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January 7, 2025

MEMORANDUM

TO: Council Members

**FROM: Jennifer Light, Director of Power Planning
John Shurts, General Counsel**

SUBJECT: Briefing on Northwest Power Act Framework for Power Plan

BACKGROUND:

Presenters: Jennifer Light and John Shurts

Summary: During the January Council work session on power planning, we will provide a detailed briefing on the framework and requirements in the Northwest Power Act for the power plan development process. This will include the general provisions and timing, process elements, and an outline of the specific requirements and considerations for the power plan as described in sections 4(d)(1), 4(e), and 4(f) of the Power Act. We will also discuss the relationship of the Council's power plan to Bonneville and the rest of the region.

What follows is a detailed outline of the material and related slides to be covered during the discussion. The goal for this whole work session is to be as interactive and informal as possible. Please come prepared with questions and comments and ask them throughout this and other presentations during the work session.

Relevance: The power division has been preparing for the Council's ninth power plan and is looking to officially start review of the power plan after the Council has made its formal call for recommendations on the Fish and Wildlife program (this official kickoff is anticipated for February 2025). Once the official review has begun, the

power division staff will bring proposals for different elements of the plan to begin locking down assumptions that will guide future analysis and modeling. This briefing is to provide members with the relevant framing from the Power Act in advance of that official kickoff.

Workplan: B. Preparation of Tools and Data for the Ninth Power Plan

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Outline of power plan provisions of the Northwest Power Act

1. Power plan provisions in general, including basic directive and timing [pg. 2]
2. Relevant Purposes of the Act [pg. 3]
3. Procedure: public process for developing and adopting the power plan [pp. 4-6]
4. Substantive power plan requirements and considerations, elements, and relevant definitions [pp. 7-10]
 - A. Substantive requirements and considerations of the power plan (4d and 4e1-2) [pg. 7]
 - B. Specific elements the power plan must contain (Sections 4e3 and 4f) (pp.8-9)
 - C. Key definitions (in Section 3) [pg. 10]
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6. Relationship of the Council's power plan to resource decisions by others than Bonneville [pg. 13]

relevant excerpts from the Act are attached at the end

1. Power plan provisions in general, including basic directive and timing

Summary list of relevant provisions in NW Power Act

- Power plan provisions are in Sections 4(d) through 4(g) (attached at back)
- Relevant definitions in Section 3 (attached)
- Purposes of Act in Section 2 inform how the Council is to understand and implement the power plan provisions (attached)
- Section 4(d)(2) and Sections 6(a), 6(b) and 6(c) describe the relationship of Bonneville's resource acquisitions to the Council's power plan (attached)

Basic directive to the Council

- Per Section 4(d)(1), Council is to adopt and transmit to Bonneville a **“regional conservation and electric power plan.”**
- Sections 4(e) and 4(f) then detail the substantive priorities, considerations and elements that the power plan must contain and reflect.

Timing

- Section 4(d)(1) Council is to “review” the power plan “not less frequently than once every five years.”
- This section also recognizes that the plan “may be amended from time to time.”
- Note that prior to the review of the plan or any major amendments, Section 4(h)(2) requires the Council to call for recommendations to amend the fish and wildlife program, thereby triggering first a fish and wildlife program amendment process under Section 4(h).

2. Relevant Purposes of the Act

- 2(1) to encourage, through the unique opportunity provided by the Federal Columbia River Power system,
 - (A) conservation and efficiency in the use of electric power, and
 - (B) the development of renewable resources within the Pacific Northwest

- 2(2) to assure the Pacific Northwest an adequate, efficient, economical, and reliable power supply

- 2(3) to provide for the participation and consultation of the states, local governments, consumers, customers, users of the Columbia River system (including federal and state fish and wildlife agencies and Indian tribes), and the public at large within the region in:
 - (A) the development of regional plans and programs related to energy conservation renewable resources, other resources, and protecting, mitigating and enhancing fish and wildlife resources
 - (B) facilitating the orderly planning of the region's power system, and
 - (C) providing environmental quality

- 2(6) to protect, mitigate and enhance the fish and wildlife of the Columbia River and its tributaries...

3. Procedure: public process for developing and adopting the power plan

Process generally

Public hearings

Participation and engagement

On-going power plan work – public presentations

Advisory committees

Draft power plan

Written and oral comment, as well as public hearings

Council decision on power plan

Judicial review of adopted power plan

Process generally

- **Sections 4(d)(1) and 4(g)** describe the process the Council is to follow in preparing the power plan.
- Lightly scripted, especially compared to fish and wildlife program. Reflects the significant differences between the role of the Council in power planning and its role in fish and wildlife program development, recognized by the Ninth Circuit (compare *Seattle Master Builders* in 1986 and *NRIC v. Council* in 1994).

Public hearings

- **Section 4(d)(1)** requires the Council to hold a **public hearing** in each Council member's state prior to adoption of the plan or "any substantial, nontechnical amendments to the plan."
- Also provides that a public hearing shall also be held "in any other State of the region" "if the Council determines that the plan or amendments would likely have a substantial impact on that State in terms of major resources which may be developed in that State and which the Administrator may seek to acquire." Has never happened.
- The requirement to have public hearings before adopting the power plan is the only specific process step for the power plan in the Act.

Participation and engagement

- The Act has a lot to say more generally about public engagement and participation in the development of the power plan, beginning with the purpose stated in Section 2(3).

- **Section 4(g)(3)** provides that the Council (and Bonneville) is to encourage the cooperation, participation, and assistance of appropriate federal agencies, state entities, state political subdivisions, and Indian tribes in the preparation, adoption, and implementation of the power plan. The Council (and Bonneville) are “authorized to contract” “with such agencies, entities, tribes, and subdivisions individually, in groups, or through associations thereof to (A) investigate possible measures to be included in the plan, [and] (B) provide public involvement and information regarding a proposed plan or amendment thereto.
- Sections 4(g)(1) and (2) add generally that the Council (and Bonneville) are to, among other things:
 - insure widespread public involvement in the formulation of regional power policies
 - maintain comprehensive programs to inform the public of major regional power issues
 - obtain public views on major regional power issues
 - secure the advice and comments of Bonneville’s power sales customers and others
 - consult with the Bonneville customers and include the comments of the customers in the record of the Council's proceedings
 - recognize and not abridge the authorities of state and local governments, electric utility systems, and other non-federal entities responsible for the planning, supply, distribution, and operation of electricity generating facilities
- Note in the purpose section and in the provisions of 4(g), the bifurcated approach to engagement – an emphasis on engaging with specific types of governments and entities on the one hand, and engagement with the general public at large on the other.
- There are many ways the Council pursue its public engagement mission in development of the power plan. One is through the ongoing public presentation and publication of developing power plan materials at the Council’s regular monthly meetings – and welcoming the informal dialogue with interested parties generated by the ongoing public display of work. Other aspects of this engagement follow.

Advisory committees

- **Section 4(c)(11)** requires the Council to establish a “scientific and statistical advisory committee” to assist in the “development, collection, and evaluation of such statistical, biological, economic, social, environmental, and other scientific information as is relevant to the Council's development and amendment of a regional conservation and electric power plan.”
- Section 4(c)(12) authorizes the Council to establish other advisory committees as the Council deems appropriate.

- Section 4(c)(13) directs the Council to ensure advisory committee members include, “to the extent feasible,” representatives from and seek the advice of “Federal, and the various regional, State, local, and Indian Tribal Governments, consumer groups, and customers.”
- Council currently has chartered 8 advisory committees to support power planning activities – Conservation, Generating Resources, Demand Response, Demand Forecasting, Fuels, Climate and Weather, Resource Adequacy, and System Analysis.
- Council has 2 additional advisory committees connected to the Regional Technical Forum that also provide insight as appropriate – the RTF itself and the RTF Policy Advisory Committee
- By virtue of 4(a)(4) of the Act, the federal law on advisory committees – the Federal Advisory Committees Act or FACA – applies to the Council as it does to Bonneville. The Council charters and operates these committees consistent with FACA requirements.
- The Council invests heavily in the use of the advisory committees as one of the main ways to engage in an ongoing way with especially the specific entities noted in the Act.

Draft power plan

- The Act says nothing explicit about a **draft power plan**, although implied by the notion of having public hearings on plan prior to adoption.
- The Council largely follows the notice and comment procedures specified in the federal Administrative Procedures Act, including:
 - wide public notice of the proposed or draft power plan -- and often of major elements of the plan in formulation before the draft
 - opportunities for written comment as well as to testify at public hearings
 - explanation at the end as to how the Council considered comments in shaping the final power plan
 - publication of notice of final plan in Federal Register
- Council takes extensive written and oral comment on the draft power plan, as well as hold the formal public hearings.

Council decision on power plan

- Via Section 4(c)(2), to approve the power plan requires a formal vote of the Council in this way:

(A) a majority of the members appointed to the Council, including the vote of at least one member from each State with members on the Council; or

(B) at least six members of the Council.

Judicial review of adopted power plan

- Adoption of the power plan is a final action subject to judicial review. Section 9(e)(1)(A)
- Challenges must be filed in the Ninth Circuit. Must be filed within sixty days after publication of the notice of final agency action in the Federal Register. Section 9(e)(5)
- By Section 9(e)(2), review is limited to the administrative record compiled of the decision. The scope of judicial review is governed by Section 706 of the federal Administrative Procedures Act, which means the court will set aside the Council's action if found to be:
 - arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law
 - contrary to constitutional right, power, privilege, or immunity
 - in excess of statutory jurisdiction, authority, or short of statutory right
 - without observance of procedure required by law

4. Substantive power requirements and considerations, elements, and relevant definitions

A. Substantive requirements and considerations of the power plan (4d and 4e1-2)

Basic directive/provisions:

- To reiterate, **Section 4d(1)** has the basic directive: Council is to adopt and transmit to Bonneville a “**regional conservation and electric power plan.**”
- **Sections 4(e) and 4(f)** then detail the substantive priorities, considerations, and elements that the power plan must contain and reflect.

Power plan is to prioritize “cost effective” resources and “conservation” and then other resources:

- **Section 4(e)(1)** specifies that the power plan is to “give priority to resources which the Council determines to be **cost effective**” ...

with ...

- ... priority to be given “first, to **conservation**; second, to renewable resources; third, to generating resources utilizing waste heat or generating resources of high fuel conversion efficiency; and fourth, to all other resources.” (Key definitions discussed below.)

