MEMORANDUM

TO: Power Committee

FROM: Ben Kujala

SUBJECT: Development of supporting material for the 2021 Power Plan

BACKGROUND:

Presenter: Ben Kujala

Summary:

The process of developing a power plan has generally resulted in an extensive document anywhere from just over 200 pages to close to 1000 pages. These documents are available as PDFs on our website (https://www.nwcouncil.org/power-planning) and help provide context and history to the work we do today. However, in the current information rich environment for the analysts, planners, and public that use our work, this approach has limitations.

We have previously discussed the draft table of contents for the 2021 Power Plan. The table of contents focuses on the elements of the power plan required by the Power Act. There is also extensive and detailed work that underlies and supports each element of the plan and the plan’s conclusions and recommendations. We are proposing that the supporting material be included as part of our website and presented via webpages as opposed to appendices attached to the plan. This approach both addresses some of the limitations of the appendix approach from previous plans and creates opportunities to enhance the material that supports the plan, while still preserving the record upon which the plan and its conclusions rely. A discussion of these challenges and opportunities follows:
If we want more people to find the work of the Council, we need more content in webpages and less in PDFs. Documents that are attached to websites, in PDF or Word formats, do not rank well in search engines like Google. In January of 2020, the Council’s website had over 15,000 visitors from the United States - over 10,000 of those visitors got to our website through a search engine. Many of those visitors searched for “Grand Coulee Dam”; our website is often in the first page of results when someone searches for Grand Coulee Dam. It is not a coincidence that the Columbia River History Project (https://www.nwcouncil.org/reports/columbia-river-history) has all the content in webpages and not in PDFs.

To support all levels of engagement with the plan, we should make it easier to share focused content. Many of the people who engage with our content only need a small slice of the information we produce. They may be interested in information on the impact of different resource strategies on greenhouse gas emissions or, alternatively, just want to get our estimated costs for the generating resource reference plants. The Council has increased the reach of the plan by supporting different levels of engagement with the material we produce including these narrower uses of the plan. A large document is unfriendly for those with focused needs. Webpages enable sharing focused information directly. With content on a website, it’s easier to send a link that takes someone directly to the content in which they’re interested.

To support analysts that rely on us for regional information, we need to make it easy to find updated data and forecasts. The Council is a resource for forecasts and information for the Northwest energy sector. Part of our audience needs these forecasts and data to be of a recent vintage. We support this by updating forecasts and data between plans, and on a webpage, we can link directly to updated information as it’s released, while also preserving the information relied on in development of the plan. This not only makes it easier to find the latest forecast, but it also makes it obvious when we have updated forecasts and data since the issuance of the plan.

To build and maintain trust in the analyses and methods used at the Council, we should include supporting detailed data and materials in context. Supporting data and materials are difficult to include directly in a PDF. In the 7th plan, we had a collection of these material on the website (https://www.nwcouncil.org/reports/technical-information-and-data) but they are out of context with the content of the 7th plan. On a webpage these data and supporting materials can be connected to the tables, graphs, and analyses that rely on them.

Using webpages creates an opportunity to include dynamic content. We can embed graphs and charts that help the reader explore and understand the data that are supporting the plan.

Using webpages creates an opportunity to better understand how people use the material supporting the plan. With webpages it’s possible to track in greater detail how the audience engages with the content.

Using webpages allows for adding content. Content on a webpage can grow and be refactored. That is, we can add context to the information online or even create pages that collect the information produced for the plan in different ways.
For example, many of the data underlying the plan are captured in Excel workbooks or included in model databases and there are always requests for the additional data supporting the plan. With webpages we can add these data to the supporting material pages as requested.

- **Using webpages creates an opportunity to create additional content on our website that connects to and curates the material used to support the plan.** The website includes blog posts and reports that reference the material that supports the plan. More content on webpages creates an opportunity for that content to guide readers directly to relevant information that is cited.

Given the proposal to change from the approach used in previous plans, it makes sense that the approach to producing this information may also change. Rather than creating the plan documents first and then collecting the technical appendices after the chapters are written, we’re proposing that the website contains a broader range of material that will then be used to focus the drafting of the plan content.

Staff has outlined the content we currently anticipate will be produced to support the plan. We’ve attached a draft sitemap that will help us discuss what we anticipate being included on the website. Our intent is to create this content and use it to draft a focused plan document that matches the draft table of contents for the 2021 Plan.

The sitemap also forms the basis for an approach to integrating the writing of the supporting material and the plan document into our timeline. Our proposed approach to drafting this material is:

1. Each part of the sitemap will be assigned to a lead writer
2. That writer will coordinate with the team members that contributed to the work to prepare an initial draft.
3. The draft will be sent to the broader power team and state staff for review.
4. Comments will be considered and reflected into the draft as appropriate by the lead author.
5. The draft will go through a director review and be updated as appropriate.
6. The draft will be transformed into a webpage and be added to a staging website and made available for review by Council members and updated as appropriate.
7. When the Council adopts a draft plan, the supporting web material will be moved to the Council’s website and be publicly available.

Because we intend to use this material as the basis for drafting the plan, we will determine for each section outlined in the draft table of contents what supporting material needs to be completed before we can create a draft of the section. We then propose that drafting each section for the plan goes through a process similar to the following:

1. A group including the staff that produce the supporting material, the director, the legal team, and public affairs meets to discuss which material merits inclusion in the plan document
2. A proposal for content is sent to the Committee - likely by email - and flagged for discussion at committee if there are concerns
3. A first draft is prepared by staff
4. The draft goes through technical and legal review when appropriate.
5. Working with PA, the draft goes through an editor for style consistency.
6. The draft goes through director review and edits as appropriate.
7. The draft goes to the Council for review and edits as appropriate.
8. When all the sections are drafted, the combined document gets one last Council review.
The 2021 Power Plan

**DRAFT TABLE OF CONTENTS:**

**Section 1: Executive Summary and Introduction**
- Executive summary
- State of the system
- Power Act requirements and the Power Plan
- Slimmed down and high-level action plan

**Section 2: Demand Forecast**
- Regional demand forecast
- Bonneville’s demand forecast

**Section 3: Forecast of Regional Reserve and Reliability Requirements**
- Operating and planning reserves
- System needs assessment

**Section 4: Energy Conservation Program**
- Regional Conservation Targets
- Model Conservation Standards
- Surcharge Methodology

**Section 5: Resource Development Plan**
- Resource strategy (generation and conservation)
- Analysis of Alternative Resource Strategies
- Input and Analysis:
- Existing resources and retirements
- Economic and Financial Assumptions
- Electricity and Fuel Price Forecasts
- Transportation forecast
- End-use natural gas forecast
- Conservation resources (supply curves)
- New generating resources potential
- New demand response resources potential

**Section 6: Forecasts of Power Resources Required to meet BPA’s Obligations**
- Council's forecast of BPA's load resource balance
- BPA's White Book

**Section 7: Recommendation for Amount of Power BPA Should Acquire**
- Conservation
- Renewable resources
- Other generating resources
- Demand response
- Market power

**Section 8: Analysis of Cost-Effective Methods for Providing Reserves**
- Define cost-effective methods for providing reserves
- Result of study of reserves and adequacy requirement

**Section 9: Recommendations for Research and Development**
Section 10: Methodology for Determining Quantifiable Environmental Costs and Benefits for Cost Effectiveness

- Environmental Methodology and Due Consideration for Environmental Quality and Fish and Wildlife
- Environmental Effects of Electric Power Production

Section 11: Fish and Wildlife Program