Law: L. Bonnett. Observer: J. Bradley, B. Cullen, K. Hess, T. McLeod, L. Shannon.

Moved by Councillor Farrell

That with respect to Report GPT2020-0597, the following be approved:

That the Gas, Power and Telecommunications Committee:

1. Receive this report for the Corporate record;
2. Direct Administration to notify the Alberta Utilities Commission (AUC) of the natural gas utility over-earning discussed in Attachment 2 and participate in any proceeding resulting thereof and;
3. Direct that the report and attachments be heard in a closed meeting pursuant to Section 23 (Local public body confidences) of the *Freedom of Information and Protection of Privacy Act* and remain confidential pursuant to Section 24 (Advice from officials) of the *Freedom of Information and Protection of Privacy Act*, reviewed by 2023 June 11.

MOTION CARRIED

10.2 URGENT BUSINESS

10.2.1 Court of Appeal Legal Update - Municipal Rights of Way Bylaw, GPT2020-0705

Administration in attendance In Person and Remotely during the Closed Meeting discussions with respect to Report GPT2020-0705:

Clerks: J. Fraser and J. Palaschuk, Advice: K. Hess, Law: L. Bonnett, Observer: B. Whyte, J. Bradley, L. Shannon, B. Cullen, T. McLeod, and R. Holberton.

Moved by Councillor Davison

That with respect to Report GPT2020-0705, the following be approved:

That the Gas, Power, and Telecommunications Committee:

1. Recommend that Council receive the verbal update for the Corporate Record; and
2. Direct that the Closed Meeting discussions remain confidential pursuant to Sections 24 (Advice from officials), and 27 (Privileged Information) of the *Freedom of Information and Protection of Privacy Act*.

MOTION CARRIED

11. ADJOURNMENT

Moved by Councillor Magliocca

That the meeting adjourn at 2:09 p.m.

MOTION CARRIED

The following item has been forwarded to the 2020 July 20 Combined Meeting of Council:

CONFIDENTIAL CONSENT

- Court of Appeal Legal Update - Municipal Rights of Way Bylaw, GPT2020-0705

The next Regular Meeting of the Gas, Power and Telecommunications Committee is scheduled to be held on 2020 July 16 at 9:30 a.m.

CONFIRMED BY COMMITTEE ON

CHAIR

ACTING CITY CLERK

UNCONFIRMED

BRIEFING

Page 1 of 1

Item # 5.2.1

**Chief Financial Officer's Briefing to
Gas, Power and Telecommunications
2020 July 16**

**ISC: UNRESTRICTED
GPT2020-0759**

Status of Outstanding Motions and Directions

PURPOSE OF BRIEFING

This briefing details the outstanding items for the Gas, Power and Telecommunications (GPT) Committee from previous meetings

SUPPORTING INFORMATION

The GPT Committee has directed that this briefing be prepared on a monthly basis for each scheduled meeting. As of 2020 June 24, there are no outstanding motions and directions

ATTACHMENT(S)

1. None

**Chief Financial Officer's Report to
Gas, Power and Telecommunications
2020 July 16**

**ISC: UNRESTRICTED
GPT2020-0761**

Industry Update on Electricity, Natural Gas and Telecommunications

EXECUTIVE SUMMARY

This report summarizes key developments in the electricity, natural gas, and telecommunications industries since 2020 March 12, the date of the last industry update report (GPT2020-0282).

ADMINISTRATION RECOMMENDATION:

That the Gas, Power and Telecommunications Committee receive this report for the Corporate Record and for discussion.

PREVIOUS COUNCIL DIRECTION / POLICY

The Gas, Power and Telecommunications Committee has requested that this report be prepared every second meeting. The meetings scheduled for 2020 April and May were cancelled.

BACKGROUND

This report, with Attachment 1, provides a summary of relevant industry developments and policy issues.

INVESTIGATION: ALTERNATIVES AND ANALYSIS

Natural gas and electricity markets are analyzed to provide an understanding of energy prices which affect The City's utility costs, Calgarians who pay for utility services and franchise fee revenue.

Policy issues in Alberta's regulated utilities and general utility industry developments that could have an impact on The City's interests are reviewed to keep committee members informed of issues that may require future regulatory intervention or impact The City's operations.

Attachment 1 provides details on recent developments in Alberta's Utilities industry.