Power plan is to include a resource scheme (or resource strategy) to reduce or meet Bonneville’s obligations, with certain considerations required:

- **Section 4(e)(2)** then provides that the Council’s plan “shall set forth a general scheme for implementing conservation measures and developing resources pursuant to section 6 of this Act to reduce or meet the [Bonneville Power] Administrator’s obligations...” [see below on what those Bonneville obligations are]
- ... and then **Section 4(e)(2)** also requires that the Council develop this resource scheme “with due consideration” by the Council for:
 - environmental quality
 - compatibility with the existing regional power system
 - protection, mitigation, and enhancement of fish and wildlife and related spawning grounds and habitat, including sufficient quantities and qualities of flows for successful migration, survival, and propagation of anadromous fish
 - other criteria the Council might set forth in the plan.

B. Specific elements the power plan must contain (Section 4e(3) and 4f)

Section 4(e)(3) then lists specific **elements** the Council is to include in the power plan “[t]o accomplish the priorities,” while leaving it to the Council to set forth the elements “in such detail as the Council determines to be appropriate”:

- (A) an energy **conservation** program to be implemented under this Act, including, but not limited to, model conservation standards [model conservation standards are further defined in Section 4(f)], along with a possible surcharge described in Sections 4(e)(3)(g) and 4(f) – see below]
- (B) recommendations for research and development
- (C) a methodology for determining quantifiable environmental costs and benefits under section 3(4) of this Act [the definition of **cost-effectiveness**]
- (D) a demand forecast of at least twenty years, to be developed in consultation with Bonneville, customers, states (including state agencies with ratemaking authority over electric utilities), and the public, “in such manner as the Council deems appropriate.”

and

a forecast of power resources estimated by the Council to be required to meet the obligations of the Bonneville Power Administrator and the portion of the Administrator’s obligations the Council determines can be met by resources in each of the priority categories listed in paragraph [4(e)](1). The resource forecast:

- (i) shall include regional reliability and reserve requirements
 - (ii) shall take into account the requirements of subsection (h) on the availability of resources to the Administrator [the fish and wildlife program], and
 - (iii) shall include the approximate amounts of power the Council recommends should be acquired by Bonneville and may include, to the extent practicable, an estimate of the types of resources from which such power should be acquired
- (E) an analysis of electricity reserve and reliability requirements and cost-effective methods of providing **reserves** designed to insure adequate electric power at the lowest probable cost
 - (F) the program adopted pursuant to subsection (h) [the fish and wildlife program]
 - (G) if the Council recommends surcharges pursuant to subsection (f) of this section, a methodology for calculating such surcharges

Model conservation standards:

- Section 4(f)(1) provides that the Council shall adopt “model conservation standards” into the plan “after consultation with the Administrator, states, political subdivisions, customers, and the public.” Model conservation standards to be included in the plan shall include (but not be limited to) standards applicable to:
 - (A) new and existing structures
 - (B) utility, customer, and governmental conservation programs
 - (C) other consumer actions for achieving conservation
- Model conservation standards shall:
 - reflect geographic and climatic differences within the region and other appropriate considerations
 - be designed to produce all power savings that are cost-effective for the region and economically feasible for consumers, taking into account [available] financial assistance
- Section 4(f)(2): surcharge authority

C. Key definitions (in Section 3)

Cost-effective: What makes a resource **cost-effective** under the Act? “Cost-effective” defined in **Section 3(4)**:

- To be cost-effective a resource must:
 - be **reliable and available**
 - meet or reduce demand of the “consumers of the customers” at “an **estimated incremental system cost** no greater than that of the least-cost similarly reliable and available alternative measure or resource”
- “**System cost**” is then defined to mean “an estimate of all direct costs of a measure or resource over its effective life,” including, “among other factors”:
 - cost of distribution and transmission to the consumer, if applicable
 - waste disposal costs
 - end-of-cycle costs
 - fuel costs (including projected increases)
 - such quantifiable environmental costs and benefits as the Administrator determines, on the basis of a methodology developed by the Council as part of the plan are directly attributable to such measure or resource
- **Edge to conservation.** The “estimated incremental system cost” of any conservation measure is not to be considered greater than any nonconservation resource unless in excess of 110% of the incremental system cost of the nonconservation resource.

“Resource” (Section 3(19)): “Resource” means—

- (A) electric power, including the actual or planned electric power capability of generating facilities, or
- (B) actual or planned load reduction resulting from direct application of a renewable energy resource by a consumer, or from a conservation measure.

“Electric power” (Section 3(9)): “Electric power” means electric peaking capacity, or electric energy, or both.

“Conservation” (Section 3(3)): “Conservation” means any reduction in electric power consumption as a result of increases in the efficiency of energy use, production, or distribution.

“Renewable resource” (Section 3(16)) “Renewable resource” means a resource which utilizes solar, wind, hydro, geothermal, biomass, or similar sources of energy and which either is used for electric power generation or will reduce the electric power requirements of a consumer, including by direct application.

“Reserves” (Section 3(17)) “Reserves” means the electric power needed to avert particular planning or operating shortages for the benefit of firm power customers of the Administrator and available to the Administrator (A) from resources or (B) from rights to interrupt, curtail, or otherwise withdraw, as provided by specific contract provisions, portions of the electric power supplied to customers.

5. Relationship of the Council's power plan to Bonneville resource acquisitions

A. At Bonneville: By Section 4(d)(2) and Sections 6(a) through 6(c) of the Act, Bonneville is to act consistent with the Council's power plan in making decisions to acquire new resources.

Context and concept at time of the passage of the Act:

As will be discussed at other times, in the Northwest Power Act Congress envisioned that Bonneville, the federal power marketing agency selling at wholesale the electrical power produced by the Federal Columbia River Power System and "federal base system" resources (e.g., WNP-2), would also be a major engine (or the major engine) for adding new resources to the region's power system as needed by Bonneville's customers.

Bonneville resource acquisition authority:

- **Section 5** of the Act requires Bonneville to offer power sales contracts to public and private utilities in the region and others, without limitation to the amount in Bonneville's federal base system
- **Section 6** of the Act then authorizes and obligates Bonneville to **acquire sufficient resources** to meet its obligations
- **Section 6** resource acquisition authority includes:
 - **Conservation resources.** Section 6(a) obligates Bonneville to acquire conservation and implement such conservation measures "as the Administrator determines are consistent with the [Council's power] plan."
 - **Generating resources.** Section 6(b) then requires Bonneville to acquire "sufficient resources":
 - (A) to meet the agency's "contractual obligations" "after taking into account planned savings from [the conservation] measures"; and
 - (B) "to assist [the agency] in meeting the requirements of section 4(h) of the Act" [that is, the fish and wildlife provisions]
 - **"Major" resources.** Section 6(c) provides additional specific procedures for acquiring "major" resources, defined in Section 3(12) to mean resources with a planned capability greater than 50 aMW and to be acquired for more than five years.

Bonneville's resource decisions to be consistent with the Council's power plan:

Sections 4(d)(2) and 6(a), 6(b), and 6(c) tie Bonneville's acquisition of new resources for these purposes directly to the Council's power plan by requiring that Bonneville's conservation and generating resource acquisitions be consistent with the Council's power plan, with certain narrowly specified exceptions.

B. At the Council: And so, what is the Council to include in the power plan concerning Bonneville's resource acquisitions? See Sections 4(e)(2), 4(e)(3)(A), 4(e)(3)(D) in particular.

- **Section 4(e)(2)** provides that the Council's plan "shall set forth a general scheme for implementing conservation measures and developing resources pursuant to section 6 of this Act *to reduce or meet the [Bonneville Power] Administrator's obligations.*"
- **Section 4(e)(3)(A)** then provides the power plan is to contain "an energy conservation program to be implemented under this [Act]" - that is, to be implemented by Bonneville
- **Section 4(e)(3)(D)** also provides the power plan is to contain, along with a "demand forecast of at least twenty years,":

"a forecast of power resources estimated by the Council to be required to meet [Bonneville's] obligations and the portion of such obligations the Council determines can be met by resources in each of the priority categories referred to in paragraph [4(e)](1). The resource] forecast:

(i) shall include regional reliability and reserve requirements,

(ii) shall take into account the effect, if any, of the requirements of subsection (h) [the fish and wildlife program] on the availability of resources to the Administrator, and

(iii) shall include the approximate amounts of power the Council recommends should be acquired by Bonneville on a long-term basis and may include, to the extent practicable, an estimate of the types of resources from which such power should be acquired."

6. Relationship of the Council's power plan to resource decisions by others than Bonneville

Resource acquisition decisions by others:

The Council's power plan is influential in the resource decisions of the region's non-federal utilities and in the decisions to review resource choices by the states' utility commissions. With the reminder that the only legal link *in the Northwest Power Act* to the power plan is *to Bonneville's* new resource acquisition decisions, and to Bonneville's authority to impose a surcharge recommended by the Council, under Section 4(f)(2)).

I-937 in Washington:

Washington voters, in making 1937 part of Washington state law, have now tied a required analysis by Washington utilities of conservation potential to the Council's *conservation methodology* (not the plan's resource strategy). This is not a legal responsibility of the Council under federal law, but of the utilities in Washington under state law.

Northwest Power Act of 1980

Excerpts from Section 2 (purposes), Section 3 (definitions), Section 4(c)(11-13) (advisory committees), Sections 4(d-g) (power plan), Sections 6(a-c) (Bonneville resource acquisitions)

Section 2: Purposes

Section 2 The purposes of this Act, together with the provisions of other laws applicable to the Federal Columbia River Power System, are all intended to be construed in a consistent manner. Such purposes are also intended to be construed in a manner consistent with applicable environmental laws. Such purposes are:

2(1) to encourage, through the unique opportunity provided by the Federal Columbia River Power System--

- 2(1)(A) conservation and efficiency in the use of electric power, and
- 2(1)(B) the development of renewable resources within the Pacific Northwest;

2(2) to assure the Pacific Northwest of an adequate, efficient, economical, and reliable power supply;

2(3) to provide for the participation and consultation of the Pacific Northwest States, local governments, consumers, customers, users of the Columbia River System (including Federal and State fish and wildlife agencies and appropriate Indian tribes), and the public at large within the region in--

2(3)(A) the development of regional plans and programs related to energy conservation, renewable resources, other resources, and protecting, mitigating, and enhancing fish and wildlife resources,

2(3)(B) facilitating the orderly planning of the region's power system, and

2(3)(C) providing environmental quality;

2(6) to protect, mitigate and enhance the fish and wildlife, including related spawning grounds and habitat, of the Columbia River and its tributaries, particularly anadromous fish which are of significant importance to the social and economic well-being of the Pacific Northwest and the Nation and which are dependent on suitable environmental conditions substantially obtainable from the management and operation of Federal Columbia River Power System and other power generating facilities on the Columbia River and its tributaries.

