

GOVERNANCE JURISDICTIONAL SCAN

PREPARED FOR THE IESO MARKET
RENEWAL WORKING GROUP

JANUARY 20, 2017

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OVERVIEW

OVERVIEW

INDUSTRY STRUCTURE

	Ontario	Australia	United Kingdom	New York
Government	<ul style="list-style-type: none"> Ontario Ministry of Energy 	<ul style="list-style-type: none"> Council of Australian Government Energy Council 	<ul style="list-style-type: none"> Department for Business, Energy and Industrial Strategy 	<ul style="list-style-type: none"> New York State Department of Public Service
Regulators	<ul style="list-style-type: none"> OEB Competition Bureau 	<ul style="list-style-type: none"> AER AEMC (rule maker) ACCC 	<ul style="list-style-type: none"> Ofgem GEMA CMA ACER 	<ul style="list-style-type: none"> NYPSC FERC FTC
System Operator	<ul style="list-style-type: none"> IESO 	<ul style="list-style-type: none"> AEMO 	<ul style="list-style-type: none"> NGET ELEXON (Balancing Authority) 	<ul style="list-style-type: none"> NYISO
Market Operator	<ul style="list-style-type: none"> IESO 	<ul style="list-style-type: none"> AEMO 	<ul style="list-style-type: none"> 3rd party exchangers 	<ul style="list-style-type: none"> NYISO
Providers	<ul style="list-style-type: none"> OPG, Independent Power Producers Hydro One Networks LDCs 	<ul style="list-style-type: none"> AEMO (Victoria) PowerLink, TransGrid, AusGrid, SA Power Networks 	<ul style="list-style-type: none"> Suppliers (Big Six) NGET DNOs 	<ul style="list-style-type: none"> NY Power Authority ConEd, National Grid, New York State Electric & Gas etc.



ONTARIO

ONTARIO GOVERNANCE STRUCTURE

There are limited checks and balances on government decisions regarding the long-term system plan.

Market Players	Role	Description
Ministry of Energy	Government	Presides over policy matters relating to energy resources and electric power for the Province of Ontario; can issue policy directives to OEB and IESO; Has a significant role in long-term energy system planning
Ontario Energy Board (OEB)	Regulator	Regulates T&D and retail segments, and licenses all market participants; regulates rates of OPG; carries out policy development via proceedings, industry task forces, stakeholder working groups and public consultations
IESO	System Operator	Real-time transmission system operations balancing the supply of and demand for electricity across Ontario

ONTARIO GOVERNANCE STRUCTURE

Consumers counterbalance government influence on long-term system planning late in the process, at the ballot box.

Market Players	Role	Description
IESO	Market Operator	Administers the wholesale electricity market; leads Ontario's energy system planning, procurement and conservation efforts as per government directives
Providers	Generation, T&D	Power producers, aggregators, transmission and distribution owners; own, maintain and operate the physical assets
Consumers	Consumers	Power consumers that can influence electricity policy and regulation via stakeholder consultations, as Board intervenors, and through the political process (ballot box); counterbalances government influence on long term system planning

- The OEB is developing a process to improve consumer engagement:
[New Consumer Engagement Framework](#)

ONTARIO GOVERNANCE STRUCTURE

There are a number of sub-panels that govern the Ontario electricity market.

OEB

Market Surveillance Panel

- Monitors efficiency, fairness, transparency and competitiveness of the IESO-administered market

IESO

Board of Directors

- Approves the market rules, policies and guidelines that govern the IESO-administered markets.

Technical Panel

- Reviews market rule amendments and advises IESO Board on technical issues as required

Market Assessment and Compliance Division (MACD)