Stakeholder Engagement, Research and Communication

None

Strategic Alignment

This report is in alignment with the mandate of the Gas, Power and Telecommunications Committee.

Chief Financial Officer's Report to
Gas, Power and Telecommunications
2020 July 16

ISC: UNRESTRICTED
GPT2020-0761

Industry Update on Electricity, Natural Gas and Telecommunications

Social, Environmental, Economic (External)

This report aligns with The City's Triple Bottom Line Policy Framework. The analysis determined that no social, environmental or economic implications were applicable.

Financial Capacity

Current and Future Operating Budget:

This report does not propose a decision, and there is no current or future budget or business plan implication.

Current and Future Capital Budget:

No budget or business plan implications arise from this report.

Risk Assessment

No budget or business plan implications arise from this report.

REASON(S) FOR RECOMMENDATION(S):

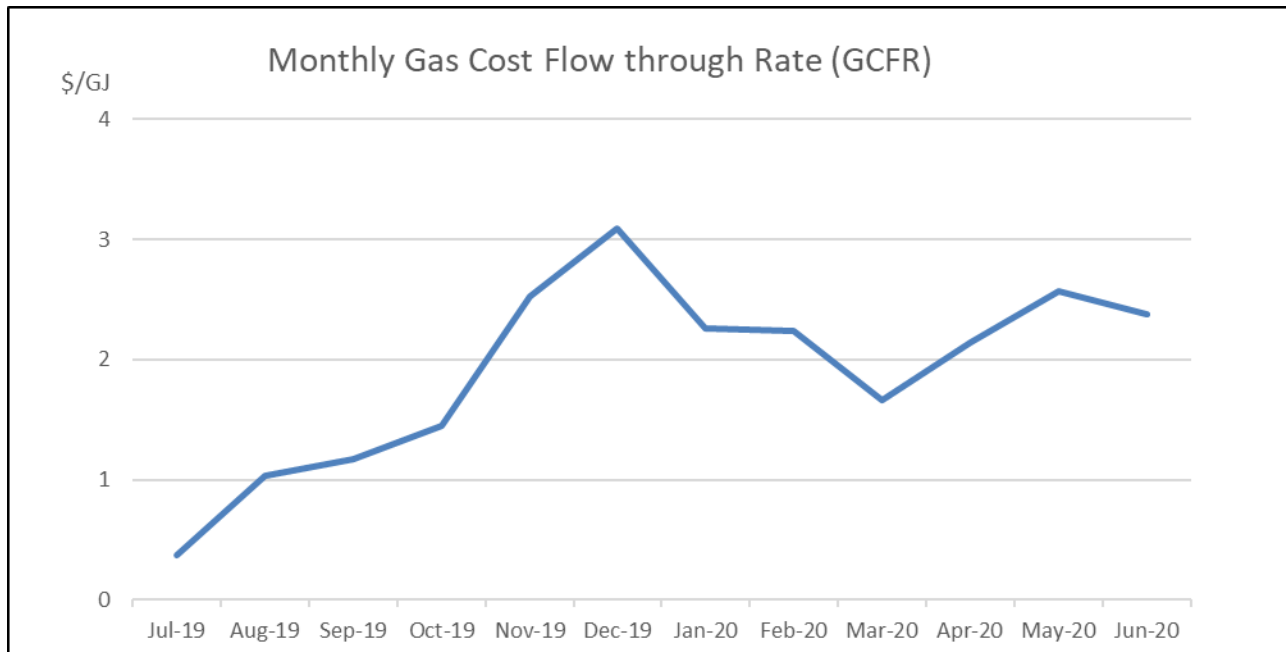
This report provides information to GPT Committee members to assist them in their understanding of regulatory issues that affect The City's interests.