Section 3: Definitions

Section 3 As used in this Act, the term--

3(3) "Conservation" means any reduction in electric power consumption as a result of increases in the efficiency of energy use, production, or distribution.

3(4) [Cost-effective]

(A) "Cost-effective", when applied to any measure or resource referred to in this Act, means that such measure or resource must be forecast--

- (i)** to be reliable and available within the time it is needed, and
- (ii)** to meet or reduce the electric power demand, as determined by the Council or the Administrator, as appropriate, of the consumers of the customers at an estimated incremental system cost no greater than that of the least-cost similarly reliable and available alternative measure or resource, or any combination thereof.

(B) For purposes of this paragraph, the term "system cost" means an estimate of all direct costs of a measure or resource over its effective life, including, if applicable, the cost of distribution and transmission to the consumer and, among other factors, waste disposal costs, end-of-cycle costs, and fuel costs (including projected increases), and such quantifiable environmental costs and benefits as the Administrator determines, on the basis of a methodology developed by the Council as part of the plan, or in the absence of the plan by the Administrator, are directly attributable to such measure or resource.

(C) In determining the amount of power that a conservation measure or other resource may be expected to save or to produce, the Council or the Administrator, as the case may be, shall take into account projected realization factors and plant factors, including appropriate historical experience with similar measures or resources.

(D) For purposes of this paragraph, the "estimated incremental system cost" of any conservation measure or resource shall not be treated as greater than that of any nonconservation measure or resource unless the incremental system cost of such conservation measure or resource is in excess of 110 per centum of the incremental system cost of the nonconservation measure or resource.

3(5) "Consumer" means any end user of electric power.

3(7) "Customer" means anyone who contracts for the purchase of power from the Administrator pursuant to this Act.

3(9) "Electric power" means electric peaking capacity, or electric energy, or both.

3(12) "Major resource" means any resource that--

- (A) has a planned capability greater than fifty average megawatts, and
- (B) if acquired by the Administrator, is acquired for a period of more than five years.

3(16) "Renewable resource" means a resource which utilizes solar, wind, hydro, geothermal, biomass, or similar sources of energy and which either is used for electric power generation or will reduce the electric power requirements of a consumer, including by direct application.

3(17) "Reserves" means the electric power needed to avert particular planning or operating shortages for the benefit of firm power customers of the Administrator and available to the Administrator (A) from resources or (B) from rights to interrupt, curtail, or otherwise withdraw, as provided by specific contract provisions, portions of the electric power supplied to customers.

3(19) "Resource" means--

- (A) electric power, including the actual or planned electric power capability of generating facilities, or
- (B) actual or planned load reduction resulting from direct application of a renewable energy resource by a consumer, or from a conservation measure.

Section 4(c)(11-13) (advisory committees)

4(c)(11) The Council shall establish a voluntary scientific and statistical advisory committee to assist in the development, collection, and evaluation of such statistical, biological, economic, social, environmental, and other scientific information as is relevant to the Council's development and amendment of a regional conservation and electric power plan.

4(c)(12) The Council may establish such other voluntary advisory committees as it determines are necessary or appropriate to assist it in carrying out its functions and responsibilities under this Act.

4(c)(13) The Council shall ensure that the membership for any advisory committee established or formed pursuant to this section shall, to the extent feasible, include representatives of, and seek the advice of, the Federal, and the various regional, State, local, and Indian Tribal Governments, consumer groups, and customers.

Sections 4(d) through 4(g): Power Plan

4(d)(1) Within two years after the Council is established and the members are appointed pursuant to subsection (a) or (b) of this section, the Council shall prepare, adopt, and promptly transmit to the Administrator a regional conservation and electric power plan. The adopted plan, or any portion thereof, may be amended from time to time, and shall be reviewed by the Council not less frequently than once every five years. Prior to such adoption, public hearings shall be held in each Council member's State on the plan or substantial, nontechnical amendments to the plan proposed by the Council for adoption. A public hearing shall also be held in any other State of the region on the plan or amendments thereto, if the Council determines that the plan or amendments would likely have a substantial impact on that State in terms of major resources which may be developed in that State and which the Administrator may seek to acquire. Action of the Council under this subsection concerning such hearings shall be subject to section 553 of title 5, United States Code and such procedure as the Council shall adopt.

4(d)(2) Following adoption of the plan and any amendment thereto, all actions of the Administrator pursuant to section 6 of this Act shall be consistent with the plan and any amendment thereto, except as otherwise specifically provided in this Act.

4(e)(1) The plan shall, as provided in this paragraph, give priority to resources which the Council determines to be cost-effective. Priority shall be given: first, to conservation; second, to renewable resources; third, to generating resources utilizing waste heat or generating resources of high fuel conversion efficiency; and fourth, to all other resources.

4(e)(2) The plan shall set forth a general scheme for implementing conservation measures and developing resources pursuant to section 6 of this Act to reduce or meet the Administrator's obligations with due consideration by the Council for (A) environmental quality, (B) compatibility with the existing regional power system, (C) protection, mitigation, and enhancement of fish and wildlife and related spawning grounds and habitat, including sufficient quantities and qualities of flows for successful migration, survival, and propagation of anadromous fish, and (D) other criteria which may be set forth in the plan.

4(e)(3) To accomplish the priorities established by this subsection, the plan shall include the following elements which shall be set forth in such detail as the Council determines to be appropriate:

- (A) an energy conservation program to be implemented under this Act, including, but not limited to, model conservation standards;
- (B) recommendation for research and development;
- (C) a methodology for determining quantifiable environmental costs and benefits under section 3(4);
- (D) a demand forecast of at least twenty years (developed in consultation with the Administrator, the customers, the States, including State agencies with ratemaking authority over electric utilities, and the public, in such manner as the Council deems appropriate) and a forecast of power resources estimated by the Council to be required to meet the Administrator's obligations and the portion of such obligations the Council determines can be met by resources in each of the priority categories referred to in paragraph (1) of this subsection which forecast (i) shall include regional reliability and reserve requirements, (ii) shall take into account the effect, if any, of the requirements of subsection (h) on the availability of resources to the Administrator, and (iii) shall include the approximate amounts of power the Council recommends should be acquired by the

Administrator on a long-term basis and may include, to the extent practicable, an estimate of the types of resources from which such power should be acquired;

- (E) an analysis of reserve and reliability requirements and cost-effective methods of providing reserves designed to insure adequate electric power at the lowest probable cost;
- (F) the program adopted pursuant to subsection (h); and
- (G) if the Council recommends surcharges pursuant to subsection (f) of this section, a methodology for calculating such surcharges.

4(e)(4) The Council, taking into consideration the requirement that it devote its principal efforts to carrying out its responsibilities under subsections (d) and (h) of this section, shall undertake studies of conservation measures reasonably available to direct service industrial customers and other major consumers of electric power within the region and make an analysis of the estimated reduction in energy use which would result from the implementation of such measures as rapidly as possible, consistent with sound business practices. The Council shall consult with such customers and consumers in the conduct of such studies.

4(f)(1) Model conservation standards to be included in the plan shall include, but not be limited to, standards applicable to (A) new and existing structures, (B) utility, customer, and government conservation programs, and (C) other consumer actions for achieving conservation. Model conservation standards shall reflect geographic and climatic differences within the region and other appropriate considerations, and shall be designed to produce all power savings that are cost-effective for the region and economically feasible for consumers, taking into account financial assistance made available to consumers under section 6(a) of this Act. These model conservation standards shall be adopted by the Council and included in the plan after consultation, in such manner as the Council deems appropriate, with the Administrator, States, and political subdivisions, customers of the Administrator, and the public.

4(f)(2) The Council by a majority vote of the members of the Council is authorized to recommend the Administrator a surcharge and the Administrator may thereafter impose such a surcharge, in accordance with the methodology provided in the plan, on customers for those portions of their loads within the region that are within States or political subdivisions which have not, or on the Administrator's customers which have not, implemented conservation measures that achieve energy savings which the Administrator determines are comparable to those which would be obtained under such standards. Such surcharges shall be established to recover such additional costs as the Administrator determines will be incurred because such projected energy savings attributable to such conservation measures have not been achieved, but no case may such surcharges be less than 10 per centum or more than 50 per centum of the Administrator's applicable rates for such load or portion thereof.

4(g)(1) To insure widespread public involvement in the formulation of regional power policies, the Council and Administrator shall maintain comprehensive programs to--

- (A) inform the Pacific Northwest public of major regional power issues,
- (B) obtain public views concerning major regional power issues, and
- (C) secure advice and consultation from the Administrator's customers and others.

4(g)(2) In carrying out the provisions of this section, the Council and the Administrator shall--

- (A) consult with the Administrator's customers;
- (B) include the comments of such customers in the record of the Council's proceedings; and
- (C) recognize and not abridge the authorities of State and local governments, electric utility systems, and other non-Federal entities responsible to the people of the Pacific Northwest for the planning, conservation, supply, distribution, and use of electric power and the operation of electric generating facilities.

4(g)(3) In the preparation, adoption, and implementation of the plan, the Council and the Administrator shall encourage the cooperation, participation, and assistance of appropriate Federal agencies, State entities, State political subdivisions, and Indian tribes. The Council and the Administrator are authorized to contract, in accordance with applicable law, with such agencies, entities, tribes, and subdivisions individually, in groups, or through associations thereof to (A) investigate possible measures to be included in the plan, (B) provide public involvement and information regarding a proposed plan or amendment thereto, and (C) provide services which will assist in the implementation of the plan. In order to assist in the implementation of the plan, particularly conservation, renewable resource, and fish and wildlife activities, the Administrator, when requested and subject to available funds, may provide technical assistance in establishing conservation, renewable resource, and fish and wildlife objectives by individual States or subdivisions thereof or Indian tribes. Such objectives, if adopted by a State or subdivision thereof or Indian tribes, may be submitted to the Council and the Administrator for review, and upon approval by the Council, may be incorporated as part of the plan.