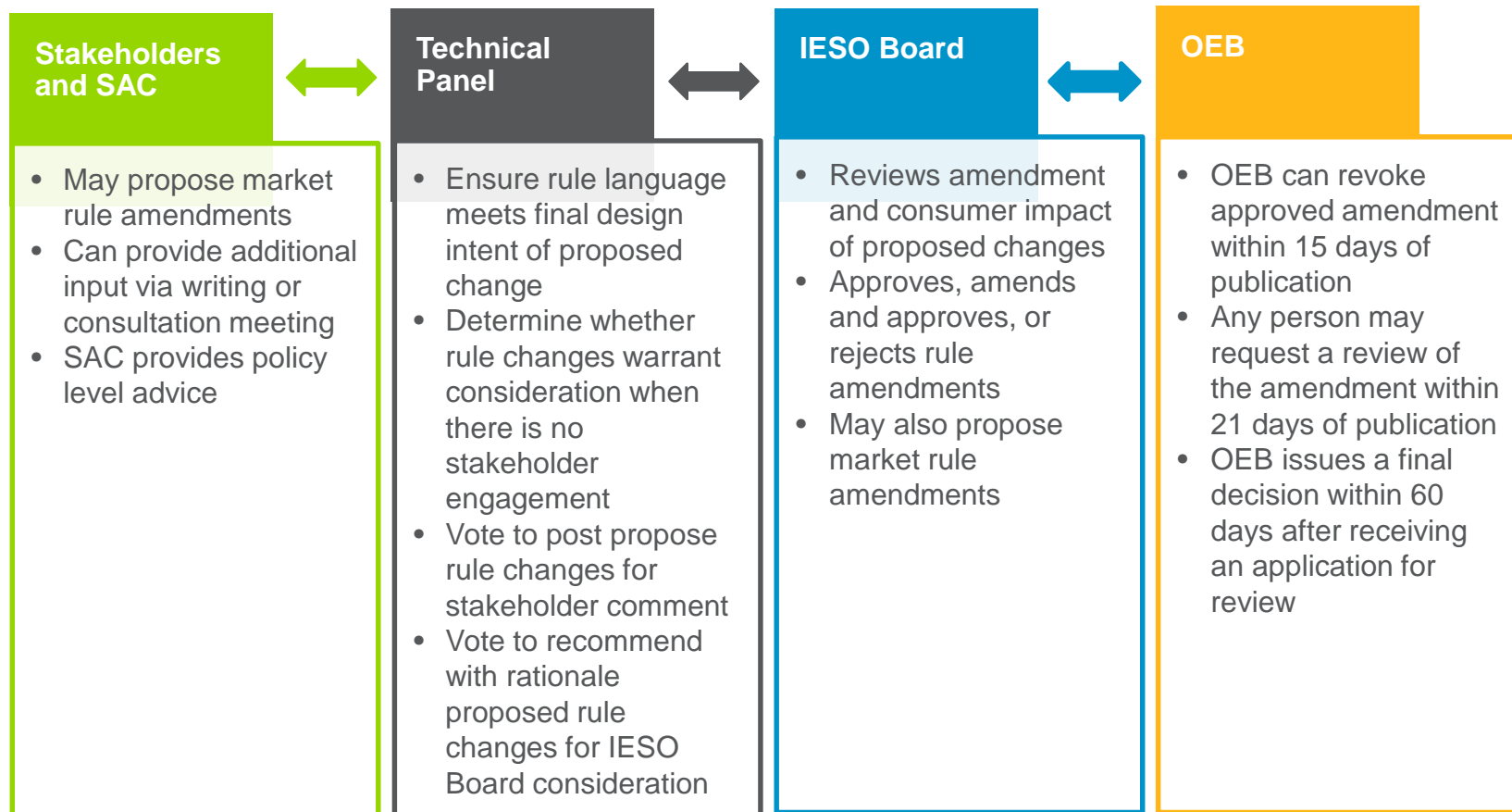
- Monitors operation of electricity market and market rule compliance with market rules and North American reliability standards

Stakeholder Advisory Committee

- Forum for stakeholder input on market development, conservation and planning decisions

ONTARIO GOVERNANCE PROCESSES

The Market Rule Amendment Process



The IESO staff develops an assessment of the impact of the amendment on the interests of consumers with respect to prices and the reliability and quality of electricity service.¹

- The OEB shall make an order revoking an amendment, and refer it back to the IESO for consideration if:
 - It finds that the amendment is inconsistent with the purposes of the Electricity Act, or
 - Unjustly discriminates against or in favour of a market participant or class of market participants

¹ IESO. Market Manual 2: Administration. Part 2.3: Market Rule Amendment Procedures. http://www.ieso.ca/Documents/marketAdmin/ma_MarketRuleAmendProcedure.pdf

ONTARIO GOVERNANCE PROCESSES

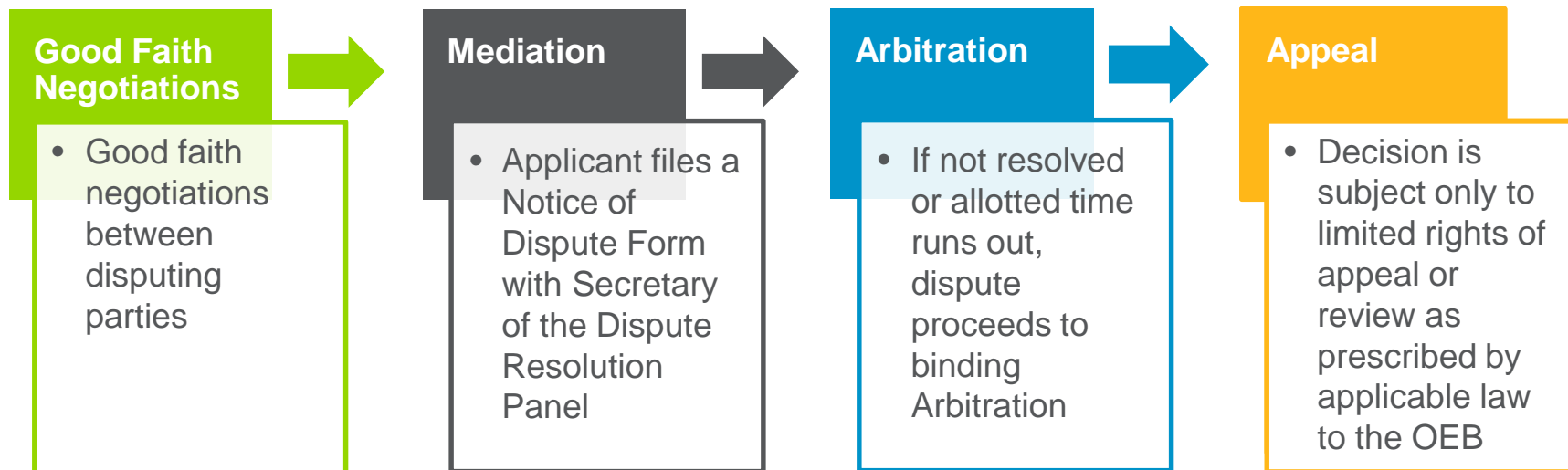
Urgent Market Rule Amendments are decided by the Urgent Market Rule Amendment Committee or the IESO Board under specific circumstances.