ATTACHMENT(S)

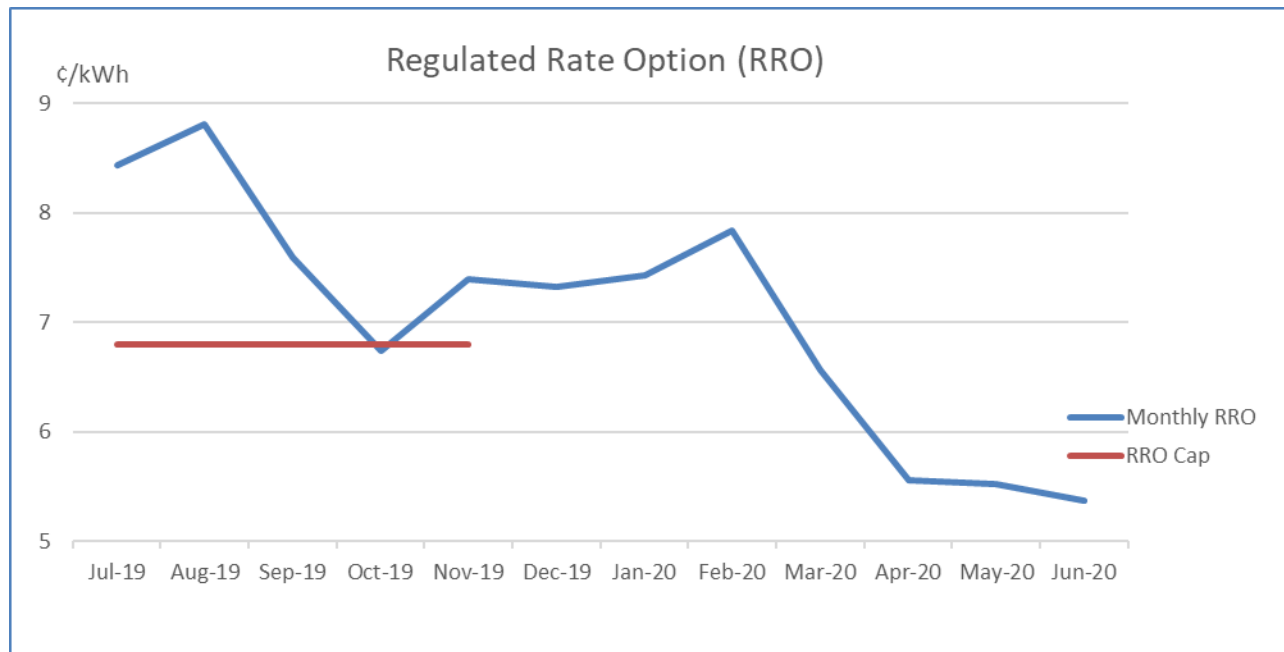
1. Attachment 1 – Industry Update on Electricity, Natural Gas and Telecommunications

ENERGY PRICES AND MARKETS**Natural Gas**

The 2020 June gas cost flow-through rate (GCFR) was \$2.38 per gigajoule. Prices are forecast to remain stable for the remainder of 2020. Natural gas costs for The City thus far in 2020 are 13.3 percent (\$694,000) lower relative to 2019, largely due to a warmer winter in 2020.

**Electricity**

The ENMAX regulated rate option (RRO) price for 2020 June was 5.37 cents per kilowatt-hour. The price cap of 6.8 cents per kilowatt-hour is no longer in effect as of 2019 December. Electricity costs for The City thus far in 2020 are 3.2 per cent (\$934,000) lower relative to 2019, largely due to decreased transit electricity usage.



The month-to-date all-hours average power pool price for 2020 June 22 was 3.48 cents per kilowatt-hour. For reference, the all-hours average price for 2019 June was 5.35 cents per kilowatt-hour. Power pool prices are forecast to remain between 4 and 6 cents per kilowatt-hour for the remainder of 2020.