Section 6: Conservation and Resource Acquisition

6(a)

- (1)** The Administrator shall acquire such resources through conservation, implement all such conservation measures, and acquire such renewable resources which are installed by a residential or small commercial consumer to reduce load, as the Administrator determines are consistent with the plan, or if no plan is in effect with the criteria of section 4(e)(1) and the considerations of section 4(e)(2) and, in the case of major resources, in accordance with subsection (c) of this section. Such conservation measures and such resources may include, but are not limited to--
 - (A) loans and grants to consumers for insulation or weatherization, increased system efficiency, and waste energy recovery by direct application,
 - (B) technical and financial assistance to, and other cooperation with, the Administrator's customer and governmental authorities to encourage maximum cost-effective voluntary conservation and the attainment of any cost-effective conservation objectives adopted by individual States or subdivisions thereof,
 - (C) aiding the Administrator's customers and governmental authorities in implementing model conservation standards adopted pursuant to section 4(f), and
 - (D) conducting demonstration projects to determine the cost effectiveness of conservation measures and direct application of renewable energy resources.
- (2)** In addition to acquiring electric power pursuant to section 5(c), or on a short-term basis pursuant to section 11(b)(6)(i) of the Federal Columbia River Transmission System Act, the Administrator shall acquire, in accordance with this section, sufficient resources--
 - (A) to meet his contractual obligations that remain after taking into account planned savings from measures provided for in paragraph (1) of this subsection, and
 - (B) to assist in meeting the requirements of section 4(h) of this Act.

The Administrator shall acquire such resources without considering restrictions which may apply pursuant to section 5(b) of this Act.

6(b)

- (1)** Except as specifically provided in this section, acquisition of resources under this Act shall be consistent with the plan, as determined by the Administrator.
- (2)** The Administrator may acquire resources (other than major resources) under this Act which are not consistent with the plan, but which are determined by the Administrator to be consistent with the criteria of section 4(e)(1) and the considerations of section 4(e)(2) of this Act.
- (3)** If no plan is in effect, the Administrator may acquire resources under this Act which are determined by the Administrator to be consistent with the criteria of section 4(e)(1) and the considerations of section 4(e)(2) of this Act.
- (4)** The Administrator shall acquire any non-Federal resources to replace Federal base system resources only in accordance with the provisions of this section. The Administrator shall

include in the contracts for the acquisition of any such non-Federal replacement resources provisions which will enable him to ensure that such non-Federal replacement resources are developed and operated in a manner consistent with the considerations specified in section 4(e)(2) of this Act.

- (5) Notwithstanding any acquisition of resources pursuant to this section, the Administrator shall not reduce his efforts to achieve conservation and to acquire renewable resources installed by a residential or small commercial consumer to reduce load, pursuant to subsection (a)(1) of this section.

6(c)

- (1) For each proposal under subsection (a), (b), (f), (h) or (l) of this section to acquire a major resource, to implement a conservation measure which will conserve an amount of electric power equivalent to that of a major resource, to pay or reimburse investigation and preconstruction expenses of the sponsors of a major resource, or to grant billing credits or services involving a major resource, the Administrator shall--

- (A) publish notice of the proposed action in the Federal Register and provide a copy of such notice to the Council, the Governor of each State in which facilities would be constructed or a conservation measure implemented, and the Administrator's customers;
- (B) not less than sixty days following publication of such notice, conduct one or more public hearings, presided over by a hearing officers, at which testimony and evidence shall be received, with opportunity for such rebuttal and cross-examination as the hearing officer deems appropriate in the development of an adequate hearing record;
- (C) develop a record to assist in evaluating the proposal which shall include the transcript of the public hearings, together with exhibits, and such other materials and information as may have been submitted to, or developed by, the Administrator; and
- (D) following completion of such hearings, promptly provide to the Council and make public a written decision that includes, in addition to a determination respecting the requirements of subsection (a), (b), (f), (h), (l), or (m) of this section, as appropriate--
 - (i) if a plan is in effect, a finding that the proposal is either consistent or inconsistent with the plan or, notwithstanding its inconsistency with the plan, a finding that it is needed to meet the Administrator's obligations under this Act, or
 - (ii) if no plan is in effect, a finding that the proposal is either consistent or inconsistent with the criteria of section 4(e)(1) and the considerations of section 4(e)(2) of this Act or notwithstanding its inconsistency, a finding that it is needed to meet the Administrator's obligations under this Act.

In the case of subsection (f) of this section, such decision shall be treated as satisfying the applicable requirements of this subsection and of subsection (f) of this section, if it includes a finding of probable consistency, based upon the Administrator's evaluation of information available at the time of completion of the hearing under this paragraph. Such decision shall include the reasons for such finding.

- (2) Within sixty days of the receipt of the Administrator's decision pursuant to paragraph (1)(D) of this subsection, the Council may determine by a majority vote of all members of the Council, and notify the Administrator--

- (A) that the proposal is either consistent or inconsistent with the plan, or
 - (B) if no plan is in effect, that the proposal is either consistent or inconsistent with the criteria of section 4(e)(1) and the considerations of section 4(e)(2).
- (3)** The Administrator may not implement any proposal referred to in paragraph (1) that is determined pursuant to paragraph (1) or (2) by either the Administrator or the Council to be inconsistent with the plan or, if no plan is in effect, with the criteria of section 4(e)(1) and the considerations of section 4(e)(2)--
- (A) unless the Administrator finds that, notwithstanding such inconsistency, such resource is needed to meet the Administrator's obligations under this Act, and
 - (B) until the expenditure of funds for that purpose has been specifically authorized by Act of Congress enacted after the date of the enactment of this Act.
- (4)** Before the Administrator implements any proposal referred to in paragraph (1) of this subsection, the Administrator shall--
- (A) submit to the appropriate committees of the Congress the administrative record of the decision (including any determination by the Council under paragraph (2)) and a statement of the procedures followed or to be followed for compliance with the National Environmental Policy Act of 1969.
 - (B) publish notice of the decision in the Federal Register, and
 - (C) note the proposal in the Administrator's annual or supplementary budget submittal made pursuant to the Federal Columbia River Transmission System Act (16 U.S.C. 838 and following).

The Administrator may not implement any such proposal until ninety days after the date on which such proposal has been noted in such budget or after the date on which such decision has been published in the Federal Register, whichever is later.

- (5)** The authority of the Council to make a determination under paragraph (2)(B) if no plan is in effect shall expire on the date two years after the establishment of the Council.

Briefing on Northwest Power Act Framework for Power Plan

Jennifer Light and John Shurts

January 15, 2025



Northwest **Power** and
Conservation Council

Power Planning Work Session Goals

Staff has several items that will benefit from a deeper dive and more discussion with Council members

- **Power Planning 101:** Focus on key provisions in the Power Act related to the Council's power planning efforts
- **Preparing Analysis for Ninth Power Plan:** Bring forward several topics around key issues to be explored in the next plan
 - Existing policies to represent in the starting point
 - Understanding of extreme weather events as captured with current data
 - Early thinking on approach to capturing operational risk of wildfires
 - Incorporating of hydrogen into the loads and resource options of the plan

Power Plan 101 Outline

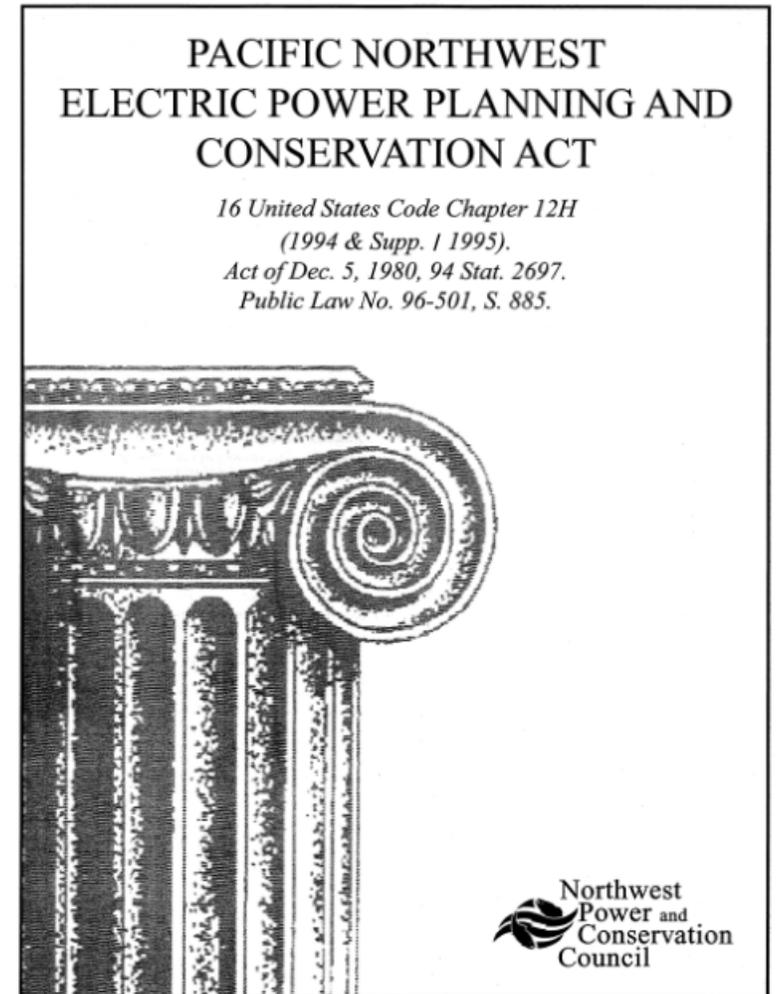
1. Power plan provisions in general
2. Relevant purposes of the Act
3. Public process for developing and adopting the power plan
4. Substantive power plan requirements and considerations, elements, and relevant definitions
5. Relationship of the Council's power plan to Bonneville resource acquisitions
6. Relationship of the Council's power plan to resource decisions by others than Bonneville
7. Putting it all together

1. Power plan provisions in general, including basic directive and timing



Relevant plan provisions

- Power plan provisions are in Sections 4(d) through 4(g)
- Relevant definitions in Section 3
- Purposes of Act in Section 2 inform how the Council is to understand and implement the power plan provisions
- Section 4(d)(2) and Sections 6(a), 6(b) and 6(c) describe the relationship of Bonneville's resource acquisitions to the Council's power plan