- To implement standards or criteria of a standards authority
- A reason prescribed by regulation
- To avoid, reduce the risk, or mitigate the effects of:
 - Conditions that affect the normal function of the integrated power system
 - Abuse of market power
 - Unintended adverse effect of a market rule

ONTARIO GOVERNANCE PROCESSES

The Dispute Resolution Process

- Related to market rules, agreements with the IESO, IESO denying authorization to a prospective market participant or denying registration to a prospective metering service provider, or disputes between market participants



- There are individual dispute resolution frameworks embedded in the power supply contracts between generators and the IESO, generally include good faith negotiations followed by binding arbitration



AUSTRALIA

AUSTRALIA

NATIONAL ELECTRICITY MARKET

The National Electricity Market (NEM) is an energy-only market that spans Australia's eastern and south-eastern coasts.



- Five price regions: Queensland, New South Wales (including the Australian Capital Territory), South Australia, Victoria, and Tasmania
- Energy-only market – high price caps
- Mandatory gross pool – large generators must trade through AEMO
- Self-commitment – no cross-temporal optimization, no start-up or shut down payments
- Co-optimized energy, security and ancillary service
- Dispatch and pricing every five minutes
- Settlements based on 30-minute periods

AUSTRALIA

GOVERNANCE STRUCTURE

Australia has a separate body, the AEMC, for developing market rules.

Market Player	Role	Role Description
Council of Australian Government Energy Council (COAG Energy Council)	Government	Provides broad policy direction, national oversight and coordination of governance, and program management
Australian Energy Market Commission (AEMC)	Rule Maker	Responsible for rule making and market development; manages rule change requests; does not propose material rule changes; provides market development advice to government
Australian Energy Regulator (AER)	Regulator	Oversees economic regulation of T&D networks, monitors markets and enforces compliance with rules and legislation
Australian Energy Market Operator (AEMO)	System Operator	Real-time grid system operations balancing the supply of and demand for electricity across NEM; transmission network provider in Victoria

AUSTRALIA

GOVERNANCE STRUCTURE

Australia's regulator, AER, has a **Consumer Challenge Panel** to facilitate consideration of the consumer perspective in AER decisions.

Market Player	Role	Role Description
Australian Energy Market Operator (AEMO)	Market Operator	Operators both wholesale and retail markets across the NEM; transmission network planner
Providers	Generation, T&D	Power producers, transmission and distribution providers of electricity; for example, PowerLink, TransGrid, AusGrid, SA Power Networks etc.
Consumers	Consumers	Power consumers that can influence electricity policy and regulation via stakeholder consultations, and consumer panel or advocacy groups

AER

Consumer Challenge Panel

- Provides input and challenge the AER on key consumer issues during a network determination, to improve the AER's decisions

AUSTRALIA

GOVERNANCE STRUCTURE

There are a number of sub-panels that govern Australia's NEM.

AEMC

Reliability Panel

- Develops rules and manages rule change requests;
- Monitors, reviews and reports on the safety, security and reliability of the national electricity system