UTILITY REGULATION UPDATE

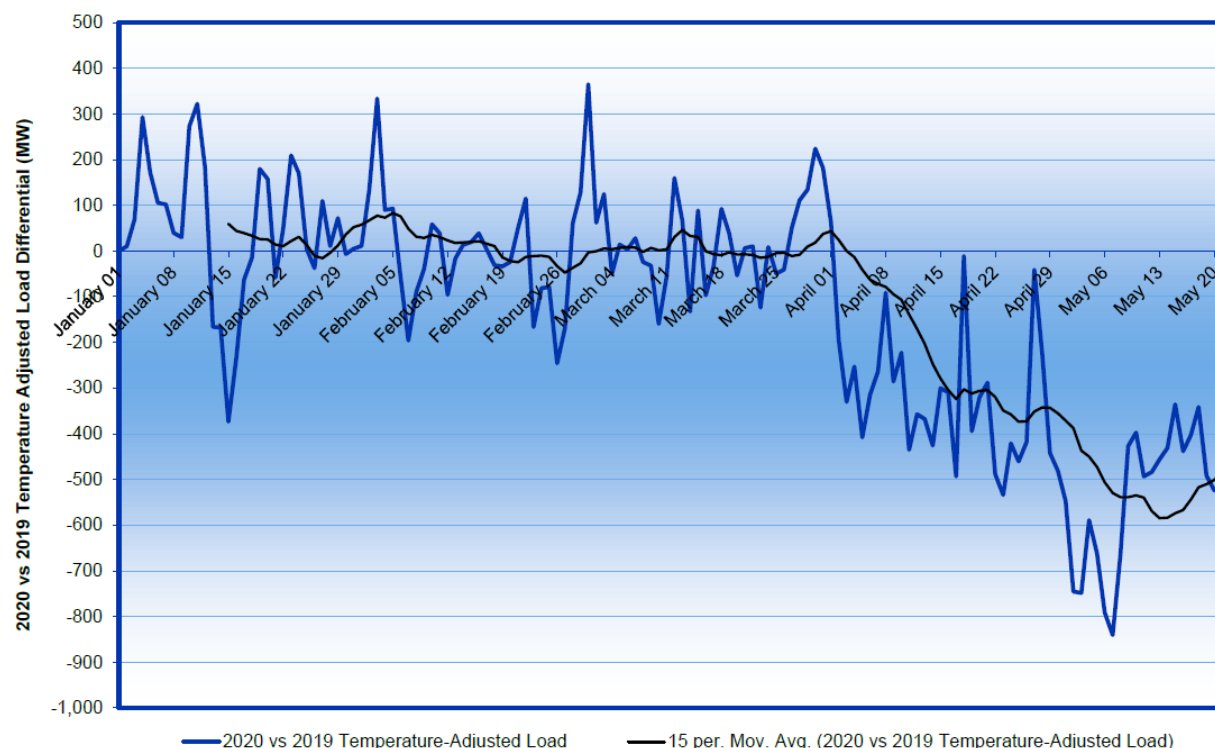
New Alberta Utilities Commission Chair

On 2020 June 24 Carolyn Dahl Rees was announced as the Interim AUC Chair, replacing Mark Kolesar. The Alberta Government announced that the new Chair would focus on streamlining regulatory processes and reducing red tape. This was a surprise as Mark Kolesar was scheduled to host a webinar with industry on 2020 June 24, and he was appointed as AUC Chair for a five year term that began on 2018 May 1. It is expected a new permanent Chair will be appointed no later than 2021 June.

UTILITIES AND INDUSTRY DEVELOPMENTS

Impact of COVID-19 and Low Oil Prices on Alberta Electricity demand

Beginning in 2020 April the economic shutdown began to impact provincial electricity demand. Daily temperature adjusted load was over 800 MW lower in the beginning of May on a year-over-year basis. By mid-May electricity consumption had begun to improve. The graph below shows the daily temperature adjusted load differential (2020 vs 2019).



*Source – EDC Associates Q2-2020 update

Alberta electricity demand should continue to bounce back as the province opens back up and oil prices improve.

Impact on Power Price

The Alberta power market operates as an oligopoly – the top 5 firms control roughly two-thirds of available supply, and this is not expected to materially change as the grid evolves over the coming years. The large capital costs of building large generation stations is one factor which contributes to market power being concentrated in five main companies.

| <u>Company</u> | <u>Control (MW)</u> | <u>%</u> |
|----------------------|---------------------|----------|
| TransAlta | 3,268 | 20.6% |
| Heartland Generation | 1,796 | 11.3% |
| ENMAX | 1,446 | 9.1% |
| Capital Power | 1,321 | 8.3% |
| Suncor | 1,182 | 7.5% |

The portfolios of the top firms are driven by carbon costs and natural gas prices, not the price of oil. The near term base case scenario sees prices climbing above 6 cents per kilowatt-hour and slowly increasing into 2021 and 2022. The near term downside scenario sees prices remaining near 4 cents per kilowatt-hour with little increase until 2022. These forecast prices are not significantly different than what was budgeted for franchise fees and City electricity costs.