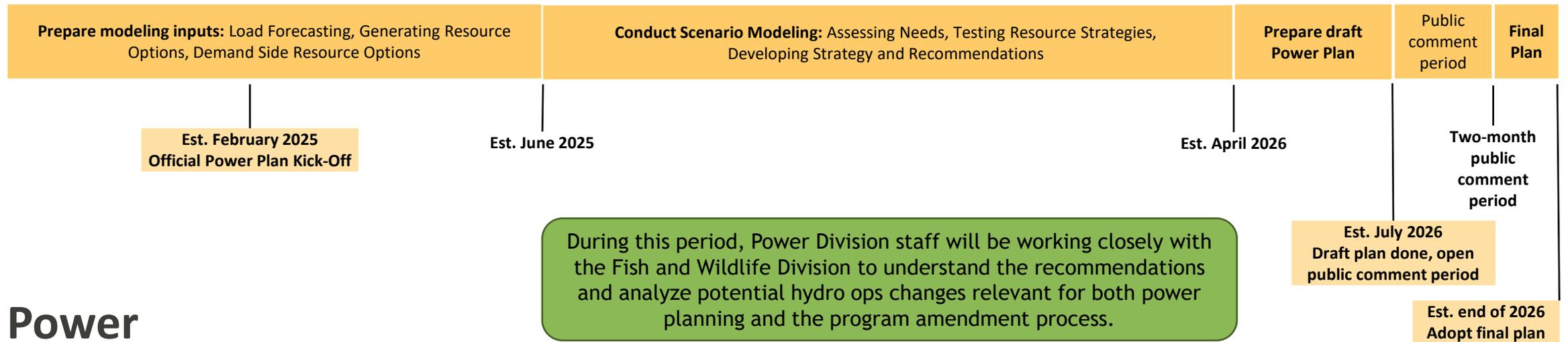
Basic directive to the Council

- Section 4(d)(1) provides the basic directive: “Council shall prepare, adopt, and promptly transmit to the Administrator a **regional conservation and electric power plan.**”
- Sections 4(e) and 4(f) then detail the substantive priorities, considerations and elements that the power plan must contain and reflect.

Power Plan Timing

- Section 4(d)(1) says the Council is to “review” the power plan “not less frequently than once every five years”
- This section also recognizes that the plan “may be amended from time to time”
- Note that prior to the review of the plan or any major amendments, Section 4(h)(2) requires the Council call for the recommendations to amend the fish and wildlife program, thereby triggering first the fish and wildlife program amendment process under Section 4(h)

Fish and Wildlife



Power

2. Relevant purposes of the Power Act



Section 2 has the Relevant Purposes of the Act

2(1) to encourage, through the unique opportunity provided by the Federal Columbia River Power system,

- (A) conservation and efficiency in the use of electric power, and
- (B) the development of renewable resources within the Pacific Northwest

2(2) to assure the Pacific Northwest an adequate, efficient, economical, and reliable power supply

Section 2 has the Relevant Purposes of the Act (cont'd)

- 2(3) to provide for the participation and consultation of the states, local governments, consumers, customers, users of the Columbia River system (including federal and state fish and wildlife agencies and Indian tribes), and the public at large within the region in:
 - (A) the development of regional plans and programs related to energy conservation renewable resources, other resources, and protecting, mitigating and enhancing fish and wildlife resources
 - (B) facilitating the orderly planning of the region's power system, and
 - (C) providing environmental quality
- 2(6) to protect, mitigate and enhance the fish and wildlife of the Columbia River and its tributaries...

3. Procedure: public process for developing and adopting the power plan



Northwest **Power** and
Conservation Council

Public Process for Developing and Adopting Power Plan

- Process generally
- Public hearings
- Participation and engagement
- On-going power plan work – public presentations
- Advisory committees
- Draft power plan
- Written and oral comment, as well as public hearings
- Council decision on power plan
- Judicial review of adopted power plan

Existing Advisory Committees

- Council currently has chartered 8 advisory committees to support power planning activities
- Council has 2 additional advisory committees connected to the Regional Technical Forum that also provide insight as appropriate

Climate and
Weather

Conservation

Demand
Forecasting

Demand
Response

Generating
Resources

Fuels

Resource
Adequacy

System
Analysis

4. Substantive power plan requirements and considerations, elements, and relevant definitions



Reminder of Basic Directive for the Power Plan

- Section 4(d)(1) provides the basic directive: “Council shall prepare, adopt, and promptly transmit to the Administrator a **regional conservation and electric power plan.**”
- Sections 4(e) and 4(f) then detail the substantive priorities, considerations and elements that the power plan must contain and reflect.



The 9th Northwest Power Plan

Prioritizing Cost-Effective Resources and Conservation

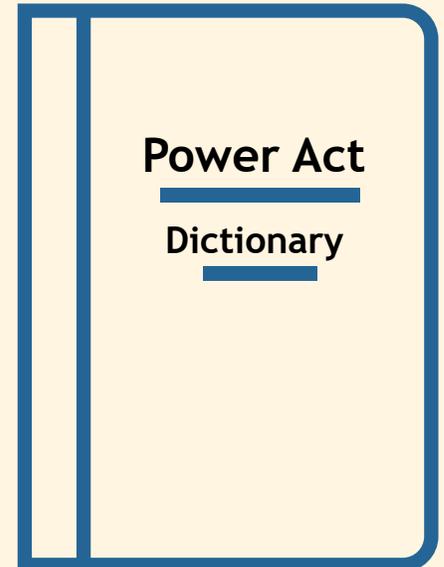
- Section 4(e)(1) specifies that the power plan is to “give priority to **resources** which the Council determines to be **cost effective**” ...

with ...

- ... priority to be given “first, to **conservation**; second, to **renewable resources**; third, to generating resources utilizing waste heat or generating resources of high fuel conversion efficiency; and fourth, to all other resources.”

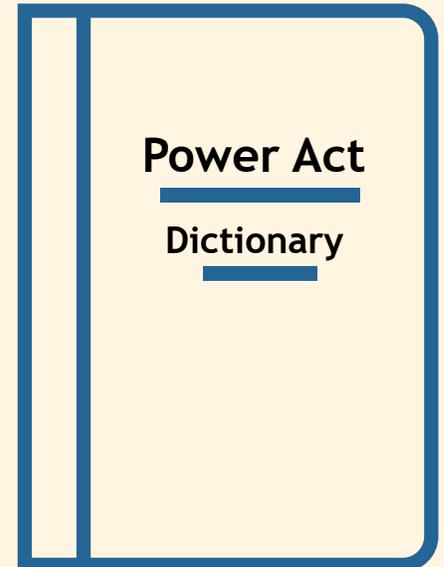
Key Definitions Break Time

- **Resource** (Section 3(19)) – Means:
 - electric power, including the actual or planned electric power capability of generating facilities, or
 - actual or planned load reduction resulting from direct application of a renewable energy resource by a consumer, or from a conservation measure
- **Conservation** (Section 3(3)) – Means any reduction in electric power consumption as a result of increases in the efficiency of energy use, production, or distribution
- **Renewable resource** (Section 3(16)) – Means a resource which utilizes solar, wind, hydro, geothermal, biomass, or similar sources of energy and which either is used for electric power generation or will reduce the electric power requirements of a consumer, including by direct application



Key Definitions Break Time

- **Cost-effective** (Section 3(4)): To be cost-effective, a resource must be forecast to:
 - Be reliable and available within the time it is needed
 - Meet or reduce the demand of the “consumers of the customers at an estimated incremental system cost no greater than that of the least-cost similarly reliable and available alternative measure or resource”
- **“System cost”** is then defined to mean “an estimate of all direct costs of a measure or resource over its effective life,” including, “among other factors”: cost of distribution and transmission to the consumer, if applicable waste disposal costs end-of-cycle costs fuel costs (including projected increases) such quantifiable environmental costs and benefits as the Administrator determines, on the basis of a methodology developed by the Council as part of the plan are directly attributable to such measure or resource
- Further in this section defining cost-effective, the Act gives an edge to conservation:
 - The “estimated incremental system cost” of any conservation measure is not to be considered greater than any nonconservation resource unless in excess of 110% of the incremental system cost of the nonconservation resource



Power Plan Recommendation for Resources

- Section 4(e)(2) then provides that the Council’s plan “shall set forth a **general scheme for implementing conservation measures and developing resources** pursuant to section 6 of the Act to reduce or meet the Administrator’s obligations...”
- Section 4(e)(2) also requires that the Council develop this resource scheme “with **due consideration**” by the Council for:
 - Environmental quality
 - Compatibility with the existing system
 - Protection, mitigation, and enhancement of fish and wildlife and related spawning grounds and habitat, including sufficient quantities and qualities of flows for successful migration, survival, and propagation of anadromous fish, and
 - Other criteria the Council might set forth in the plan

Specific Power Plan Elements (1)

Sections 4(e)(3) and 4(f) then list specific elements that the Council is to include in the power plan “to accomplish the priorities,” while leaving it to the Council to set forth the elements “in such detail as the Council determines to be appropriate”

Section 4(e)(3):

- (A) an **energy conservation program to be implemented**, including model conservation standards
- (B) recommendations for **research and development**
- (C) methodology for determining **quantifiable environmental costs and benefits** (connected to the definition of cost-effectiveness under section 3(4))

Specific Power Plan Elements (2)

Specific elements captured in Section 4(e)(3) continued...

- (D) a **demand forecast of at least twenty years**, to be developed in consultation with Bonneville, customers, states (including state agencies with ratemaking authority over electric utilities), and the public, “in such manner as the Council deems appropriate” and...

a **forecast of power resources** estimated by the Council to be required to meet the Administrator’s obligations and the portion of the Administrator’s obligations the Council determines can be met by resources in each of the priority categories in Section 4(e)(1). The resource forecast:

- (i) shall include regional reliability and reserve requirements
- (ii) shall take into account the requirements of the fish and wildlife program, and
- (iii) shall include the approximate amounts of power the Council recommends should be acquired by Bonneville and may include, to the extent practicable, an estimate of the types of resources from which such power should be acquired

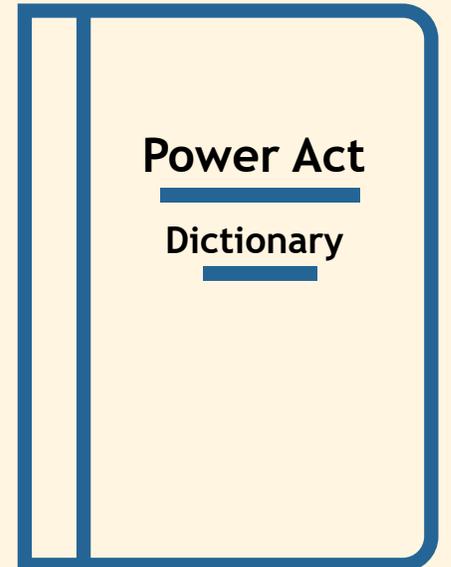
Specific Power Plan Elements (3)

Specific elements captured in Section 4(e)(3) continued...