AEMO

NEM Wholesale Consultative Forum

Settlement Residue Committee

Settlement Managers Working Group

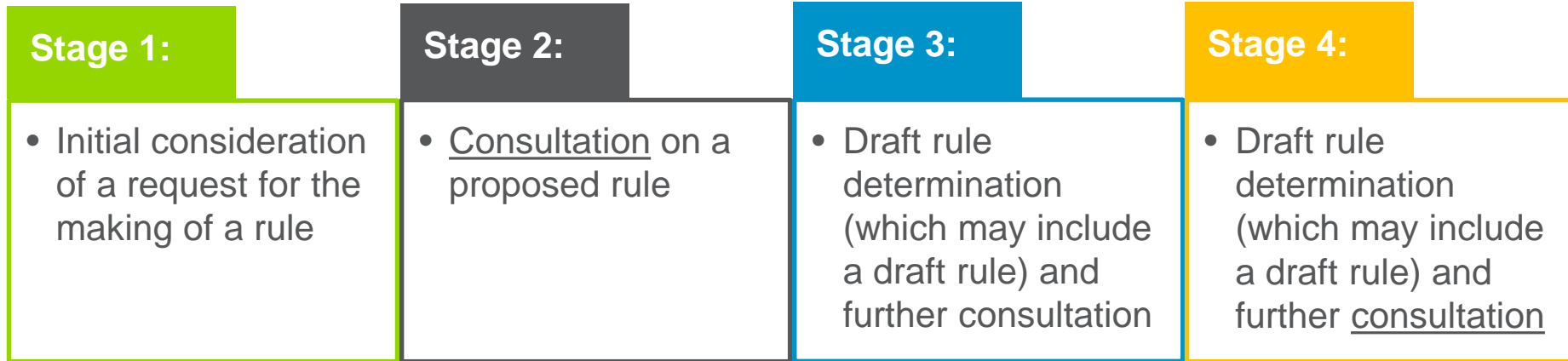
Energy Consumers Australia

- Forum for stakeholder input on developing and improving the NEM
- Responsible for reporting and approving rule changes on settlement residue auctions in the NEM
- Forum for stakeholder engagement on market settlement and prudential matters
- Promotes the long term interests of consumers of energy with respect to the price, quality, safety, reliability and security

AUSTRALIA

GOVERNANCE PROCESSES

The National Electricity Rule Change Process



The South Australian Minister for Mineral Resources & Energy has the power to make rules amending the National Electricity Rules.

- Generally includes two stages of public consultation
- Rule change requests relating to AEMO's declared network functions may only be made by AEMO, the Minister of a jurisdiction or a declared transmission system operator that is party to a network agreement with AEMO

A decision may be revoked if it does not satisfy Section 7 of the National Electricity Law:

“The objective of this Law is to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:

- (a) price, quality, safety, reliability and security of supply of electricity; and*
- (b) the reliability, safety and security of the national electricity system.”*

- A rule change request should explain:
 - The expected benefits and costs of the proposed change;
 - The potential impacts of the change on those likely to be affected

¹ AEMC Guidelines for Proponents: Preparing A Rule Change Request <http://www.aemc.gov.au/Energy-Rules/National-energy-rules/Rule-making-process/Guidelines-for-proponents-preparing-a-rule-change.aspx>

AUSTRALIA

GOVERNANCE PROCESSES

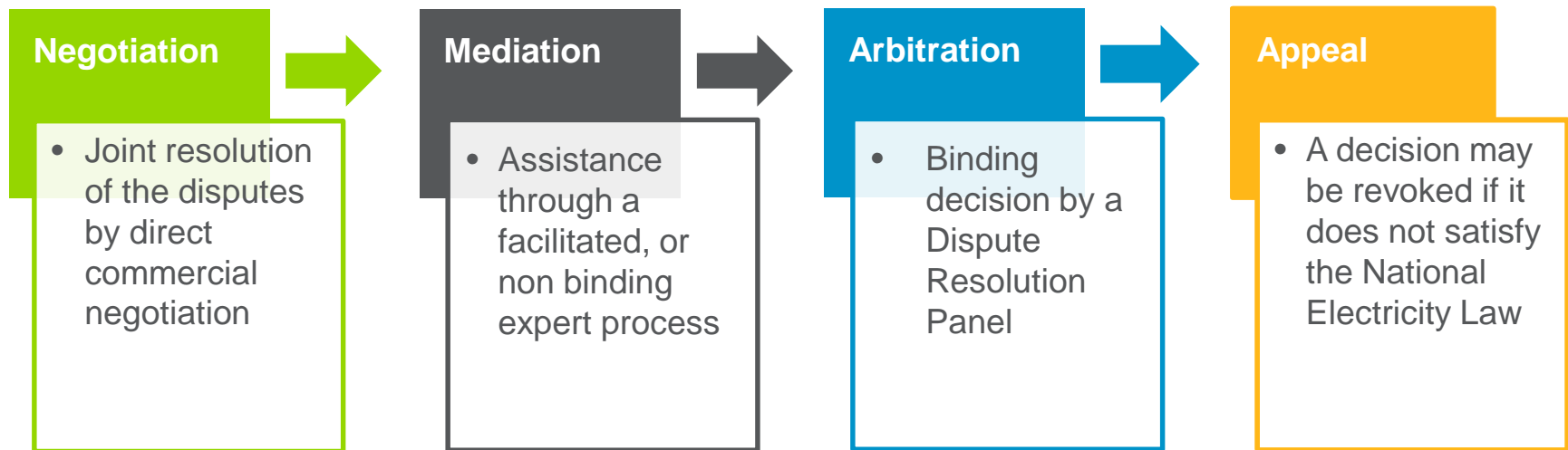
Australia has an urgent rule change and dispute resolution process similar to Ontario.

National Electricity “Fast Track” Rule Change

- Request by an electricity market **regulatory body** (such as AEMO)
- One round of public consultation
- Decided by the AEMC

Dispute Resolution Process

- AER appoints a Wholesale Energy Market Dispute Resolution Adviser to facilitate and guide the process



AUSTRALIA

GOVERNANCE REVIEW

The COAG Energy Council initiated a governance review of the Australian energy market five years after establishing AEMO in 2009.¹

- Concluded that the division of functions of current governance arrangements remains appropriate for serving the purposes of the Australian Energy Market Agreement and serving the relevant national objectives
- Recommendations:
 - Need more **transparency in activities and effective strategic direction** from COAG Energy Council
 - Stakeholder engagement should **avoid duplication in consultation** and should have **greater visibility** of agenda issues
 - COAG Energy Council should **not assign policy-related tasks to AEMO**, but that the expertise of AEMO be accessed through consultation by the AEMC
 - Changing energy governance arrangements in response to shifts in general policy objectives is an approach that is generally best avoided

¹ COAG.Review of Governance Arrangements for Australian Energy Markets. July 2015.