Electricity sector capital investment remains strong

Some recent good news has been the continued ability of the Alberta electricity sector to attract capital to develop new supply resources, especially renewable energy. Innogy's 22 MW Vauxhall solar project connected to the grid in 2020 mid-February, followed by Innogy's 25 MW Hull project towards the end of April. Hull is Alberta's largest solar farm commissioned to-date, with the title previously held by Elemental Energy's 15 MW Brooks Solar park. In 2020 April, CryptoStar Corp., a cryptocurrency mining and data centre operator, signed a letter of intent to secure up to 120 MW of power. CryptoStar anticipates commercial operation of its data mining facilities to begin Q2-2020, with additional data centres coming online throughout 2020. TC Energy announced 2020 mid-May that it has closed an equity investment in Turning Point Generation's Canyon Creek pumped hydro facility.

Afternoon electricity supply surplus

During the afternoon of 2020 May 3 the electricity market experienced a supply surplus event where prices hit \$0 per MW. This was only the second time in history for a zero price hour to occur in the afternoon (last time was 2004 December). Strong wind generation coupled with lower demand was the cause of the supply surplus.

Over half of all the available generation is offered into the market at \$0/MWh almost all the time. These zero dollar offers at the bottom of the merit order are made up of: non-dispatchable cogeneration, a large chunk of coal capacity, imports, units providing ancillary services, intermittent resources such as wind farms, a portion of hydro and biomass units and most cogeneration units.

All electricity that is bought and sold on the grid in Alberta is done through a competitive wholesale market (called the Power Pool) operated by the Alberta Electric System Operator (AESO). The AESO manages the grid to perfectly match supply (electricity generated/imported) with demand (electricity consumed/exported). Alberta generators and importers of electricity submit supply offers to the AESO a day ahead of each hour with the price (\$/MWh) at which they are prepared to sell their power. The supply offers with the lowest price are used (dispatched) each minute of that hour by the AESO to meet demand until all of the demand has been satisfied. The list of price/quantity pairs sorted by price is referred to as the merit order. The system controller dispatches the generating units, starting with the lowest offer, and moves up the merit order until sufficient supply has been dispatched to meet demand.

As electricity demand shifts up and down during the day, the system controller keeps supply and demand in balance by dispatching offers in the merit order. The price of the last offer that is dispatched establishes what is known as the system marginal price or SMP. This SMP is recorded for each minute within the hour. At the end of the hour (also known as a settlement interval), the average of the 60 SMPs is the pool price for that hour. Each generator that dispatched electricity into the grid in that hour is paid that pool price for its electricity regardless

of the price specified in its supply offer – even those who offered electricity at \$0/MWh get paid the pool price for the hour.

The Table below details the offer behaviour in 2020 January and February of the various types of generation in Alberta.

| Distribution of Unit Offers (January, February) | | | | | | |
|---|------|-------------|--------------|---------------|----------------|--------|
| Unit Classification | \$0 | \$0 to \$25 | \$25 to \$50 | \$50 to \$100 | \$100 to \$750 | \$750+ |
| Coal - 2020 | 52% | 7% | 33% | 6% | 1% | 1% |
| Coal - 2019 | 48% | 9% | 34% | 8% | 2% | 1% |
| Natural Gas (Cogen) - 2020 | 89% | 6% | 4% | 0% | 0% | 1% |
| Natural Gas (Cogen) - 2019 | 87% | 7% | 5% | 0% | 0% | 0% |
| Natural Gas (Combined-Cycle) - 2020 | 50% | 34% | 10% | 2% | 1% | 2% |
| Natural Gas (Combined-Cycle) - 2019 | 49% | 16% | 26% | 2% | 3% | 3% |
| Natural Gas (Simple-Cycle) - 2020 | 41% | 4% | 16% | 3% | 4% | 33% |
| Natural Gas (Simple-Cycle) - 2019 | 45% | 10% | 14% | 6% | 3% | 23% |
| Hydro (Dispatchable) - 2020 | 28% | 0% | 2% | 2% | 27% | 40% |
| Hydro (Dispatchable) - 2019 | 25% | 0% | 6% | 5% | 34% | 31% |
| Hydro (Run of River) - 2020 | 100% | 0% | 0% | 0% | 0% | 0% |
| Hydro (Run of River) - 2019 | 100% | 0% | 0% | 0% | 0% | 0% |
| Wind - 2020 | 100% | 0% | 0% | 0% | 0% | 0% |
| Wind - 2019 | 100% | 0% | 0% | 0% | 0% | 0% |

*Source – EDC Associates Q2-2020 update