- (E) an analysis of electricity reserve and reliability requirements and **cost-effective methods for providing reserves** designed to insure adequate electric power at the lowest probable cost
- (F) the program adopted pursuant to subsection (h) (i.e. the **Fish and Wildlife Program**)
- (G) if the Council recommends surcharges pursuant to subsection (f) of this section, a **methodology for calculating such surcharges**
 - Note: subsection F will be covered in a minute...

Key Definitions Break Time

- **Reserves** (Section 3(17)) – means the electric power needed to avert particular planning or operating shortages for the benefit of firm power customers of the Administrator and available to the Administrator (A) from resources or (B) from rights to interrupt, curtail, or otherwise withdraw, as provided by specific contract provisions, portions of the electric power supplied to customers



Specific Power Plan Elements (4)

- Section 4(f)(1) provides that the Council shall adopt “**model conservation standards**” into the plan “after consultation with the Administrator, states, political subdivisions, customers, and the public.” Model conservation standards to be included in the plan shall include (but not be limited to) standards applicable to:
 - (A) new and existing structures
 - (B) utility, customer, and governmental conservation programs
 - (C) other consumer actions for achieving conservation
- Model conservation standards shall:
 - reflect geographic and climatic differences within the region and other appropriate considerations
 - be designed to produce all power savings that are cost-effective for the region and economically feasible for consumers, taking into account [available] financial assistance
- Section 4(f)(2): gives the Council authority to recommend to the administrator a **surcharge**, and the Administrator may impose a surcharge, in accordance with the methodology provided in the plan

5. Relationship of the Council's power plan to Bonneville resource acquisitions



Power Act Concept

- Bonneville is to act consistent with the Council's power plan in making decisions to acquire new resources, as set forth in Section 4(d)(2) and Sections 6(a) through 6(c)
- Section 5 requires Bonneville to offer power sales contracts to public and private utilities in the region and others, without limitation to the amount in Bonneville's federal base system
- Section 6 of the Act then authorizes and obligates Bonneville to acquire resources to reduce or meet its obligations, and do so consistent with the Council's power plan with some narrowly specified exceptions

Bonneville Resource Acquisition Authority

Bonneville’s resource decisions to be consistent with the Council’s power plan:

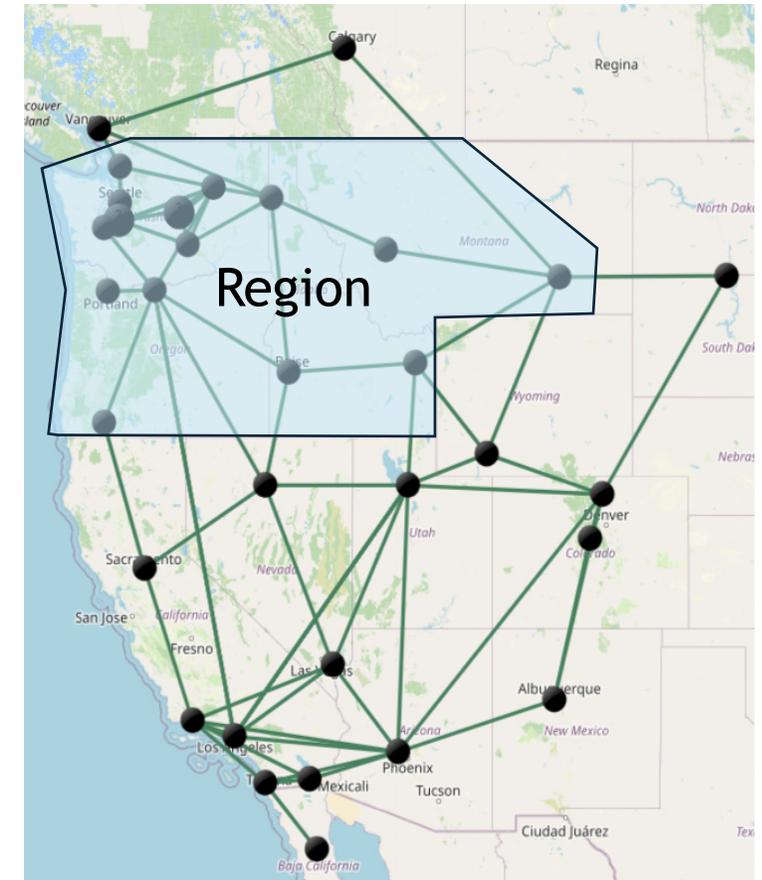
- **Conservation resources:** Section 6(a) obligates Bonneville to acquire conservation and implement such conservation measures “as the Administrator determines are consistent with the [Council’s power] plan.”
- **Generating resources:** Section 6(b) then requires Bonneville to acquire “sufficient resources”:
 - to meet the agency’s “contractual obligations” “after taking into account planned savings from [the conservation] measures”; and
 - “to assist [the agency] in meeting the requirements of section 4(h) of the Act” [Fish and Wildlife provisions]
- **“Major” resources:** Section 6(c) provides additional specific procedures for acquiring “major” resources, defined in Section 3(12) to mean resources with a planned capability greater than 50 aMW and to be acquired for more than five years.

Power Act Concept and Changing Context

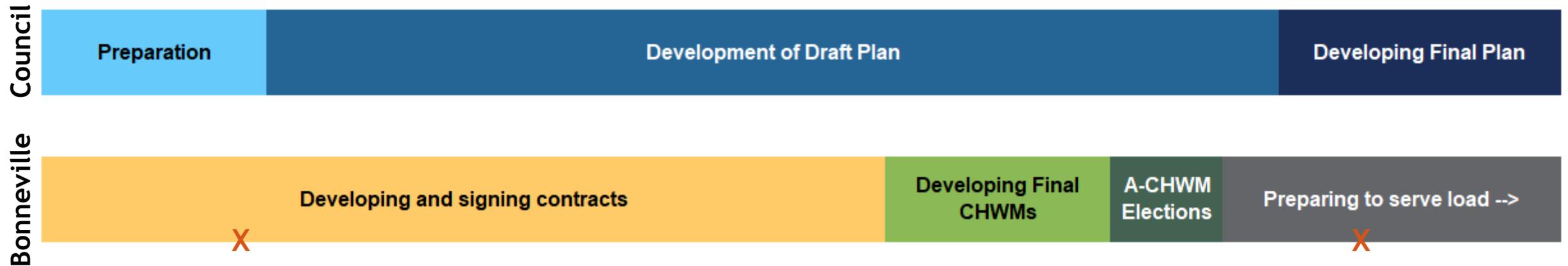
- At the time of passage of the Act:
 - Assumption was that Bonneville would sell the electric power produced by the Federal Columbia River Power System and “federal base system” resources (e.g. CGS) *and* Bonneville would be the major engine for adding new conservation and generation resources
- Today, and almost immediately post passage of the Act:
 - Bonneville and others have added significant conservation resources to the system. But others, not Bonneville, have added new generation resources to the region’s power supply
 - Bonneville’s current contract structure defined in Regional Dialogue has, in many ways, encouraged preference customers to add new resources to meet their load growth
 - This dynamic might change, at least somewhat, under the post-2028 Bonneville contracts

Council's Power Plan and Bonneville

- Council's power plan identifies new resource development needs in the region and then will provide specific direction for Bonneville, for consistent resource acquisition activities as specified in Sections 4d and 6.
- Ninth power plan will leverage the whole range of regional analysis to inform recommendations to Bonneville
 - Council will not model Bonneville's obligation directly, but will be able to map that obligation to the regional analysis
 - Regional granularity in modeling and analysis may help provide Bonneville specific insights, where relevant



Council and Bonneville Processes (DRAFT)



- Council seeking to complete a power plan by end of 2026 to help guide Bonneville
- Understanding the Bonneville obligation (including a-CHWM elections) will be critical
- Council and Bonneville staff are working closely as we develop the power plan and Bonneville conducts its resource program analysis

X - Anticipated BPA Resource Program

6. Relationship of the Council's power plan to resource decisions by others than Bonneville



Resource Acquisition Decisions by Others

- The Council's power plan is influential in the resource decisions of the region's non-federal utilities and in the decisions to review resource choices by the states' utility commissions
 - There is no legal obligation for these entities to acquire new resources consistent with the Council's power plan
- In Washington, I-937 does require that Washington utilities be consistent with the Council's conservation methodology for developing conservation potential
 - Note, this does not require consistency with the plan's recommended resource strategy, just the methodologies used in the development of the potential
 - Additionally, this is not a legal responsibility of the Council under Federal law, but rather a responsibilities of the utilities under Washington state law