<http://www.coagenergycouncil.gov.au/sites/prod.energycouncil/files/publications/documents/Review%20of%20Governance%20Arrangements%20for%20Australian%20Energy%20Markets%20-%20Draft%20Report.pdf>



UNITED
KINGDOM

UNITED KINGDOM ELECTRICITY MARKET

The Electricity Market Reform was implemented in 2013 to incentivize investment in secure, low-carbon electricity, improve security of electricity supply and improve affordability.

Electricity Distribution



Electricity Transmission



- Electricity distribution networks are regional grids, branching from national grids
- Electricity Market Reform: Capacity Market, Contract for Difference
- Outcome-based RII model: Revenue = Incentives + Innovation + Output
 - Requires T&D companies to engage with consumers on proposed business plans

UNITED KINGDOM

GOVERNANCE STRUCTURE

An EU agency, ACER, was created to integrate the European energy market.

Market Player	Role	Role Description
Department for Business, Energy and Industrial Strategy (DBEIS)	Government	Sets overall policy direction and sets out key parameters for Electricity Market Reform (EMR);
Gas and Electricity Markets Authority (GEMA)	Regulator	Determines strategy, sets policy priorities and takes decisions on a range of matters, including price controls and enforcement; regulates the gas and electricity market;
Office of Gas and Electricity Markets of Great Britain (Ofgem)	Regulator	Aimed at protecting interests of electricity and gas consumers; issues licenses to market participants; owns and manages capacity market rules; dispute resolution role between NGET and capacity market participants
Agency for Cooperation of Energy Regulators (ACER)	Regulator	Ensures market integration and regulatory framework harmonisation in EU energy market to enhance competition; monitors Europe's third party exchange

UNITED KINGDOM GOVERNANCE STRUCTURE

The UK has separate entities serving as a system operator and market operator.

Market Player	Role	Role Description
National Grid Electricity Transmission (NGET)	System operator	Manages the operations of both the England and Wales transmission system; EMR delivery
ELEXON	System Operator/ Balancing Authority	Facilitates the effective delivery, implementation, operation and development of the electricity trading arrangements; administers the Balancing and Settlement Code
3 rd Party Exchange	Market Operator	Operates the day-ahead and intra-day markets
Providers	Generation, T&D, Retailers (Suppliers)	The “Big Six” suppliers / generators, independent power producers, Distribution Network operators who distribute electricity in fourteen regions throughout Great Britain; Transmission Network Operators, licensed to transmit electricity
Consumers	Consumers	Power consumers that can influence electricity policy and regulation via consumer consultations with T&D companies, and consumer panels (Ofgem’s Consumer Challenge Group)

UNITED KINGDOM GOVERNANCE STRUCTURE

There are a number of sub-panels that govern the UK's electricity market.

Ofgem

Future Trade Arrangements Forum

- Reviews market rules and changes; can propose changes

Future Wholesale Markets Project

- Aims to build consensus on principles of Great Britain's electricity trading arrangements and any changes required by changing market and policy framework

Joint European Stakeholder Group

- Aims to look at the effect of recent Ofgem and government reforms on electricity wholesale markets, as well as challenges and opportunities stemming from changes in the generation mix

Balance and Settlement Code (BSC) Panel

- Aims to develop a process for implementation of European Network Codes and other areas of European electricity policy such as infrastructure policy.

- Brings together stakeholders from across the sector, including Ofgem, National Grid, BSC Parties and consumer representatives, focused on ensuring that the BSC is delivered efficiently, economically, effectively, fairly and transparently

UNITED KINGDOM GOVERNANCE STRUCTURE

The UK electricity market is integrated with the EU market, thus requiring an independent European structure which fosters cooperation among European energy regulators.

ACER

Market Monitoring Team

European Stakeholder Committee

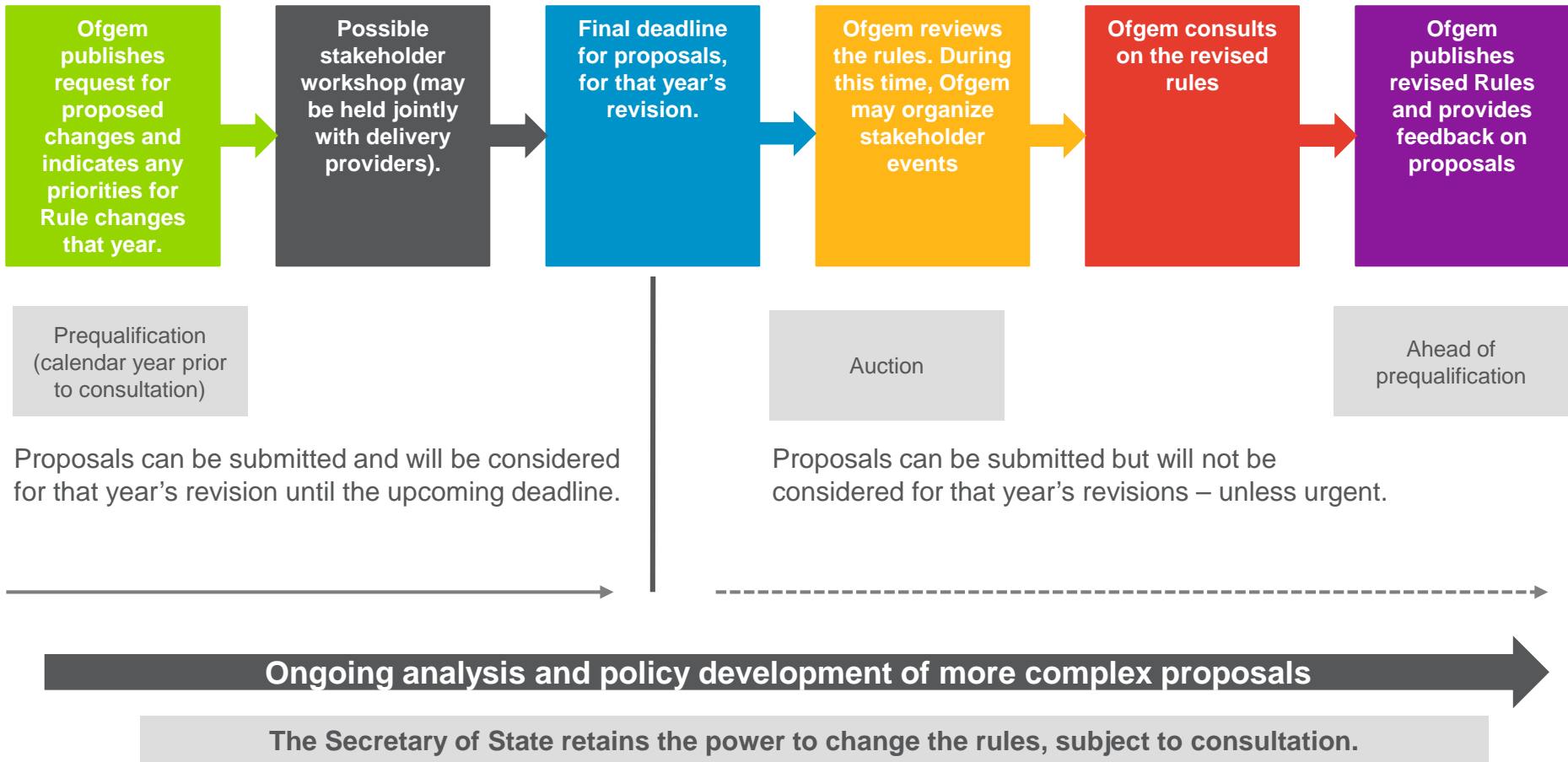
- Works closely with the European Commission, National Regulatory Authorities, and other relevant organizations.
- Aims to compare retail market competition in different markets across the EU, with a view to identifying instances of best practice which improve market performance
- Established to inform and consult stakeholders about the requirements in the guidelines/network codes related to grid connection, market and system operation

Wholesale Energy Market Integrity and Transparency (REMIT)

- Introduces a sector-specific legal framework for the monitoring of wholesale energy markets. The objective is to detect and to deter market manipulation.
- ACER will be responsible for collecting and analyzing wholesale markets and other relevant data to identify possible instances of market abuse.
- ACER will notify the National Regulatory Authorities (NRAs) who will carry out investigations

UNITED KINGDOM GOVERNANCE PROCESSES

The Capacity Market Rules Change Process



Ofgem amends, adds, revokes or substitutes market rules to align with objectives set out in the Electricity Capacity Regulations.

- Protect the interests of existing and future consumers in relation to electricity conveyed by distribution or transmission systems
 - Promoting investment in capacity to ensure security of electricity supply
 - Facilitating the efficient operation and administration of the Capacity Market
 - Ensuring the compatibility of the Capacity Market Rules with other subordinate legislation under Part 2 of the Energy Act 2013.
-
- If a stakeholder is not satisfied with Ofgem's final decision, they may take their complaint to the Parliamentary Ombudsman or Competition Appeal Tribunal if the decision made is deemed in violation the Competition Act 1998.