7. Putting it all Together

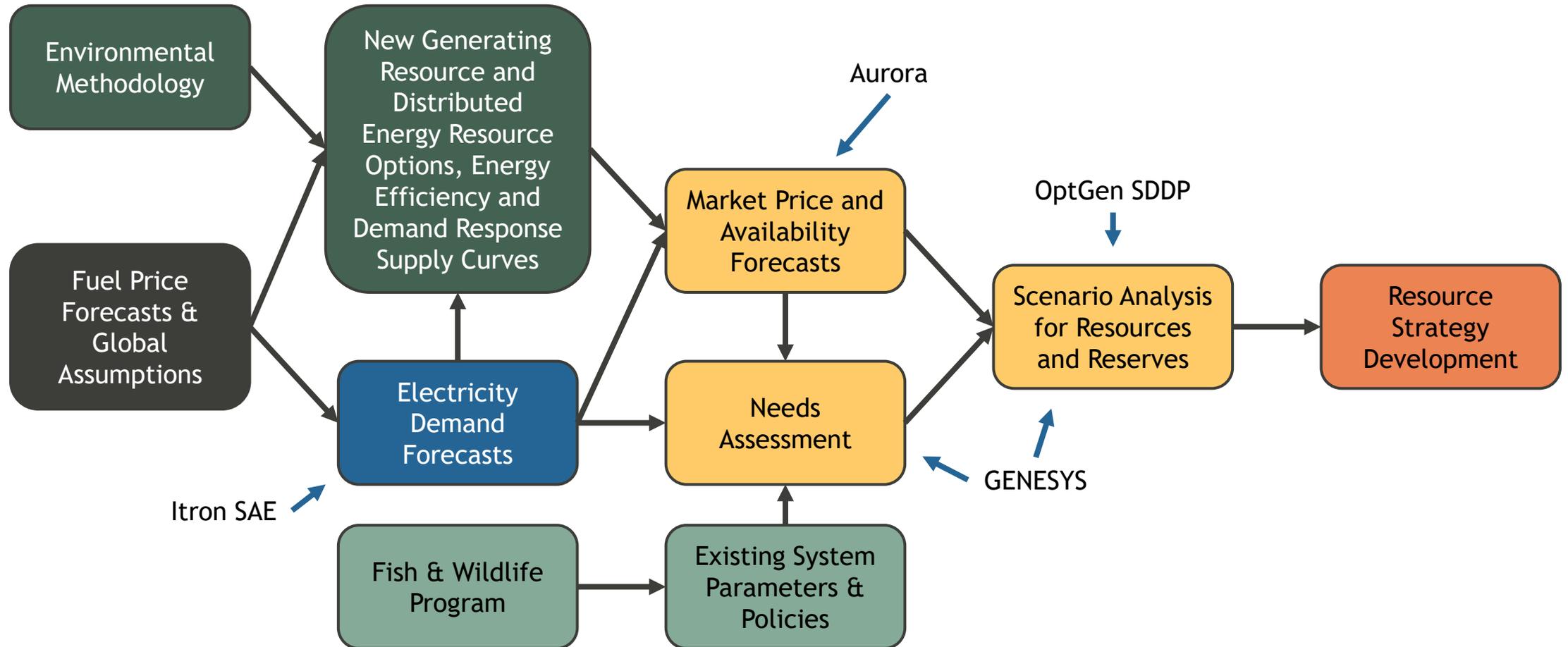


Northwest **Power** and
Conservation Council

Super High-Level Summary

- Need to put forth a plan that provides a general scheme for new resource development for Bonneville and the region
- Power Act is pretty light on how that plan is development, but it does require:
 - Public engagement
 - Inclusion of specific elements
- Ultimately, our approach is to consider what we know of the existing system, forecast out potential load growth, and analyze how best to fill the gap
- Every piece of this is uncertain, and the Council uses a range of “futures” and scenario analysis to explore this uncertainty with a goal of informing a robust strategy in light of the uncertainty

Power Plan Elements and Analytical Flow



Ways of Accounting for Uncertainty



Range of Forecasts

Modeling with a range of futures to account for uncertainty, with the full range informing each run



Scenarios

Conducting scenario analysis to explore impacts of changing key assumptions



Best Estimates

Using single estimates for other assumptions not likely to drive significant changes

Existing System and Fish and Wildlife Program

What: Reflect the known elements of the existing system in modeling



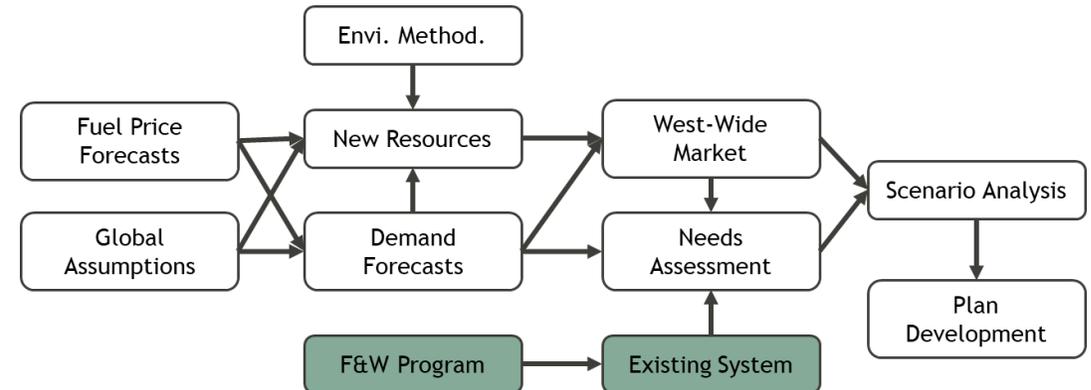
Timing: February

- Note: staff plan time later in the process to account for any changes due to Fish and Wildlife Program elements



Scenario modeling may be used to explore potential implications of changes to the system

- Currently such modeling is expected to take place in the Hydro Flexibility Scenario



Global Assumptions

What: Develop set of common assumptions to use across analysis



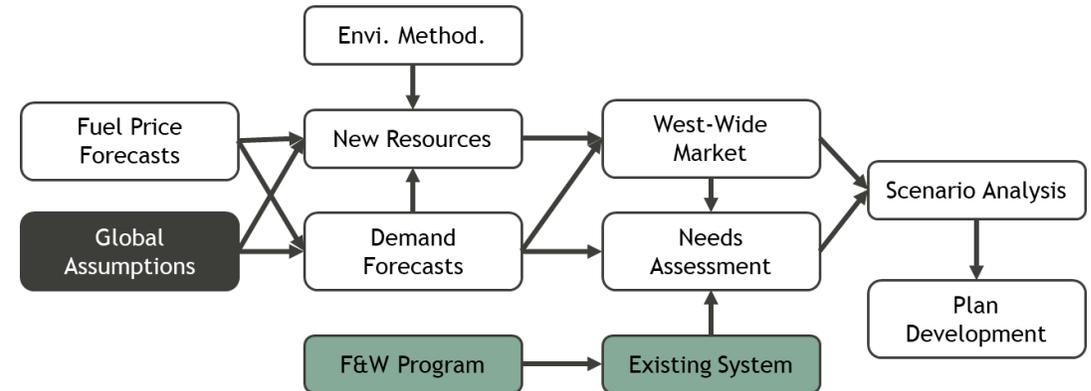
Timing: February

- Staff have presented many of these to the Council already



Best estimates to be used in all modeling, including across all scenarios

- Note, staff is conducting some sensitivity testing during this current model testing phase to inform on big levers



Fuel Price Forecasts

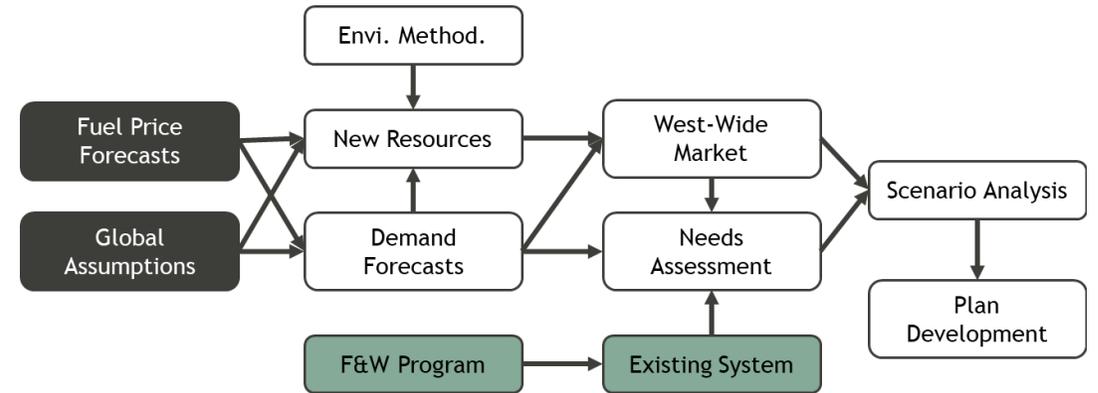
What: Develop forecasts of fuel prices, such as natural gas, to inform modeling



Timing: February



Range of forecasts will be developed and used in the modeling to reflect variability and uncertainty of future prices



Demand Forecast

What: Develop forecasts of future electricity demand to inform needs

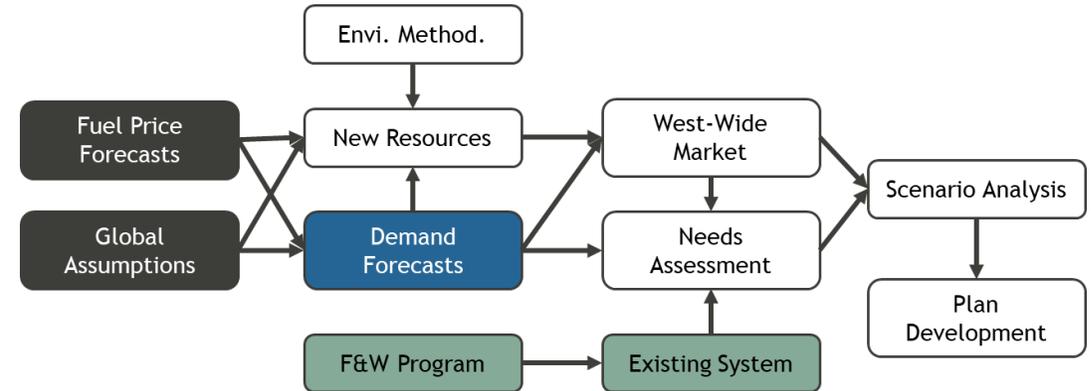


Timing: March – April



Range of forecasts will be developed and used in the modeling to reflect variability and uncertainty loads

- Note: Out of region loads are typically done on an expected basis



Environmental Methodology

What: Develop a single methodology for quantifying environmental costs and benefits directly attributable to new resources



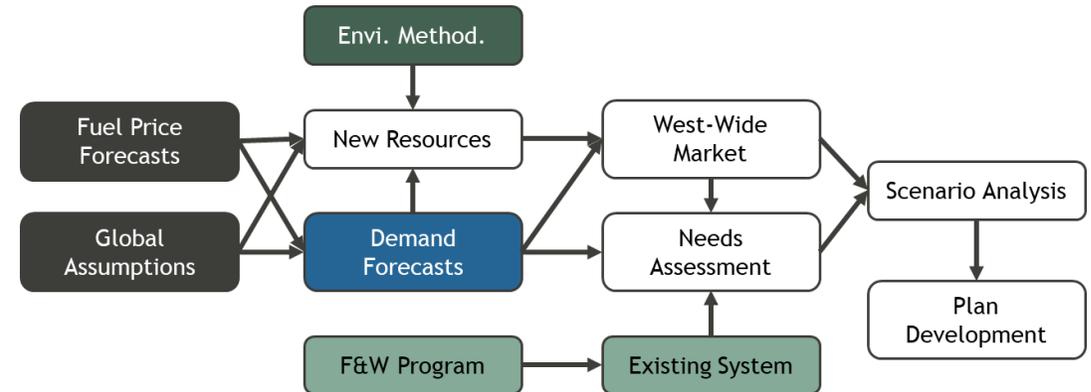
Timing: February

- Staff presented the methodology in September and December of 2024



Best estimates to be used across all scenario analysis

- Note: Some of the proposed scenario modeling is expected to capture uncertainty around resource costs, which could also reflect uncertainty around these related costs