¹ Ofgem. Guidance for the Change Process for the Capacity Market Rules. <https://www.ofgem.gov.uk/ofgem-publications/89120/finalguidelinesforthecapacitymarketrulesaugust-pdf>

UNITED KINGDOM GOVERNANCE PROCESSES

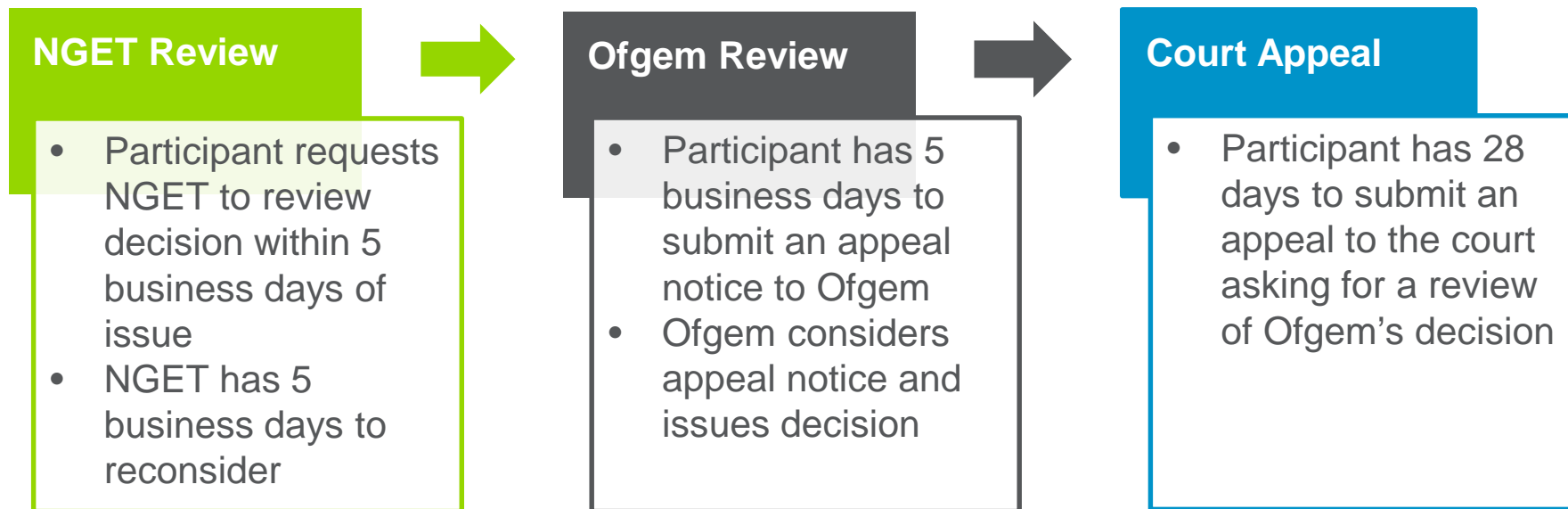
The UK has an urgent rule change and dispute resolution process similar to Ontario.

Urgent Market Rule Change Process

- Linked to imminent or current issue that may:
 - Affect the efficient operation of the capacity market
 - Abuse of market power
 - Unintended adverse effect of a market rule

EMR Dispute Resolution

- Disputes between NGET and market participants



UNITED KINGDOM

GOVERNANCE REVIEW

The CMA conducted a comprehensive energy market investigation and has made recommendations for improving governance and regulatory structure.¹

- Structure and governance of regulatory structure increase the risk of policies being developed that are not in the interest of customers
- Recommendations:
 - Amend primary legislation to clarify Ofgem's statutory objectives and duties and thereby remove any constraint on Ofgem's ability to pursue its principal objective (protecting the interests of existing and future customers) by promoting effective competition where it considers this appropriate
 - Legislation should establish a clear process requiring Ofgem to publish opinions on all draft legislation and policy proposals relevant to its statutory objectives that are likely to have a material impact on the energy markets
 - DBEIS (previously DECC) and Ofgem should publish detailed joint statements setting out action plans for the implementation of proposed policy objectives that will require Ofgem interventions

¹ CMA. June 2016. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/531157/Energy-final-report-summary.pdf



NEW YORK

NEW YORK ELECTRICITY MARKET

New York has an energy market with reserve requirements and a centralized capacity market.



- Settles day-ahead, hour-ahead and real-time market
- Generating Capacity: 39,039 MW
- Transmission Lines: 17,841 km
- NY REV – Reforming the Energy Vision initiative launched in 2014
- Centers around distributors becoming Distributed System Platform providers
 - Market operations
 - Grid operations
 - Integrated system planning

NEW YORK GOVERNANCE STRUCTURE

New York's REV initiative is an effort initiated by Governor Cuomo in the State Energy Plan.

Market Player	Role	Role Description
New York Department of Public Service	Government	Sets overall policy direction through the State Energy Plan and Reforming the Energy Vision (REV) initiative
Federal Energy Regulatory Commission (FERC)	Regulator	Regulates the interstate transmission of electricity; reviews electricity company M&As, transmission planning and cost allocation; ensures compliance with reliability standards; developing industry best practices and guidelines
New York Public Service Commission (NYPSC)	Regulator	Oversees economic regulation of state T&D networks; promotes competitive power markets where viable; ensures equitable rates and high-quality service
NYISO	System Operator	Operates New York's transmission network

NEW YORK GOVERNANCE STRUCTURE

Consumers in New York are engaged through various initiatives and consumer councils.

Market Player	Role	Role Description
NYISO	Market Operator	Operates the wholesale power markets that trade electricity, capacity, transmission congestion contracts, and related products, in addition to administering auctions for the sale of capacity; long-term system planning
Providers	Generation, T&D	Unbundled power producers, transmission and distribution providers of electricity; for example, NY Power Authority, ConEd, National Grid, New York State Electric & Gas etc.
Consumers	Consumers	Power consumers that can influence electricity policy and regulation via customer engagement initiatives, consumer representatives (NY Energy Consumers Council, NYISO's Consumer Interest Liaison, Advisory Council)

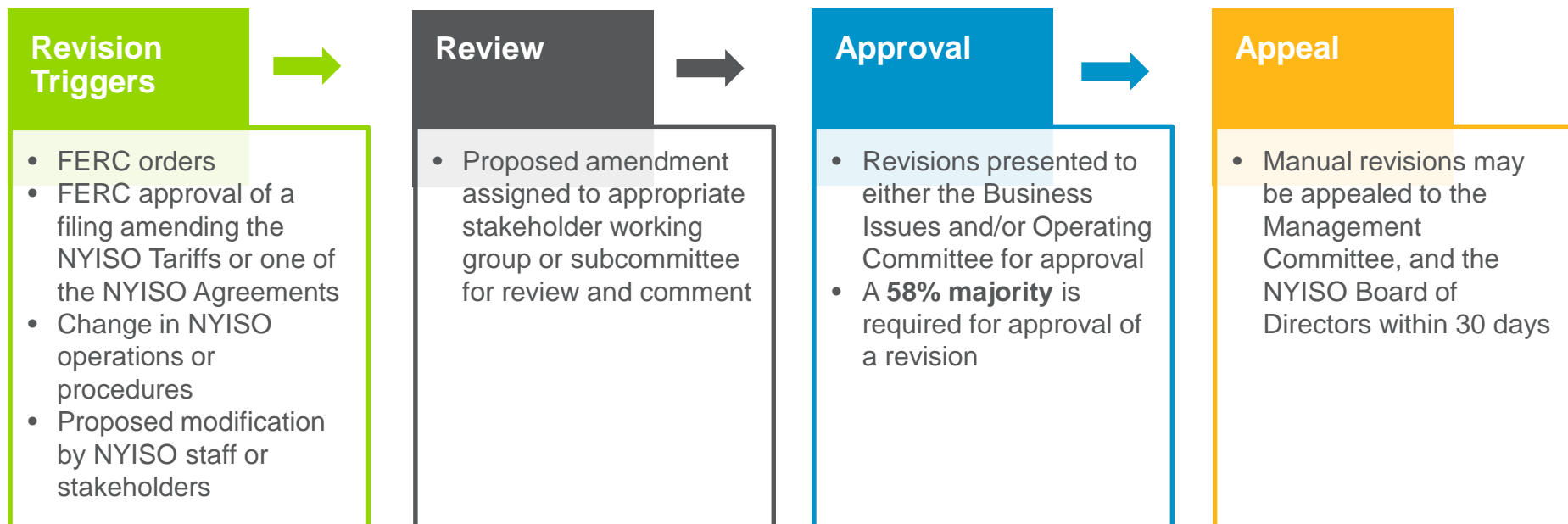
NEW YORK GOVERNANCE STRUCTURE

NYISO's Shared Governance structure allows stakeholders from various market sectors to have oversight responsibilities of the NYISO through committees.



NEW YORK GOVERNANCE PROCESSES

The NYISO Manual Review, Revision and Approval Process



NEW YORK GOVERNANCE PROCESSES

The Dispute Resolution Process

- Designated Dispute Resolution Administrator (DRA)

Internal Dispute Resolution

- Dispute presented directly to a senior representative of each party on an informal basis

Non-Binding Mediation

- DRA may submit disputes mediation where subject matter involves proposed change or modification of a service agreement or ISO Services Tariff provision

Arbitration

- DRA may submit disputes to binding arbitration if it involves interpreting a service agreement or ISO Services Tariff provision

Appeal

- Within one year of arbitration decision, a party may request that FERC or any other appropriate jurisdictional federal or New York State regulatory or judicial authority review a decision

CRITERIA FOR MARKET RULE DECISIONS¹

FERC requires rates, terms and conditions to be “just and reasonable” and must be “not unduly discriminatory or preferential” (Federal Power Act, Section 205)

- “Just and reasonable” rate
 - Cost-justified
 - Market-justified
- “Not unduly discriminatory or preferential” rate
 - Discrimination without a reason is prohibited (not cost-justified)
 - Discrimination with a reason is allowed (cost-justified)

¹ An Overview of FERC and Federal Regulation of Public Utilities in the US. <https://www.ferc.gov/about/ferc-does/ferc101.pdf>



SUMMARY

SUMMARY

JURISDICTION COMPARISON

Ontario generally has fewer checks and balances around industry structure and long-term resource procurement; similar formal market rule change and dispute resolution processes.

	Ontario	Australia	United Kingdom	New York
Oversight of Supply Decisions	Consumers	AEMO AER Consumers	NGET Ofgem Consumers	NYISO NYPSC Consumers
Market Rule Amendment Decision	Review panel	Review panel	Review panel	By committee vote (58% majority)
Completed Independent Governance Reviews	No	Yes	Yes	No

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