New Resource Options

What: Develop a suite of new resource options to be explored in modeling

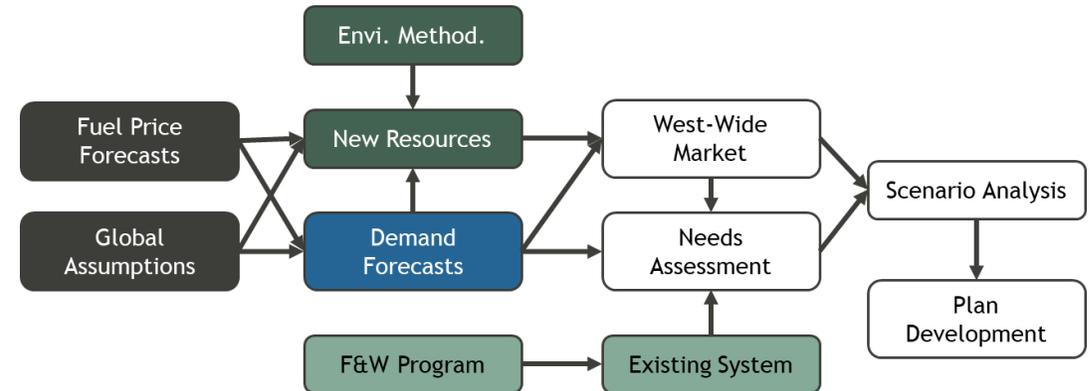


Timing: February – May



Scenario modeling will be used to explore uncertainty around new resource availability and costs

- Currently such modeling is expected to take place in the Resource and Transmission Risk Scenario



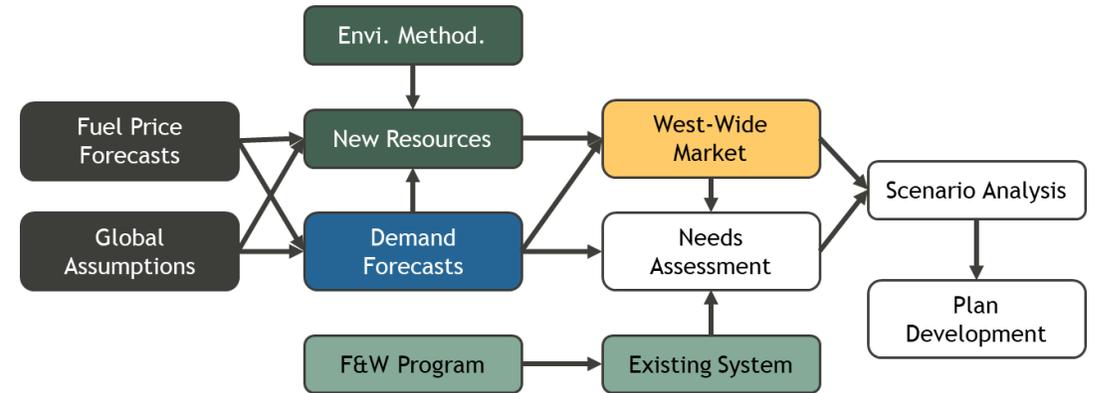
West-Wide Market Build Out

What: Model a build out of west-wide resources to inform market dynamics

 **Timing:** June-ish

 **Best estimate** build out based on specific scenario assumptions will be used in modeling

 Note: Staff may develop a scenario/sensitivity specific west-wide build outs for modeling consistency



Needs Assessment

What: Conduct assessment of needs based on existing system assumptions and demand forecast trajectories



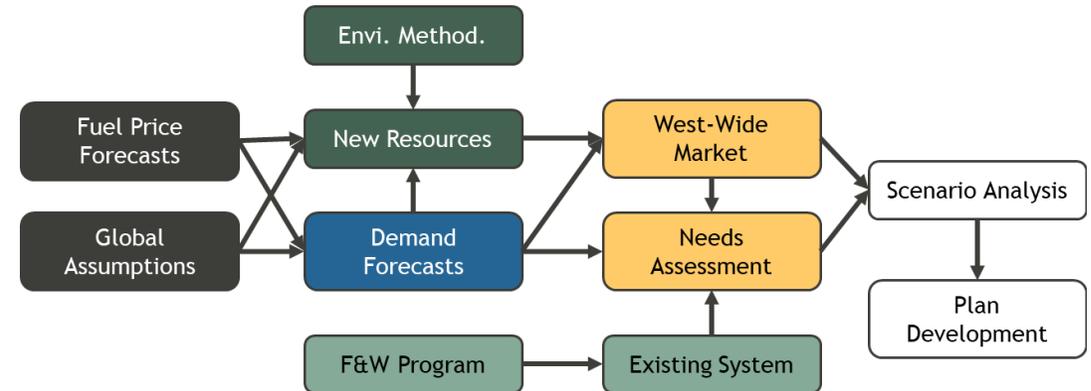
Timing: August-ish



Best estimate needs assessment will be developed based on scenario assumptions



Note: Staff may develop a scenario/sensitivity specific needs assessments for modeling consistency



Scenario Analysis for Resource Optimization

What: Conduct multiple runs to capture uncertainty through scenario modeling to inform range of cost-effective resources and reserves across those scenarios

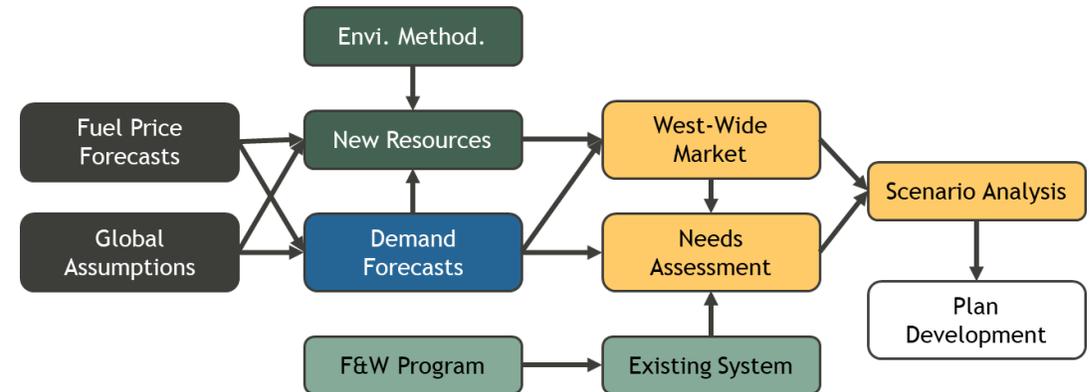


Timing: November 2025 – April 2026



Scenario modeling is the main approach for understanding how resource selection changes with different assumptions

- Collectively, the results from all scenarios and other analysis will inform new resource recommendations



Plan Development

What: Develop recommendation for new resources based on analysis and with due consideration for elements identified in Section 4(e)(2) of the Act

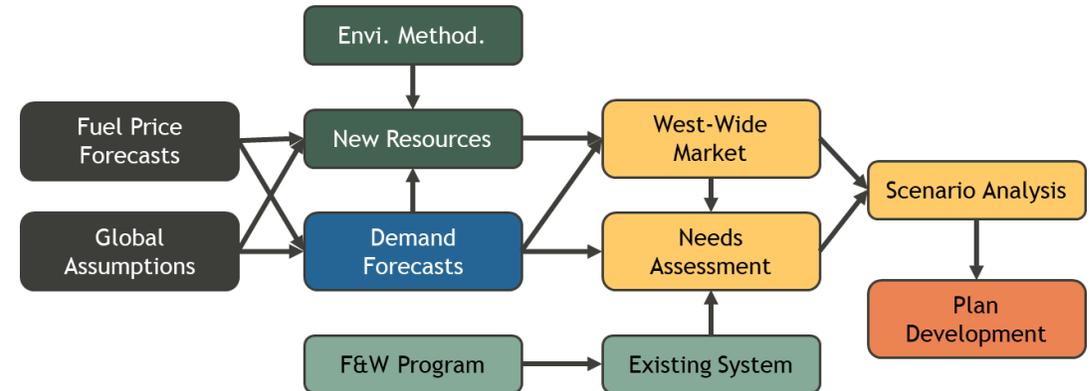


Timing: March – May 2026



Recommendations for new resources and related actions will need to include:

- Cost-effective resource and reserves strategy
- Conservation program and MCS
- Demand forecast
- Environmental methodology
- Research and development



Upcoming Power Plan Topics

Month	Council meeting agenda item*
November (Portland, OR)	Transmission & Distribution Deferral - Proposed Approach (30 min) ✓
December (Webinar)	Ensuring Consistent Treatment of Costs Across Resources - Proposed Approach (45-60 min) ✓
January (Portland, OR)	Power Plan 101 (2 hr) Review of Existing Policies to Incorporate in 9 th Plan (1 hr) Representation of Extreme Weather in Climate Change Data (45 min) Approach to Modeling Operational Risks from Wildfires (30 min) Approach to Modeling Hydrogen in the Ninth Plan (45 min)
★ February (Portland, OR)	Scope of Starting Point and Resource and Transmission Risk Scenario (1+ hr) Proposed Natural Gas and Other Fuels Price Forecast (1 hr) Proposed Reference Plants for the Ninth Plan - Part 1 (1 hr)
March (Portland, OR)	Proposed Reference Plants for Ninth Plan - Part 2 (1 hr) Proposed Ninth Plan Demand Forecast - Part 1 (1 hr) Outside the Northwest Load and Resources Assumptions (1 hr) Primers on Needs Assessment and WECC-Wide Buildout Study (1.5 hr)
April (Portland, OR)	Proposed Ninth Plan Demand Forecast - Part 2 (1-1.5 hr) Proposed Adequacy Metrics and Thresholds for Ninth Plan (45 min) Proposed Demand Side Resources Supply Curves - <i>coming in bits and pieces in April, May and maybe June</i>

*Note: This focuses on power plan specific topics and does not include all power division work. All topics are subject to change.



Further Discussion?